



SUDAN UNIVERSITY OF SCIENCE AND TECHNOLOGY

COLLEGE OF GRADUATE STUDIES



# **Evaluation of the Educational Quality of Comboni Schools in Khartoum State in the Light of the European Foundation for Quality Management Excellence Model**

تقويم جودة مدارس كمبوني بولاية الخرطوم على ضوء نموذج الامتياز للمؤسسة الأوروبية لإدارة الجودة

Submitted in Partial Fulfilment for the Requirements of the Degree of Doctor of Philosophy

Submitted by:

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Khartoum, April 2021





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## **DEDICATION**

*To all teachers and staff of Comboni Schools who give their best for the education of Sudanese and refugee children.*

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## ABSTRACT

Catholic Schools have developed in Sudan along with the beginning of modern education since the end of the XIX century. These schools, as basic schools in general in Sudan, face today the challenge of quality.

The study aims at assessing the educational quality of those schools in Khartoum State through the EFQM Excellence Model. Considering this purpose, the research is descriptive but also exploratory as it intends to verify the applicability of a contextualized version of this Model to a sample of three Catholic Primary Schools (case study strategy). The study identifies the main variables that explain the differences of quality among those schools as well. In this way, the research process should also instill an evaluation culture in the selected schools.

The study is also explanatory as it intends to analyse the relation between the particular objectives of those schools and the concept of educational quality.

The research demonstrates the applicability of the model and shows some specific characteristics of quality of Comboni schools: the stress on continuous evaluation of the students through homework and periodical tests; their open and dynamic concept of identity that makes them welcoming to diversity; the care for the quality of the premises and for their Catholic identity.

Moreover, the study identifies some variables that explain the different quality between the schools of the sample: pre-service teachers training; in-service staff training; average salary, number of students and the organization of camps to help finalists to prepare the General Basic School Certificate exams.

At the end of the research, a post-test version of the self-assessment tool is elaborated that can be better used for Comboni Basic Schools in the future but also for other Basic Schools in the country.

The study recommends the studied schools to develop a written document with their mission, vision, goals and strategies to achieve them with involvement of the school community and the inclusion of a communication plan.

## ABSTRACT IN ARABIC

تطورت المدارس الكاثوليكية في السودان مع بداية التعليم الحديث منذ نهاية القرن التاسع عشر. وتواجه هذه المدارس اليوم تحدي الجودة مثل كل مدارس الأساس في السودان.

تهدف الدراسة إلى تقييم الجودة التعليمية لتلك المدارس في ولاية الخرطوم عن طريق نموذج المؤسسة الأوروبية لإدارة الجودة (EFQM). بالنظر إلى هذا الغرض، يعد البحث وصفيًا ولكنه استكشافي أيضا لأنه يعتزم التحقق من قابلية تطبيق إصدار مُحدد من هذا النموذج لعينة من ثلاث مدارس أساس (استراتيجية دراسة الحالة). وتحدد الدراسة المتغيرات الرئيسية التي تشرح الفروق في الجودة فيما بين تلك المدارس. بهذه الطريقة، ستعرس عملية البحث أيضًا ثقافة التقييم في المدارس المختارة.

فإن الدراسة هي من طبيعة تحليلية أيضًا لأنها تهدف إلى تحليل العلاقة بين الأهداف الخاصة لتلك المدارس ومفهوم الجودة التعليمية.

أظهر البحث قابلية تطبيق النموذج وبعض الخصائص الخاصة لجودة مدارس كمبوني: التأكيد على التقييم المستمر للطلاب من خلال الواجبات المنزلية والاختبارات الدورية؛ مفهومهم المفتوح والديناميكي للهوية الذي يجعلهم يرحبون بالتنوع؛ الحرص على جودة المباني والحفاظ على هويتهم الكاثوليكية.

علاوة على ذلك، حددت الدراسة بعض المتغيرات التي تشرح الجودة المختلفة بين مدارس العينة: تدريب المعلمين قبل الخدمة؛ تدريب الموظفين أثناء الخدمة؛ متوسط الراتب، وعدد الطلاب وتنظيم المعسكرات لمساعدة المرشحين النهائيين لإعداد امتحانات شهادة الأساس.

في نهاية البحث، تم تطوير نسخة ما بعد الاختبار لأداة التقييم الذاتي التي يمكن استخدامها بشكل أفضل لمدارس كمبوني الابتدائية في المستقبل ومدارس الأساس الأخرى في البلاد أيضًا.

وتوصي الدراسة المدارس المدروسة بإعداد وثيقة مكتوبة تتضمن رسالتها ورؤيتها وأهدافها واستراتيجياتها لتحقيقها بمشاركة المجتمع المدرسي كله وإدراج خطة اتصال.

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## LIST OF ABBREVIATIONS AND ACRONYMS

AC-E-A – Africa Centrale (Central Africa in Italian) – Ethiopia – Arabia

APF – Archivio Propaganda Fide (Propaganda Fide Archivium)

APQI - Associazione Premio Qualità Italia – Italy Quality Award Association

B.A. – Bachelor of Arts

B.Sc. – Bachelor of Science

CAF – Common Assessment Framework

*CBM* – Christian Blind Mission

CCC – Catechism of the Catholic Church

CCK – Comboni College Khartoum

CCST – Comboni College of Science and Technology

CIC – Codex Iuris Canonici (= Code of Canon Law in Latin)

CIPP – Context, Input, Process, Product

CMS – Church Mission Society

CONFEMEN – Conference of the Ministers of Education of French-speaking Countries

CPA – Comprehensive Peace Agreement

EFQM – European Foundation for Quality Management

ESEA – Elementary and Secondary Education Act

ff. – Folios

FMoGE – Federal Ministry of General Education of the Republic of Sudan

FUNDIBEQ – Ibero-american Foundation for Quality Management

GAO – Government Accountability Office

IBAQM – Ibero-American Quality Management Model

IDP – Internally Displaced People

IQ – Intelligence Quotient

ISO – International Standards Organization

JUSE – Japan Union of Scientist and Engineers

LDB – Lettere della Sacra Congregazione di Propaganda Fide: Lettere, Decreti, Billetti  
(Letters of the Sacred Congregation for the Evangelization of Peoples: Letters, Decrees,  
Notes)

MBNQA – Malcolm Baldrige National Quality Award

MECSS – Ministry of Education, Culture and Sports of Spain

No. – Number

NGO – Non-government Organization

PASEC – CONFEMEN - Programme for the Analysis of Education Systems

PDCA – Plan-Deploy-Check-Act

Prot. – Protocol

PSGC – Primary School General Certificate

PTA – Parent Teacher Association

SABEM – South African Business Excellence Model

SACMEQ – Southern and Eastern Africa Consortium for Monitoring Education Quality

SAQI – South African Quality Institute

SBM – School Based Management

SC – Fondo Scritture Riferite nei Congressi (Scriptures Fund Related to Congresses)

SDG – Sudanese Pounds

SMoE – State Ministries of Education

SPLA – Sudan People Liberation Army

SSK – Sisters School Khartoum

TQM – Total Quality Management

UIS – Unesco Institute for Statistics

UNESCO – United Nations Educational, Scientific and Cultural Organization.

UNICEF – United Nations International Children´s Educational Fund

US – United States

USA – United States of America

W - Text from the Writings of Comboni. It is followed by the paragraph number.

## **ROMANIZATION SYSTEM**

This study uses some sources in Arabic language and reports some words in that language. When convenient, Arabic words have been romanized using the criteria of the British Standards Institution (BS 4280).

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## CHAPTER I. INTRODUCTION

### 1.1 Introduction

There is a point in the development of a country in which the effort to make education available to all gives place to the focus on the quality of that education. Nonetheless, “the distinction between reach and quality is artificial” as “children can be retained in the school only when they find their existence inside the school gainful, relevant and beneficial for life” (Malgavkar, 1995; quoted by Gopalan, 2014, p.6).

For one reason or the other, quality is a fundamental challenge for primary schools in Sudan so that a passage can be made from instruction to learning. Malgavkar speaks about the importance of creating and driving “the concept of ‘Learning Guarantee’ versus ‘Education Guarantee’. A sustained Universalization of Elementary Education can be achieved only through dramatic improvement in learning in the school" (Malgavkar, 1995, quoted by Gopalan, 2014, p. 6).

And this development can just become possible through the assimilation of a self-assessment culture.

This thesis proposes a concrete tool for the self-assessment of a certain category of primary schools hoping that this experience can improve their quality and can become a point of reference for other primary schools in the country.

The targeted schools are those of the Catholic Church at Khartoum State. These schools are called Comboni Schools in Sudan and no scientific research has been done on their quality.

This first chapter introduces the problem faced by this thesis, its importance and the objectives, limits and methodology of the research.

## **1.2 Problem Statement**

The Catholic Church runs 38 Primary Schools in the State of Khartoum. These schools are popularly known as “Comboni Schools”. Some of them were created in the first eighty years of the twentieth century. But the majority of those schools were opened after the beginning of the Second Sudanese Civil War as a response to the massive arrival of displaced people from the South to the peripheries of the capital of the country. This second wave of schools were built with simpler structures as they were supposed to be provisional. Nevertheless, many of them have been transformed into stable schools.

These schools belong to the network of Catholic Schools in the world that is recognized by its quality as they usually perform better than public schools, have a long tradition of serving the poor and “provide valuable options for parents, thus contributing to healthy pluralism in the educational choices available to them” (Wodon, 2018, p. 191).

The thesis designs a model of evaluation of the quality of these schools based on the one of the European Foundation of Quality Management (EFQM) and the principles of Total Quality Management (TQM). This model is adapted and applied to a sample of them selected through a questionnaire that assesses their availability to enter into a process of continuous improvement and the suitability of their organizational culture.

The research also aims at producing a self-assessment tool that may be easily adapted to government schools of Khartoum State.

### 1.3 Research Importance

*Comboni Schools* are non-profit private schools with particular characteristics: the owner is the Catholic Church; they host a meaningful number of Christian students and staff in a country of Islamic majority; some of them have students enrolled that belong to the richest layers of society along with those who belong to the poorest ones; they host a great cultural diversity; the first ones were founded in the XIX century and therefore their history goes along with the beginning of modern education in Sudan.

Some of these schools are well established, while others face the challenge of the transformation from one setting that aimed at responding to an emergency situation to a query for quality in a more stable situation. As said before, there is some literature about these schools, but no scientific research has been ever done on their quality at the level of PhD.

It is also worth mentioning that the Government of Sudan laid out its educational goals and strategy in the Interim Basic Education Strategy and among the objectives of this strategy there are the improvement of the quality of learning and of the planning and management of the educational system (EU et al., 2015, p. 475). This strife for quality can also be understood in the context of the fourth Sustainable Development Goals (SDG): to “ensure inclusive and quality education for all”.

The importance of increasing the quality of schools in Sudan has also to do with the diminution of the high dropout rate. The latter one could:

indicate that the quality of the schooling is too low to justify the student’s time and the direct costs in terms of parental financial contributions or the opportunity costs of a child who would otherwise be contributing to the household income or helping with chores (World Bank, 2012, p. 4).

This research will not study a pre-existing ongoing process of quality management in Primary Schools of Sudan, but will investigate the first steps of the application of an adaptation of the model of the European Foundation for Quality Management (EFQM) elaborated by the researcher after the literature review to a sample of Comboni Primary Schools.

Kim, Kumar and Murphy conducted a literature review based on peer-reviewed papers written in English on EFQM Model studies in view of future research agenda and concluded that “that current studies have missed the model’s holistic approach” (2008, p. 692).

Thus the research is innovative as far as the methodology and the object of the research are concerned and therefore will provide with knowledge on this particular kind of schools and data for their improvement. But it may also represent a point of reference for the implementation of the EFQM model in other private or government schools of the country.

In addition to this, the research will help those schools to define and achieve their goals, to respond better to the needs of Sudanese society, the students and their families; to increase the satisfaction and the performance of their staff and students, to become more accountable and to enter into a process of continuous improvement.

#### **1.4 Research Purpose and Objectives**

The assimilation of a self-assessment culture demands concrete instruments to produce continuous improvement. The general purpose of this study is to construct a guidance framework for Total Quality Management (TQM) implementation in Comboni Primary Schools located in Khartoum State.

This means to elaborate and test a tool inspired by the EFQM Excellence Model to **assess** the quality of a sample of *Comboni Schools* located in Khartoum State in view of developing the above mentioned framework.

In addition to this general objective, the specific objectives of this study are:

1. to **analyse** the relation between the particular objectives of these schools and the concept of educational quality;
2. to **assess** the viability of the implementation of a tool based upon the EFQM Model in Primary schools of Sudan;
3. to help every evaluated centre to know itself better;
4. to help every educational centre to produce its improvement plan and enter into a dynamism of continuous growth.
5. to **identify** the main variables that explain the differences of quality among the schools considered in the research.

In the light of these objectives, the research could be considered exploratory in relation to the object of the application of the EFQM Excellence Model. In this sense, the research lays the ground for future studies on Comboni Schools in Khartoum State and on the application of the EFQM Excellence Model to Basic Schools in Sudan. On the other hand, it could also be considered descriptive as it describes the process of application of an assessment tool based upon the EFQM Excellence Model. But the first specific objective could be deemed more in tune with an explanatory purpose.

## 1.5 Research Questions

The above-mentioned objectives help to define the research questions. The main research question to be asked is: How can the EFQM Excellence Model be effectively implemented in Comboni Primary schools located at Khartoum State?

The secondary research questions are:

1. What are the particular characteristics of quality for a Comboni Primary School?
2. Can a self-assessment tool based upon the EFQM Model be applied to Primary Schools in Sudan?
3. How can the EFQM Excellence Model help the school to know itself better?

4. How can the EFQM Excellence Model help the school to produce its Improvement Plan?
5. Which variables explain the different quality between the schools of the sample?

## 1.6 Research Limits

The scope of this research is limited to the selected case studies among the Comboni Primary Schools in Khartoum State.

A kind of scientific approach like the one used for this research implies a lot of time spent at every school. Therefore, it will be necessary to select a sample that cannot be very large as it would be in the case of using, for instance, mere questionnaires that are distributed among the staff of the school or the students or the parents. Therefore, it will not be possible to establish statistical inference with the population to which the selected schools belong.

Another limit of the study will be that no evaluations will be done in other schools that do not belong to the above mentioned group like government or private schools. This would have allowed making comparisons among them. On the other hand, a study focused on a certain kind of schools like this facilitates the deepening of a concept of quality closely related to the mission and the objectives of the institution. Nonetheless, some data from government schools can be compared as they are available in some published reports.

The collection of data from the sample schools was done within a limited frame of time and space. This fact also limits the span of the conclusions.

The last limit is the fact that in some of the studied schools the staff may be very movable, especially if many of them are of South Sudanese origin, and the TQM model demands constancy of purpose and long term thinking.

## **1.7 Research Methodology**

This research involves three main stages. The first one consists of a literature review to develop a theoretical framework for implementing the EFQM Excellence Model in the Comboni Primary Schools located at Great Khartoum. The choice of that model is justified after reviewing the development of the concepts of educational quality and evaluation.

The literature review will explore some primary sources on the history of these schools and previous research on quality in Sudanese schools and on the application of the EFQM Model to Primary School in other countries.

The second stage will be the elaboration of a questionnaire to be distributed among the headmasters of the above mentioned schools in order to identify three of them more suitable for the implementation of the model.

The third stage instead consists of the application of the tool for self-assessment inspired in the EFQM Model to the selected schools. In addition to the questionnaire that will be prepared for the “Quality Team” of the school, interviews and documents will be collected to triangulate the data of the questionnaire.

The findings of the case studies will be analysed and compared with data coming from reports carried out by different institutions in the country in order to shed light on the theoretical framework and respond to the research questions.

## **1.8 Terminology**

Some fundamental terms used in this thesis are the following ones:

**COMBONI SCHOOLS:** the term refers to Catholic Church Schools in Sudan which include the following categories: schools run and owned by religious congregations like the Comboni Missionaries; schools owned by the Archdiocese of Khartoum and run by religious congregations; and schools owned by the Archdiocese of Khartoum and run by parishes (Parish community schools).

**CONGREGATION:** according to the Oxford Advanced Learner's Dictionary a Congregation is a "group of people gathered together for religious worship" (1989, p. 246). But in the Catholic Church the word has two technical meanings that the reader will have to distinguish in this study according to the context.

The first one refers to the second highest-ranking departments of the Roman Curia (the central administration of the Catholic Church). Above them, there are three Secretariats. Lower-ranking are the pontifical councils and pontifical commissions.

Each congregation is led by a Prefect, who is usually a cardinal. In this research, two Congregations are mentioned: the Congregation for the Evangelization of Peoples (previously called *Propaganda Fide* in Latin Language) and the Congregation for Catholic Education. The first Congregation is responsible for missionary work and related activities. The latter one is responsible for educational institutions that depend on Church authorities. Inside this Congregation there are two Offices, one for universities and another one for schools.

The second technical meaning of the word "Congregation" refers to a group of people obeying a common religious rule who consecrate themselves through the vows of poverty, chastity and obedience.

The life consecrated through the profession of the evangelical counsels is a stable form of living by which the faithful, following Christ more closely under the action of the Holy Spirit, are totally dedicated to God who is loved most of all (Code of Canon Law, 1983, c. 573 §1).

The Comboni Missionaries, the Comboni Missionary Sisters and the Lazzarists mentioned in this study are religious congregations in this sense.

**EFQM EXCELLENCE MODEL:** it is a practical, non-prescriptive excellence framework for organizational management, promoted by the European Foundation for Quality Management (EFQM) and designed to help organizations to understand their key strengths and potential gaps in relation to their stated vision and mission.

**EVALUATION:** it is a continuous and systematic process that entails the collection of quantitative and qualitative valid and reliable data to assess and judge the merit and worth of an object in order to make decisions that improve it. Therefore the evaluation includes measuring and assessing.

**IMPROVEMENT PLAN:** it is a tool that orientates a continuous action to improve the quality of an educational centre. The stages for its elaboration are: 1) Formation of an improvement team; 2) Selection of improvement areas identified in the self-assessment; 3) Formulation of objectives and indicators to assess the processes; 4) Analysis of the improvement areas; 5) Generating improvement actions; 6) Action planning; 7) Implementation; 8) Final report.

**KHARTOUM STATE:** it is one of the eighteen states of Sudan. It is the smallest state by area (22,142 km<sup>2</sup>) but the most populous (about 7,687,547 inhabitants in 2017). It contains the biggest cities in the country: the capital Khartoum, Omdurman and Khartoum Bahri. The state lies between longitudes 31.5 to 34 °E and latitudes 15 to 16 °N.

**PRIMARY SCHOOL:** it is the portion of education considered a right by a nation and a duty for her to provide it to every child. In Sudan it lasts eight years.

**QUALITY IN EDUCATION:** It defines the grade of achievement of goals in relation to the development of the students, the school staff, the parents and the community.

**SELF-ASSESSMENT:** it is a process during which someone reflects on and evaluate the quality of the work, judges the degree to which explicitly stated goals or criteria are achieved, identifies strengths and weaknesses and revises accordingly (based upon Andrade & Du, 2007, p. 160).

TOTAL QUALITY MANAGEMENT (TQM): it is a strategy or management model that was firstly developed in the 50's and 60's of the last century in Japan by experts in quality control like Edwards Deming and Joseph Juran. The model aims at creating awareness in every person in the organization about the importance of quality in every one of the processes that take place in it.

## **CHAPTER II. LITERATURE REVIEW: EFQM, EDUCATIONAL QUALITY AND EVALUATION AND COMBONI SCHOOLS**

### **2.1 Introduction**

This chapter is divided into five parts. The first one defines the theoretical framework of the European Foundation for Quality Management (EFQM) Excellence Model and analyses its possible adaptation to the particular characteristics of Comboni Primary Schools in Sudan. On the one hand, this means to identify the potential problems and some keys that may help to overcome the resistance to change and lead to a successful implementation. And on the other hand, this means to deepen the understanding of the object of this study -“Comboni Primary Schools” - that is, their historical background, educational vision and specific characteristics.

The second part instead deals with the development of educational evaluation and the third one with the concept of quality. These two sections aim at justifying the choice of the EFQM Model and at contextualizing the assessment model.

Finally, the fifth part reports some previous studies on educational assessment and total quality management in Sudanese schools that also help to define the assessment process and analyse the results.

## **2.2 The Theoretical Framework: the EFQM Excellence Model**

The European Foundation of Quality Management (EFQM) was founded in 1989 to make European production compete with the American and the Japanese ones and as a response to the development of the concepts of Total Quality Management. This not-for-profit foundation created the EFQM Excellence Model in 1992, initially as framework for assessing applications for the European Quality Award, the transnational quality awards of Europe.

This excellence model was revised in 1999, 2003, 2013 and 2020. It is a framework that helps the institution to deal with the rapid changes and complexity of modern world. It has become the most used model for evaluation of quality for any kind of organization in Europe (Martinez Mediano and Ríoperez Losada, 2005).

The revision of quantitative research on the model reveals that

there is empirical evidences of the validity, reliability and predictive power of the EFQM model when it is applied to different spheres and sectors of activity (Alonso-Almeida, & Fuentes-Frías, 2012; Suárez, Roldán, & Calvo-Mora, 2014). This aspect has been corroborated in specific spheres such as education (Calvo-Mora, & Criado, 2005; Pires Da Rosa, Saraiva, & Diz, 2003) (Suárez et al., 2017, p. 153).

### **2.2.1 Theoretical Framework of the EFQM Excellence Model**

The theory behind the EFQM Excellence Model is built upon the General Systems Theory (Bertalanffy, 1969) and the Theory of Human Communication (Watzlawick, Beavin and Jackson, 1967). According to the first theory, a system is an

entity with interrelated and interdependent parts. It has boundaries that are the barriers that define the system and distinguish it from other systems in the environment.

This concept “of interrelated elements that function as a whole is also applicable to universities as organisations” (Brits, 2010, p. 31) or schools. The kernel of the systems theory is that the whole is more than the sum of its parts, which means that changing one part of the system affects other parts and the whole system, with predictable patterns of behaviour.

According to Capra (1997, p. 37), systems thinking is "contextual thinking". Things should be explained in terms of their context, which means explaining them in terms of their environment. And systems often exist to accomplish a common purpose (a work function) that also aids in the maintenance of the system or the operations may result in system failure. The goal of systems theory is systematically discovering a system's dynamics, constraints and conditions and elucidating principles (purpose, measure, methods, tools, etc.) that can be discerned and applied to them at every level of nesting, and in every field for achieving optimized equifinality (Beven, 2006).

This type of conceptualization implies a shift from thinking on objects to thinking on relations. Some elements of the General Theory of Systems that help understanding the EFQM Model theoretical framework are the following ones (Higgs and Smith, 2006):

- The world we live in is complicated. The methods of the systems theory can be used to cope with this complexity.
- All systems work within a certain context. The context is usually so complex that any system has to select the data that it will incorporate to use in its overall working.
- Parts of the system work together in some way.
- The system is a whole.
- All systems have goals/purposes. And the system tends to change to protect itself and grow to accomplish its goal (adaptation).
- All systems take inputs and turn them into outputs.
- All systems absorb and generate some form of energy.
- Systems tend to resist change (homeostasis).

This general theoretical framework is behind the set of three integrated components that define the EFQM Excellence Model:

- i) The fundamental concepts of excellence: these concepts define the underlying principles that form the foundation for achieving sustainable excellence in any organization.
- ii) The RADAR logic: it is a simple but powerful tool for driving systematic improvement in all areas of the organization.
- iii) Nine quality criteria: they provide a framework to help organizations to convert the Fundamental Concepts and RADAR thinking into practice.

The 2019 EFQM forum celebrated in Helsinki (October 23-24, 2019) was the chosen occasion to present the new 2020 EFQM Model.

The last edition of the model draws inspiration from the three rings of the “Golden Circle”: Why, How What (Sinek, 2009) and it is structured around 3 blocks, everyone corresponding with one of the three rings, and seven quality criteria instead of nine. Moreover the term “organization context” is substituted by the term “ecosystem”.

This last model was published after this research was carried out and therefore the theoretical framework is mainly based upon the 2013 Model that became operational from January 1, 2014 and it is still in force while the new 2020 model spreads.

### **2.2.2 Fundamental Concepts of Excellence**

The EFQM model supposes eight categories “to describe the attributes of an excellent organizational culture” (EFQM, 2017, p. 4). These categories are: adding value for customers; creating a sustainable future; developing organizational capability; harnessing creativity and innovation; leading with vision, inspiration and integrity; managing with agility; succeeding through the talent of people; sustaining outstanding results (EFQM, 2017).

These concepts of excellence are also implicit in the last 2020 edition of the model and will be developed later on their application to education and in particular to Comboni Primary Schools.

### 2.2.3 The Criteria of the EFQM Model

The EFQM Excellence Model is a non-prescriptive framework based upon nine criteria that “allows people to understand the cause and effect relationships between what their organization does, the Enablers, and the Results it achieves” (EFQM, 2017, p. 4). In other words, “‘Results’ are caused by ‘Enablers’ and ‘Enablers’ are improved using feedback from ‘Results’” (Ololube, 2006, p. 9). The following figure shows the relations between the nine criteria of the model:

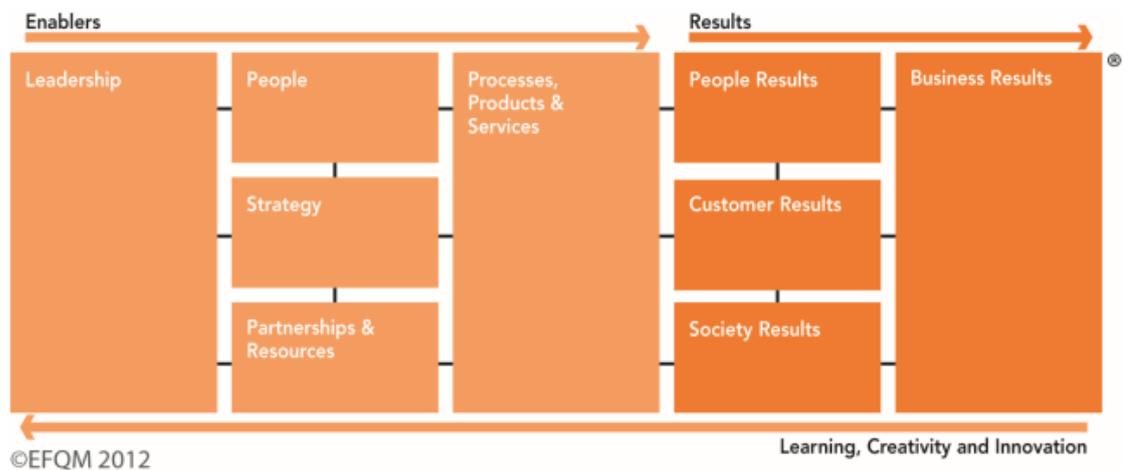


Figure II-1. EFQM Criteria (EFQM, 2017, p. 4)

The figure expresses the particular role of leadership. This enabler acts on the others to generate processes that have an impact on the results of the organization, customers and society in general. Strong leadership and strategic direction are fundamental for organizations “develop and improve their people, partnerships and

processes to deliver value-adding products and services to their customers” (EFQM, 2017, p. 4). In the last edition of the Model,

organisational leadership relates to the organisation as a whole rather than any individual or team that provides direction from the top. It is about the organisation acting as a leader within its ecosystem, recognised by others as a role model, rather than from the traditional perspective of a top team managing the organisation (EFQM, 2020, p. 13).

“Results” are four criteria and refer to “the results an organization achieves, in line with their strategic goals” (EFQM, 2017, p. 4).

Each criterion of the model is divided into a series of sub-criteria that define better the criterion. There are four or five sub-criteria for every enabler and two sub-criterion for every result.

Then, every sub-criterion is displayed in a series of areas of analysis or self-assessment that do not intend to be mandatory nor exhaustive (Sheffield Hallam, 2003, p. 7).

At this stage we will not develop every criterion or sub-criterion. This will be done later when applying them to the schools that are the object of this study.

As already mentioned, the 2020 Model instead considers just seven quality criteria.

#### **2.2.4 RADAR Logic**

The word “RADAR” is an acronym that stands for results, approaches, deploy, assess and refine. It refers to the logic framework that “provides a structured approach to questioning the performance of an organization” (EFQM, 2017, p. 6). It can be considered a development of the PDCA (plan–do–check–act or plan–do–check–adjust)

Cycle, an iterative four-step management method also known as the Deming circle/cycle/wheel. RADAR logic is usually represented with the following figure:

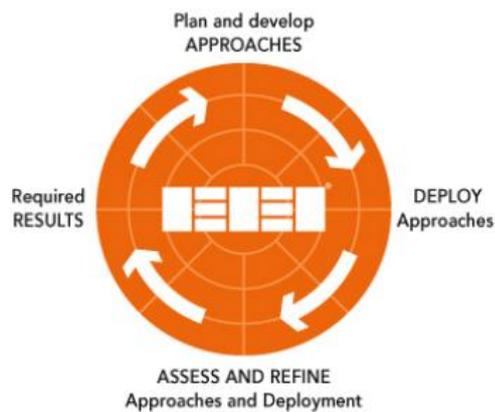


Figure II-2. Radar Logic (EFQM, 2013, p. 6).

This graphic describes that the organization should:

Determine the **Results** it is aiming to achieve as part of its strategy, both in financial and economic terms and as for what refers to satisfaction of the different stakeholders and their operations.

Plan and develop an integrated set of sound **Approaches** to deliver the required results both now and in the future.

**Deploy** the approaches in a systematic way to ensure full implementation.

**Assess** and **Refine** the deployed approaches based on monitoring and analysis of the results achieved and on-going learning activities (EFQM, 2017, p. 6).

After assessing the organization, this one should learn from that assessment and identify a number of strengths and opportunities to improve its future performance.

The RADAR scheme in the 2020 model was updated to emphasize how the organization develops according to the pace demanded by the different stakeholders in a

world characterized by volatility, uncertainty, complexity and ambiguity (VUCA) and in a framework shaped by the Sustainable Development Goals.

### 2.2.5 The Spread of the EFQM Model

The model has not spread just throughout Europe. The Singapore Quality Award for instance was launched in 1994 with a clear influence from the EFQM Excellence Model. In August 1997, the South African Quality Institute (SAQI) launched the South African Business Excellence Model (SABEM) that was created as an hybrid between the EFQM Excellence Model and the Baldrige Model and became more similar to the first one (Alonso-Almeida, 2011, p. 6392).

The Ibero-american Foundation for Quality Management (FUNDIBEQ in its Spanish form) developed in 1998 a model based in the European one and adapted to the American context.

In the Arab World we find many examples of the application of the Model in Palestinian universities (Abu Basheer, 2015). Riham Adel Hassan introduced the EFQM Model to Egyptian Private Higher Education Institutions and considered it as a successful self-assessment tool that “has been validated for the Egyptian context” (2009, p. 174). According to her survey, two are the main enablers in the Egyptian context whose improvement “will consequently directly improve the results of the higher education organisation” (2009, p. 172): processes and partnerships and resources.

The main National Business Excellence Models have formed the Global Excellence Model Council (GEM). “At the moment, there is no African country or region represented in the GEM Council” (Kiriri, 2019, p. 13). Nonetheless, in Africa we find some quality awards and business excellence models. “Most of them are either dormant or facing operational challenges” (Kiriri, 2019, p. 15). Three of them are based of the EFQM Excellence Model:

Table II-1. Quality Models in Africa (Own elaboration based upon: Alonso-Almeida, 2011; Domin, 2016; Kiriri, 2019).

Denomination	Sponsor	Year instituted	Model of Reference	Last Awards
South African Business Excellence Model	South African Excellence Foundation	1997	EFQM	2004
The National Award for Excellence in Quality (Egypt)	Industrial Modernisation Centre (IMC)	1997	Baldrige	2014
Kenya Quality Award	Kenya Institute of Management	1999	Baldrige + EFQM	2017
Moroccan National Quality Award	Moroccan Union for Quality (UMAQ)	2000	EFQM	2019
Mauritius Business Excellence Award (MBEA)	Ministry of Industry, Commerce, and Consumer Protection	2007	Baldrige	2013
Nigeria National Quality Awards	Standards Organization of Nigeria	2017		2019

The literature on the application of the EFQM Excellence Model in Sudan is very scarce and almost reduces to its implementation to non-educational institutions. Yousif, Mohammed & Sayed (2017) studied the applicability of the Model to the company “Sudan Airways” as a proposal to improve its competitiveness and market share. This study quotes an initial survey conducted in three different companies of air transport in Sudan: the national carrier (Sudan Airways), a private local company (Tarco Air) and a foreign company (Qatar Airways). The results of their study “showed a significant positive correlation between the five excellence model enabler criteria. They also revealed a significant correlation between the customer satisfaction and the five enabler criteria” (Yousif, Mohammed & Sayed, 2017, p. 59536).

El-Sayed Dirar Omer (2014) evaluated the relationship between EFQM excellence model criteria applied by some Sudanese business units. The author states that many Sudanese business units have adopted the EFQM excellence model.

Osman Elsadig Mahmoud (2014) studied the implementation of the Model and its impact on organization behaviour of Sudanese construction companies. The author justifies the importance of applying the EFQM Excellence Model in order to improve the traditional management systems of the Sudanese construction companies.

Three master's degree dissertations studied the case of Giad, a Sudanese company that applied the EFQM Model in 2009. Mohammed Najem Aldin Ibraheem Ismael (2015) studied the impact of the implementation of the EFQM Excellence Model on its performance. His study revealed that the majority of the employees (over 90%) agreed that the excellence model implementation had a positive impact. Merghani Ali Omer Hamid (2015) also studied the impact of the EFQM Model on the business results of the company. And Khogali Abdel Gabar Ahmed Khogali (2014) studied the impact of the application of EFQM Excellence model on the performance of Giad Industrial Group. The results from customer satisfaction measures showed positive trends for three consecutive years and this was reflected into positive impacts on the performance of Giad Industrial Group in terms of increased sales and decreased number of customer complaints.

Tayseer Awad Abdel Aziz Musnad (2014) focused on one of the criteria of the EFQM, leadership, and studied the case of the Ministry of Agriculture. The researcher concluded his study recommending to focus on the commitment of the top leadership in programs of quality and to raise awareness of the importance of the role of leadership in the dissemination and application of the principles of total quality and excellence.

## **2.3 The EFQM Model Applied to Education**

### **2.3.1 The Adaptation of the EFQM Model to Education**

In 1997 the European Commission promoted the application of the EFQM Excellence Model to the evaluation of educational institutions. Since then, different

European countries started applying the model to Primary and Secondary schools and to Higher and Vocational education.

In a parallel way, the EFQM also supported the adaptation of their Excellence Model to Public Administration. The result of this work was the Common Assessment Framework (CAF) Model that was launched in 2000 at the 1<sup>st</sup> European Quality Conference in Lisbon.

In May 2000 the Higher Education funding Council for England started a three year programme that aimed “to test the use of the EFQM Excellence Model in Higher Education” (Steed, 2002, p. 86).

In 2001, the Ministry of Education, Culture and Sports of Spain updated an adaptation of the EFQM model to educational centres that is periodically revised since then (Aragón Marin, 2001).

In Italy this model was developed in 2003 by APQI (Associazione Premio Qualità Italia – Italy Quality Award Association) with the collaboration of a network of schools that had been pioneers in the adaptation of the EFQM Excellence Model and immediately assumed by public schools (APQI, 2019).

In the same period, the Association of Private Schools (AEEP) launched a large-scale project at 47 schools in Portugal based on the application of the EFQM Excellence Model (Saraiva, Rosa and D’Orey, 2003).

In Africa, Prof. Nwachukwu Prince Ololube adapted the EFQM Model to education and evaluated the “existing leadership styles and management practices in the education environment in Nigeria” (2006, p. 7). As conclusion of his study, he proposes the Model “to be adopted as a means to enhance sustainability in the education sector” in Nigeria and recommends that similar studies “should be carried out in other parts of Africa to ascertain its applicability in those countries” (Ololube, 2006, p. 20).

In 2008, a number of CAF national correspondents in different countries and/or Education experts – based on the large (extended) use of the model in the educational sector in a number of Member States, decided to join forces to raise the number of CAF

users and to implement European flavoured quality management that would be learner oriented (EIPA, 2019, p. 7).

On October 23, 2017 there were 3,969 registered users of CAF Model in 55 different countries (EIPA, 2019). It's worth mentioning that a framework firstly designed for the adaptation of the EFQM Excellence Model to public administration has been mainly applied by educational institutions (27% of the institutions).

The goal of the different applications of the EFQM Excellence Model to education is to help the school to know itself better through self-evaluation and reflect upon that in order to prepare improvement plans and strategies. Nonetheless, the last version of the Model that was launched in October 2019 focuses on managing "transformation and disruption" which means to "land change effectively as well as drive continuous improvement" (Longmuir, 2019). In this way the model becomes a management tool rather than a mere assessment tool. In fact, the EFQM model represents an epistemological, conceptual, ethical and a methodological framework for school management.

As already discussed, the epistemological paradigm that underlies the EFQM Excellence Model has to do with *complex thought* and the *systemic approach* (Díez Bernal, 2002). According to Lévy-Leblond (1991; cited by López Rupérez, 2000, p. 50), complex systems conjugate a *structural heterogeneity with functional reciprocity*. This means that systems have different levels. Each of them has certain functions interrelated with the others, which gives place to feedback circuits and loops with circular causal connections.

If we thought of the school, we should consider at least three levels of reality: students, teachers and administration. All the three levels share the same reality but from a different perspective. Moreover, the interaction among these levels may give place to unforeseen effects on the school, either positive or negative.

The EFQM Excellence Model can also be considered an ethical framework as it is based upon the importance of responsibility, the satisfaction of the different stakeholders, the social impact of the institution and a humanist understanding of

relations. The Model gives direction and meaning to individual actions beyond their legal value.

Moreover, the 2020 Model emphasizes basic elements related to the sustainable development of the organization like social inclusion and environmental impact.

Nonetheless, Dahlgaard-Park (2008) considers that the best strategy for using the model is ‘adaptation’ rather than ‘adoption’. And this, in fact, is the orientation of this research.

### 2.3.2 Fundamental Concepts of Quality in Education according to the EFQM Excellence Model

We already saw that the EFQM model supposes eight categories “to describe the attributes of an excellent organizational culture” (Ceko, 2014, p. 170). For a successful application of the model, it’s important that the direction of the school understands and assumes these concepts that, when applied to the education realm, can be described as follows (Martinez Mediano and Ríoperez Losada, 2005):

- **Customer oriented – adding value for customers:** excellent schools consistently add value for students, staff and others by understanding, anticipating and fulfilling their needs, expectations and opportunities. In the case of schools we can distinguish the following customers: students and their families, school staff, society in general, providers and those who request any kind of service from the school. All these customers are the final decision makers on the quality of the school. Improvement will be possible after a previous diagnosed of their expectations. But this concept has also to recall the importance for any educational or organization of putting “students at the heart of learning and teaching” (Sheffield Hallam, 2003, p. 3).
- **Leading with vision, inspiration and integrity:** excellent schools have leaders who shape the future and make it happen, acting as role models for its values

and ethics. They embody the vision, the mission and the culture of the organization and guide the existing resources and efforts towards excellency.

- **Succeeding through the talent of people – human capital enhancement, involvement and appreciation:** excellent schools value and develop their staff and create a culture of empowerment for the achievement of both organizational and personal goals. Excellent schools are able to involve all the staff in the process of continuous improvement through team work.
- **Creating a sustainable future-social responsibility:** excellent schools have a positive impact on the world around them by enhancing their performance whilst simultaneously advancing the economic, environmental and social conditions within the communities they touch. This means that the staff members behave according to ethical principles that orientate individual actions and motivate them to have an attitude of service and continuous improvement that leads them beyond the minimum legal requirements a school should fulfil.
- **Management based upon processes and facts:** excellent schools consider processes<sup>1</sup> and facts in a systematic way. All the activities should be interrelated and managed as elements of a system where every staff member is involved. The school gets better results when it works around processes that aim at responding to the identified needs.
- **Continuous improvement and harnessing creativity and innovation:** excellent schools generate increased value and levels of performance through continual improvement and systematic innovation by harnessing the creativity of their stakeholders. They are able to challenge the *status quo* and make change possible based upon learning processes, self-evaluation, reflection, the analysis of data and previous results, planning, the maximization of the existing resources and the coherence with the mission of the school in order to innovate and improve.
- **Development of alliances:** excellent schools establish and keep alliances that add value to the collaborators, that is to persons, institutions and organizations

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<sup>1</sup> A process can be defined as a set of activities mutually interrelated or interacting that transform inputs into outputs.

that provide products, services and knowledge to them. The school is more effective and efficient when providers become partners with whom a common strategy is built. For this purpose, it's important to identify and respond effectively and efficiently to opportunities and threats.

- **Results oriented - Sustaining outstanding results:** excellent schools achieve sustained outstanding results that meet both the short and long term needs of their students and other stakeholders within the context of their operating environment. The proposed improvements are based upon reliable data that include facts and the perception of all the stakeholders (EFQM, 2017; Martinez Mediano & Ríoperez Losada, 2005; Aragón Marin, 2001).

Jerome Arcaro (1995) instead selects five of these principles as the basic ones when applying Total Quality Management to education:

- **Customer focus:** “everyone in the school system must recognize that every educational output has customers” (1995, p. 7);
- **Total involvement:** “everyone must be involved in the quality transformation” and ready to discard the “old ways of working and thinking” (1995, p. 7);
- **Measurement:** “traditionally, schools measure the quality of their output by student achievement. Education professionals must learn to measure quality” (1995, p. 8).
- **System view of Education:** “Education must be viewed as a system” (1995. p. 9).
- **Continuous Improvement:** “Quality is based on the concept that every process can be improved and that no process is perfect” (1995, p. 9).

But to reinforce and guarantee the sustainability of continuous improvement, a school administration cannot limit itself to an engagement with the continuous improvement of its own school. Sustainable continuous improvement will be possible if the whole educational system moves in the same direction which means that the success of the other schools should also be important for everyone. In this way both excellence and equity can be achieved (Hopkins, 2005).

### 2.3.3 The Nine Criteria of Quality in Education according to the EFQM Excellence Model

As already mentioned, the nine criteria of the EFQM Excellence Models previous to the 2020 version are classified into two groups: enablers and results.

The "Enabler" criteria cover “what an organization does and how it approaches its tasks to achieve the desired results” (CAF, 2013, p. 17). They define the internal operations of the school and the aspects on which it is necessary to act in order to achieve an effective management.

The "Results" criteria cover what an organization achieves. They help to understand the direction of the school in relation to its objectives and the real results. These criteria measure perceptions and objective data that should be transformed into numerical information.

Enablers and results are closely related since if the right enablers are effectively implemented, an organization will achieve the results they and their stakeholders expect. This relation is especially clear in the case of the enabler “persons” (criterion 3) and the results (criterion 7) of those persons.

Every criterion is subdivided into sub-criteria and every sub-criterion can also be divided into areas of analysis.

In educational terms, the nine criteria could be presented as follows:

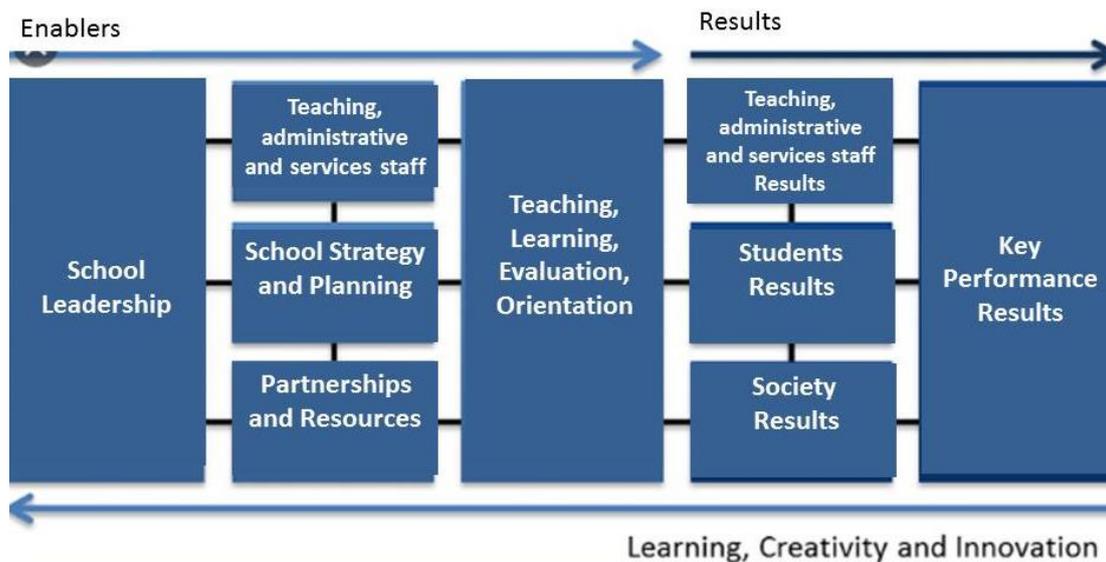


Figure II-3. Adapted version of EFQM Excellence Model inspired by Ololube, 2006, p. 10.

The five enablers (leadership, strategy, people, partnerships and resources, and processes) can be defined as follows (CAF, 2013) :

### SCHOOL LEADERSHIP

Excellent schools have leaders who carry on and facilitate the realization of the mission and vision, acting as role models for its values and ethics and inspiring trust at all times. This criterion includes five sub-criteria: i) development of the school mission, vision, values and ethical principles; ii) staff involvement to ensure their implementation and the school continuous improvement; iii) the interaction with the different stakeholders; iv) the strengthening of the culture of excellence of the persons; v) the definition and boost of change in the organization.

The EFQM Model gives a particular place to the role of leaders. This is also coherent with the theory of the “Efficient Schools” that underlines the importance of a strong leadership and their responsibility in transmitting a clear definition of objectives (Martín-Moreno Cerrillo, 2007, p. 126). The 2020 version of the model instead considers leadership related “to the organization as a whole” (EFQM, 2020, p. 13)

## SCHOOL PLANNING AND STRATEGY

Excellent schools implement their mission, vision and values by developing a stakeholder focused strategy that leads to continuous improvement. Policies and strategies are based upon current and future needs and expectations, the data of the performance indicators, research, learning and external activities. These policies and strategies are developed, revised and refined.

In a similar way, the research of the Efficient Schools movement underlines the importance of the “correspondence between objectives and strategies as decisive factor for school efficiency” (Martín-Moreno Cerrillo, 2007, p. 126).

## TEACHING, ADMINISTRATIVE AND SERVICES STAFF

Excellent schools value their staff and create a culture that allows the mutually beneficial achievement of organizational and personal goals. They develop the capabilities of their people and promote fairness and equality. They care for, communicate, reward and recognize, in a way that motivates staff, builds commitment and enables them to use their skills and knowledge for the benefit of the organization. This criterion includes: planning, management and development of human resources; implication and assumption of responsibilities; importance of dialogue; esteem and attention to the persons.

This research integrated in this criterion some indicators that are not an explicit part of the EFQM Model but provide meaningful data on teachers quality. The first one has to do with the specialized training of the school teachers. Many of them are teaching courses they were not trained to teach and this appears to affect student achievement adversely (Darling-Hammond, 2000; Goldhaber & Brewer, 1997; Monk & King, 1994). Therefore, one of the indicators of quality will be if teachers have specialized studies related to the subjects they teach. In their report for the US Department of Education, Mayer, Mullens, Moore & Ralph (2000, pp. 10-11) recalled the fact that “Goldhaber and Brewer (1997) confirmed this significant relationship in mathematics and science but found no effect in English and history. Teachers with bachelor’s and master’s degrees in mathematics are associated with higher student mathematics test scores”.

Another indicator of quality is the teacher experience. Studies suggest that students learn more from experienced teachers than they do from less experienced teachers (Murnane & Phillips, 1981; Rivkin, Hanushek, & Kain, 2005). Scheerens concludes after examining the review of 147 Input-Output Studies (Hanushek, 1986, p. 1161) that “only the variable *teacher experience* shows some consistency” (Scheerens, 1991, p. 377).

## PARTNERSHIPS AND RESOURCES

Excellent schools plan and manage external partnerships, suppliers and internal resources in order to support their strategy, policies and the effective operation of processes. External partners may be the Educational Inspection of the municipality or the State Ministry of Education. Excellent schools ensure that they effectively manage their environmental and societal impact. The criterion includes these sub-criteria: management of partnerships; management of financial resources; management of premises, equipment and material resources; management of technology; management of information and knowledge.

Silverio Julu had underlined the “lack of sufficient equipment and other necessary items as result of large number of schools and students” as basic problem for the quality of schools in Sudan (1995, p. 14).

Another quality indicator related to this criterion would be “class size”. Some evidence suggests that students may achieve more in smaller classes, particularly primary-grade students who are minorities or who come from economically disadvantaged backgrounds (Grissmer, Flanagan, & Williamson, 1998; Krueger, 1998; Mosteller, 1995; Mosteller, Light and Sachs 1996; Finn, 1998).

## PROCESSES (TEACHING, LEARNING, EVALUATION, ORIENTATION)

Excellent schools design, manage and improve processes, products and services to generate increasing value for customers and other stakeholders. In a school there are some processes that should be designed and followed up with care:

- The organization of the school (time table, staff appointment, students grouping, transport management ...);
- School climate (relations, insertion of new students, control of attendance, school entrance and exit of students...);
- Teaching and learning (application of the strategies and plans...);
- Students evaluation (evaluation design and execution);
- Orientation and coaching (application of the objectives defined for the coaching of students and their families).

This criterion also includes: identification of the different stakeholders needs, design of the school educational project, the plan for the evaluation of the students and the teaching-learning process, new students management and coaching, follow-up of the evolution of the results, definition of indicators to assess the results of the processes and objectives for improvement; management and support to the implementation of changes, revision of the key processes to ensure their progress and success (EFQM, 2017; Martinez Mediano & Ríoperez Losada, 2005; Aragón Marin, 2001).

And when carrying out the assessment of every enabler criterion, the following aspects should be considered:

- The approach: the assessment should include what the school has planned and the reasons behind those plans. Thus the design of the plan should be well founded and justified with well-defined processes and a clear orientation towards the needs of all the stakeholders. It should also be well integrated with the policies and strategies of the schools.
- The Deployment: it should contain the objectives, contents, strategies of the approach and inform the different stakeholders (teachers, students, parents).
- The evaluation and revision of the approach and the deployment in a systematic way (Martinez Mediano & Ríoperez Losada, 2005).

## RESULTS

As for the results, the model defines four criteria. They refer to the results an organization achieves, in line with their strategic goals. In all the four areas, we find that excellent organizations:

- Develop a set of key performance indicators and related outcomes to determine the successful deployment of their strategy, based on the needs and expectations of the relevant stakeholder groups;
- Set clear targets for key results, based on the needs and expectations of their business stakeholders, in line with their chosen strategy;
- Segment results to understand the performance of specific areas of the organization and the experience, needs and expectations of their stakeholders
- Demonstrate positive or sustained good results over at least 3 years;
- Clearly understand the underlying reasons and drivers of observed trends and the impact these results will have on other performance indicators and related outcomes;
- Have confidence in their future performance and results based on their understanding of the cause and effect relationships established;
- Understand how their key results compare to similar organisations and use this data, where relevant, for target setting (EFM, 2017, p. 5).

The four areas of evaluation of the results include perception measurements and indicators of performance. Excellent schools achieve and sustain outstanding results that meet or exceed the needs and expectations of the students and their parents (CUSTOMER RESULTS); of their staff (PERSONNEL RESULTS); of relevant stakeholders within society (SOCIETY RESULTS); and meet the key elements of their policies and strategies (EFQM, 2017; Martinez Mediano & Ríoperez Losada, 2005; Aragón Marin, 2001).

Every criterion has a different weight. For instance the adaptation of the model proposed by the Ministry of Education, Culture and Sports of Spain defined the following values: leadership = 12%; policies and strategies = 10%; persons = 7%; partnerships and resources=7%; processes = 14%; customers results = 15%; staff results

= 11%; society results = 10%; key results = 14% (Martinez Mediano & Ríoperez Losada, 2005; Aragón Marin, 2001).

### 2.3.4 How to Implement the EFQM Excellence Model

The implementation of the EFQM Excellence Model should be planned and carried out in phases. These stages should be sequenced (Sommerville, 2007) and “discernible at the starting moment to achieve effective implementation” (Vracking, 1995, p. 38).

When the model is applied for the first time, as it happens with the schools of this study, the self-assessment should lead to the elaboration of an improvement plan. Every centre may need a different pace or procedure, but the most common one is this:

#### INTRODUCTORY STAGE

1. Commitment of the school administration and the educational authorities.
2. Sensitization and information to the school staff.
3. Facilitation from an external expert in the model.
4. Formation of the “Quality Team” with members of the school administration and interested staff members (Davies, 2004, pp. 71-77). This team should be well trained in the Model so that they are able to inform all the school community about the process. Díez Bernal presents a detailed plan of formation made of 10-12 sessions of two hours each (2002, pp. 52-53). The first session consists of a general presentation of the model and the reading of a case study. In the following nine sessions, the different criteria and sub-criteria are thoroughly studied.

## SELF-ASSESSMENT STAGE

5. Realization of the self-assessment by the “Quality Team” with the instruments to collect data provided by the model (questionnaire or form). The same team analyses the data and writes a report with special emphasis on the strong points and the areas that need improvement.
6. The team classifies the areas that need improvement according to their impact on the key results, the policies and strategies of the school.
7. Presentation of the results by the Administration Team to the teachers in order to organize the elaboration of the Improvement Plan.

## ELABORATION OF THE IMPROVEMENT PLAN

8. Formation of “Improvement Teams” for the different areas that were identified in need of improvement and considered a priority.
9. Preparation of the Improvement Plans that define responsible people for execution, fields of application, time-line and criteria for the follow up and evaluation.
10. Presentation of the Improvement Plans to the Direction for knowledge and approval.
11. Setting and planning the processes and necessary resources to carry them out.

## APPLICATION OF THE IMPROVEMENT PLAN

12. Application and follow up of the improvement processes and assessment of results.
13. Publishing and discussion of results.
14. Verification of the results of the Improvement Plan and realization of a new self-assessment (Martinez Mediano & Ríoperez Losada, 2005; Aragón Marin, 2001).

Martínez Mediano and Rioperez conclude after testing the model with several schools, that it's convenient to engage “an expert in the model who helps forming the Quality Teams and informs and sensitizes the whole school community on the culture of quality” (2005, p. 59).

### **2.3.5 Instruments and Ways for Self-assessment according to the EFQM Excellence Model**

There are different ways of executing the self-assessment. The most common ones are the questionnaire and the form. Some digital applications like the 4.0 Profile Tool are based on those two basic methods. Here we also introduce the methodology proposed by the Common Assessment Framework (2013), the “Award Simulation”, the Proforma, the Matrix and the Workshop.

#### **i) The Questionnaire**

This instrument is specially recommended for organizations that approach the EFQM Excellence Model for the first time as it is the easiest tool to carry out the self-assessment. The questionnaire also facilitates the presentation of the results in a simple way. The questionnaire:

helps the institution to know its situation along with the future direction and priorities. It allows the comparison with the results of other centres and organizations. It encourages in the centre the culture of continuous improvement through periodical self-evaluation, the assessment of the progress and the respective corrections (Aragón Marin, 2001, p. 65).

The questionnaire can be distributed to a group of selected members of the educational centre (administrative staff, teachers, students, parents...) who would fill it individually. Some of them may be invited to answer to just a determined part of the questionnaire. It would be interesting to compare the perceptions of different groups of the school community on the same items.

For instance, the questionnaire proposed by the Ministry of Education, Culture and Sports of Spain contains 108 questions. Every one can be answered with four values. To every score a certain value in percentage is assigned: 1=no progress (0%); 2=small progress (33%); 3=meaningful progress (66.7%); 4=goal fully achieved (100%).

The “Quality Team” analyses the results and establishes the school profile that reflects the scores for every criterion.

The final score of the school can be calculated giving a different weight to every criterion as said before.

## **ii) The form**

The form is more detailed and demanding. It is advisable for institutions with previous experience in the model. It is based upon the consensus of the “Quality Team” members (Martinez Mediano and Ríoperez Losada, 2005).

In the assessment of every sub-criterion, the team firstly identifies the strong points of the school and the aspects that demand improvement. After that, the other steps of the RADAR logic are analysed for every sub-criterion of the enablers: approach, deployment, assessment and revision are assessed with a certain mark. As for the results, for every sub-criterion the magnitude and the implementation are separately assessed. Some sub-criteria have a different weight.

At the end the different marks are weighted according to the criteria defined in the model. All the scores are collected in a table along with two RADAR matrixes, one for the enablers and one for the results.

### **iii) The Model of the Common Assessment Framework (CAF)**

CAF (2013) provides two ways of scoring based upon the PDCA-cycle:

The ‘classical’ CAF scoring gives a global appreciation of each sub-criterion by indicating the PDCA phase the sub criterion finds itself in. The ‘fine-tuned’ CAF scoring is suitable for organisations that wish to reflect in more detail on the analysis of the sub-criteria. It allows you to score – for each sub-criterion – all phases of the PLAN DO CHECK ACT (PDCA) cycle simultaneously (CAF, 2013, p. 57).

The CAF Resource Centre provides the respective assessment panels for the enablers and the results according to every way of scoring.

### **iv) Award Simulation**

This approach requires the school to fully document its activities in a report as if it were applying for EFQM Award by filling the application brochure (Davies, 2004). For every criterion, evidence should be provided. The report “is subsequently reviewed by a trained assessor who looks for the strengths and areas for improvement as they would if working through the award process itself” (Sommerville, 2007, p. 35).

“The benefits associated with this approach are that it provides a list of strengths and areas for improvement and an excellent communication document” (Davies, 2004, p. 23). The associated risks are less involvement of managers because the task is usually delegated, a potential for creative writing and it can be too ambitious for an organization

early on in its journey towards excellence. Moreover it is very time-consuming and resource intensive.

**v) Matrix Chart**

In this case a matrix is created based on the Model. This matrix “consists of a series of statements against the criteria of the Model on a zero to ten scale” (Sommerville, 2007, p. 35).

The main advantage is that the matrix is simple to use, requires minimal training, can involve all the organization's people, supports team discussion and clearly demonstrates progress and the lack of progress in relation to all the nine criteria of the EFQM Excellence Model. However, the main disadvantage is that it does not provide much evidence in response to the criterion parts, “the list of strengths and areas for improvement are not produced and there is no direct cross-reference between the matrix statements and the sub-criteria of the Model” (EFQM 2003, quoted by Davies, 2004, p. 22).

**vi) Workshop Approach**

Davies defines the five stages of the workshop approach as follows: “1. Training; 2. Data collection; 3. A scoring workshop; 4. Prioritisation of improvement actions; 5. A review of progress” (2004, p. 22).

Phase 5 becomes part of the normal review process for the organisation. “The benefits associated with this approach are that it is an excellent way to familiarize management teams to understand the Model, supports team building and allows for discussion and agreement regarding the strengths and areas for improvement, which provides motivation towards improvement actions. The associated risks are that it is less

robust that the award simulation approach, requires expert facilitation and can result in unrealistic, often overgenerous scoring” (EFQM, 2003, quoted by Davies, 2004, p. 22).

## **vii) Proforma**

In this approach a proforma page is created for each one of the sub-criteria. For instance the booklet, 'Assessing for Excellence. A Practical Guide for Self-Assessment' (EFQM, 1999), includes in every page the description of the criterion, the sub-criterion, the respective areas to address and blank spaces where the assessment teams define strengths, areas for improvement and a list of evidence that supports the choice of strengths and areas for improvement.

This list helps the organization to identify factual information. The methodology associated with the filling in of the Pro-forma document fosters the involvement of a range of the organization's people.

“The associated risks are that the process is dependent upon good data collection and the proformas can stifle recognition of the full story relating to excellence development” (Davies, 2004, p. 23).

### **2.3.6 The Elaboration of the Improvement Plan according to the EFQM Excellence Model**

After self-assessment, the appointed team can prepare the Improvement Plan based upon the weak points that should be firstly improved as they have a greater impact on the performance of the school. In the identification of these priorities, some other criteria should also be considered: the urgency, the presence of the necessary resources to implement the action (feasibility) and the expectations of the different stakeholders (Martinez Mediano and Ríoperez Losada, 2005).

Obviously in order to improve, there is need of changing and for that all the school community should be involved.

The Plan should define some specific, measurable, achievable, relevant and time bound goals.

After executing the Improvement Plan, it will be important to evaluate that execution and see if the objectives were achieved.

## **2.4 Potential Problems, Resistance to Change and Keys for a Successful Implementation**

### **2.4.1 Challenges in the Implementation of the EFQM Excellence Model**

The studies that assess the efficiency of TQM in general and the EFQM Model in particular don't question their utility but stress the relevance of the way of implementing them and blame this factor as the one behind unsuccessful cases (Chin and Pun, 2002). "Harari postulates that only 20 per cent of companies that implement TQM do so successfully. Yandrick is more positive and claims that about two-thirds are successful" (quoted by Sousa-Poza, Nystrom, & Wiebe, 2001, p. 745). Similarly, Spector and Beer state that the failure rate "exceeds 75 per cent" (Spector & Beer, 1994, p. 63). In their view, the key to succeed in the implementation of TQM yields "in unhooking the organization from its traditional hierarchical and functional moorings and reattach it to horizontal, cross-functional processes" (Spector & Beer, 1994, p. 63).

A survey of 469 higher education institutions on the implementation of TQM by Birnbaum & Deshotels concluded that the adoption of TQM in the academy is both a "myth and illusion" (1999). Srikanthan & Dalrymple (2001) instead distinguish between the application to the administrative function of the universities, where TQM looks more successful, and the application to the academic functions. They state that the success in the implementation depends in the capacity of creating a combined model

able to integrate the two functions. They also underline the importance of the organizational culture. According to them, “the typical current culture in higher education is bureaucratic in nature, more prone to conflict than collaboration” (Srikanthan & Dalrymple, 2002, p.1).

Since the EFQM Excellence Model is based on TQM principles, the results of the previous studies give some indication about the challenges that this study may meet. John Davies (2004) realizes a similar study to the previous ones but focuses on the implementation of the EFQM Model in UK University academic units.

This author identifies that the keys for a successful implementation are motivation, “preparing for implementation by gaining senior management commitment and planning” (Davies, 2004, p. 265).

Several authors confirm the importance of motivation, conviction and having an established need and clear expected benefits as a key issue for a successful implementation (Chin and Pun, 2002; Tan, 1997; Melan, 1998; Thiagaragan, Zairi, & Dale, 2001; Motwani & Kumar, 1997).

Other authors stress the importance of involving all the staff so that they don't feel the implementation of the Model as an imposed decision from the top (Bolton, 1995; Munro-Faure & Munro-Faure, 1992; Mersha, 1997) and of delivering good communication and information (Vracking, 1995; Poirier & Tokarz, 1996).

Escrig-Tena, Garcia-Juan and Segarra-Ciprés produced the first studied focused on the factors that contribute to the internalisations of the EFQM model. They start from the principle that adopting the model may not necessarily imply internalisation. Thus they

provided evidence that internal reasons are more relevant than external drivers to achieve a true internalisation of the EFQM model. In particular, the search for a participative style among employees is the motive that seems to drive a substantive adoption of the EFQM model. Moreover, our work unveils motivational practices regarding performance evaluation and compensation as an important factor to facilitate the internalisation of a QM model (Escrig-Tena, Garcia-Juan and Segarra-Ciprés, 2019, p. 414).

As for the issues related to planning, Davies underlines the importance of assessing the culture/context of the organization and having the EFQM Excellence Model implementation “aligned with activities which are already taking place” in the organization (Davies, 2004, p. 86). Davies also points out the importance of keeping a good pace of implementation, “without extended periods of inactivity, in order to ensure that momentum is not lost” (2004, p. 86).

Another key factors for a successful implementation are senior management commitment, the education and training and involvement of the staff (Davies, 2004).

If we want to mention instead factors that usually result in the failure of TQM implementation, the studies mention the expectation of quick results (Mersha, 1997; Michael, Sower, & Motwani, 1997; McAdam & Welsh, 2000) and the lack of a transformational leadership (Srikanthan and Dalrymple, 2001).

Other studies point out the resistance to change as an important obstacle that makes the implementation of TQM difficult (Aly & Akpovi, 2001; Owlia & Aspinwall, 1997).

In order to overcome this resistance, Oakland (1999) lists the following tools: education and communication, participation and involvement, facilitation and support, negotiation and agreement.

Gopalan identifies two major sets of reasons that explain the failures of the implementation of Total Quality Management:

The first are initiating and start-up problems, the second are post launch issues. There are four common problems to take up TQM initiatives. They are lack of a visible enactment by the senior staff, poor planning, inadequate database, and lack of appropriate skills within the organization. The most common post launch problems are team mania-too many teams and not enough support; measurement mania-too many measurements leading nowhere; over zealous selling of outcomes and very little initial achievement; fixing problems without looking at processes and losing momentum (Gopalan, 2014, p. 42).

Another aspect that this author underlines is that “as the experience of the U.S.A and the U.K. show, the results of TQM are best obtained when it is a decentralized and school-specific initiative rather than a macro-program” (Gopalan, 2014, p. 116).

#### **2.4.2 Culture and Context Assessment**

Among the different factors to be considered before applying the EFQM Excellence Model to a certain organization, several authors underline the importance of knowing how people think about quality (Giertz, 1999) and of analysing the organizational culture, which also means their openness to change and the time needed for that (Brunetto, 2001; Bardoel & Sohal, 1999; Chin & Pun, 2002). In the same line, Atkinson (1990) recommends assessing the culture and values of the organisation using a feasibility study.

One theoretical framework to analyse the culture of an organization is the typology presented by Ott (1989), based upon the classical classification of (Schein, 2004) and the addition of a level 1B (Martin & Siehl, 1983) resulting into four interrelated levels of meaning:

- Level 1A: Artefacts.

This level “includes all the phenomena that one sees, hears, and feels when one encounters a new group with an unfamiliar culture” (Schein, 2004, pp. 25-26). Therefore it includes elements like the institution architecture; its language; its technology and products; its artistic creations; its style, the way of clothing of the staff, manners of address; its way of displaying celebrations and so on.

- Level 1B: Patterns of behaviour

This is the additional level introduced by Martin & Siehl (1983). It refers to “things that members of an organisational culture continue to do (or that causes members to do things) often without thinking” (Sommerville, 2007, p.44). This level also includes norms, rites or programmed routines, management practices such as

human resource practices, innovation practices and relation to client (Calori and Sarnin, 1991).

- Level 2: Espoused beliefs and values

This level refers to “some individual’s own assumptions about what is right or wrong, what will work or not work” (Schein, 2004, p. 28). These assumptions give the reasons why people behave as they do.

As for the difference between belief and values, the first ones provide cognitive justifications for organisational action patterns while values provide the emotional energy or motivation to enact them (Ott, 1989).

- Level 3: basic underlying assumptions

Basic assumptions are internalized by the group little variation. “This degree of consensus results from repeated success in implementing certain beliefs and values”. These assumptions “tend to be nonconfrontable and nondebtable, and hence are extremely difficult to change” (Schein, 2004, p. 31). And since human mind needs “cognitive stability”, any challenge to them “will release anxiety and defensiveness” (Schein, 2004, p. 32). Certainly this aspect is very important when thinking of any change of culture as for example the introduction of the EFQM Excellence Model. Before fostering one, it will be necessary to assess if there is capacity to change and to foresee how to manage the anxiety that the relearning may release.

Building on the model of Hofstede et al. (1990) and that of Weick (1976), McNay (1995) identifies four types of higher education cultures that can be easily translated into types of school cultures:

- Collegial: That is, a relatively small organisation that emphasises individual autonomy
- Bureaucratic culture. That is, where great use is made of hierarchies and committees in the decision-making process
- Entrepreneurial culture. That is, one where there is a keen awareness of the needs and demands of stakeholders.
- Corporate culture. That is, one where power is centralised (quoted by Sommerville, 2007, p. 48).

When analysing the characteristics of suitable cultures for the implementation of the EFQM Excellence Model, Raisbeck (2001) mentions openness and co-operation and Moeller & Sonntag (2001) a supportive organizational environment. Instead, when analysing the characteristics of the culture that may hinder the implementation for succeeding, Giertz (1999) mentions that old institutions, since they have stronger cultures, are less flexible to newness. Brunetto (2001) recalls instead the need of rewarding the efforts of the staff to change as condition to succeed in it and Hill & Taylor (1991) the importance of modifying the terminology of the model to make it appropriate and acceptable to the school community. Similarly Geddes (1993) and McCulloch (1993) underline the importance of avoiding the use of business language in education.

## **2.5 Quality in Education**

The EFQM is a concrete framework for Total Quality Management created within the business realm. Therefore, it is necessary to define the concept of quality that underlies the model before deepening into it in educational terms.

### **2.5.1 Total Quality Management and the Concept of Quality in Industry and Business**

Total Quality Management has become the major preoccupation of businesses worldwide in the last years. Its principles developed along with the evolution of the concept of quality. The modern understanding of quality is the result of the ideas and experience of some key persons:

- Edward V. Deming (1900-1993), for whom quality means grade of uniformity and reliability suitable to the needs of the market and requires “striving for an altogether better product” (Kumari Nagaraja & Subba Rao, 2012, p. 42).

Deming proposed an evaluative cycle made of the following steps: Plan-Deploy-Check-Act (PDCA) and seven quality criteria: visionary leadership, internal and external cooperation, education, process management, continuous improvement, employee satisfaction and customer satisfaction.

- Joseph M. Juran (1904-2008), for whom quality means “fitness for use in terms of design, conformance, availability, safety and field use” (Sheffield Hallam, 2003, p. 6);
- Kaoru Ishikawa (1915-1989) is known as the “Father of Quality Circles” and introduced different tools for quality control (Pareto analysis, fishbone diagrams, stratification, tally charts, histograms, scatter diagrams and control charts) (Sheffield Hallam, 2003, p. 6);
- Malcolm Baldrige (1922-1987), for whom quality self-assessment should consider seven criteria: leadership, strategic planning, customer orientation, information and analysis, human resources orientation, process management, business outcomes.
- Genichi Taguchi (1924-2012), for whom quality means lesser loss for the company, the consumer and society. In this case loss means distance between the objective and the outcome.
- Philip B. Crosby (1926-2001), for whom quality means “conformance to requirement” (Sheffield Hallam, 2003, p. 6) and “zero defects” (Kumari Nagaraja & Subba Rao, 2012, p. 42);

### **2.5.2 Educational Quality and Effectiveness.**

Encouraged by the success of Total Quality Management in industry and business, educational institutions have also assumed its principles (GAO, 1991, p. 18-28).

### *2.5.2.1 The Transition from the Entrepreneurial Realm to the Educational One*

The transition from the business to the educational realm has given place in the last 25 years to the proliferation of National Institutes of Evaluation and Quality in the world: *Instituto Nacional de Calidad y Evaluación* in Spain (1990); *Istituto Nazionale per la Valutazione del Sistema dell'Istruzione* in Italy (1999); *Direction de la Programmation et du Développement* in France; The Danish Evaluation Institute; The Australian Council for Educational Research; National Center for Education Statistics in USA; *Instituto de Inovação Educacional* in Portugal. In fact, “the evaluation of educational centres and teachers has become the main worry of educational policies” (Martín Rodríguez, 2013, p. 44).

Some of the quality management models developed in the entrepreneurial realm have been adapted to education (Malcolm Baldrige, Deming, EFQM, ISO 9000...). But the context in which the concept of quality passed into the educational field, the economic crisis of the seventies, could be dangerous in the sense that the “stress on the economic objectives implies a deviation from the social and cultural goals of education” (Martín Rodríguez, 2013, p. 25). Another factor that could consolidate the above mentioned deviation is the establishment of the figure of agencies for quality assessment in the second half of the eighties.

In the same line, Martín Rodríguez (2013, p. 27) criticizes the “forms of technocratic assessment of educational institutions” and points on some of the problems they make cause:

the revival of approaches that emphasize the methodological over the conceptual; the formal adoption of qualitative methodologies for instrumental requirements that neglect the evaluation procedures associated to those methodologies as far as the involvement of the persons who are object of evaluation; emphases on the evaluation of results; generalization of standard indicators of performance; the use of tests and standard exams to measure the knowledge of students; the application of economic criteria of evaluation.

There is also a tendency to adopt management models that orientate the process for improvement. Certainly the use of these models prevents from having to invent indicators; provides a complete conceptual framework, common and proven objectives and quality standards; defines a coherent organization with improvement activities; allows that the same criteria may be used to measure over time, which makes it easy to detect whether the institution is moving in the right direction.

It is also important to consider that the concept of quality may have different meanings for the different stakeholders and every concept will lead to identify different indicators.

Wilson states that “the quality of the educational system depends on the quality of the persons who carry it out” (1992, p. 126). Analogously, it looks coherent to say that the quality of educational centres will depend on the quality of its teaching and administrative staff and of its students.

According to López Cabanes and Ruiz Gimeno the best definition of quality should be written by the educational centre that wants to define the concept of quality for itself “as far as this definition is elaborated, shared and internalized by school staff members” (2004, p. 51). According to De la Orden (1982) quality in an educational centre is related to functionality (meaning that learning is useful for life); effectivity (the proposed objectives are achieved) and efficiency (the goals are achieved with a reasonable cost).

If we transferred the philosophy of total quality management to education, it would be necessary to consider these fields:

- Leadership, academic and administrative management: distribution of responsibilities, organization, human relations,...;
- Human resources: initial qualification, scientific and educational level, experience and attitudes, work team capacity, student-teacher ratio, commitment,...;
- Material resources: classrooms, libraries, laboratories, recreational areas, sports facilities, furniture, educational resources, technology, information, text-books, blackboards...;

- Pedagogic aspects: diagnosis of students, diversity management, didactic methods, use of educational resources, evaluation, achievement of planned objectives,...

And when defining educational quality within that theoretical framework, the following orientations should be considered (López Cabanes and Ruiz Gimeno, 2004):

- There is a society that receives the results of the educational centre and expects to cover some educational needs.
- Each educational centre, according to its objectives, examines the society that surrounds it and analyses present and future needs.
- The educational centre defines its processes and puts them into practice to reach a reasonable level of satisfaction for all its stakeholders.

According to López Cabanes & Ruiz Gimeno (2004, p. 53) educational quality is “the grade in which the characteristics of the processes of the educational centre satisfy the different stakeholders needs”. And since these needs are changing, subsequently also the concept of quality should be dynamic.

### ***2.5.2.2 School Effectiveness and Total Quality Management***

A reflection on quality that is specific for the educational realm is the one led by the movement of “*Effective Schools*” that started as a reaction to the publishing of the Coleman Report (Coleman *et al.*, 1966). This report “intended to show the extent to which school achievement is related to students’ ethnic and social background” (Scheerens, 2004, p. 2).

The studies on school effectiveness also extended to developing countries and there the results were different from those of the developed countries. This fact deserves attention as it is relevant for this research. In the cases of schools located in developing countries, the studies focused on the production of the school rather than the “school organizational and instructional variables” (Scheerens, 2004, p. 2):

The specific nature of production-function research is the concentration on what can be interpreted in a more literal sense as input characteristics: the teacher/pupil relationship, teacher training, teacher experience, teachers' salaries and expenditure per pupil (Scheerens, 2004, p.4).

The findings of this type of research have often led to disappointing conclusions in developed countries: “inconsistent findings throughout the entire available research and scant effect at most from the relevant input variables” (Scheerens, 2004, p. 4). However, on the contrary, they produce meaningful conclusions for developing countries:

Table II-2. Comparison between Industrialized and Developing Countries for Resource Input Variables.

<b>Input</b>	<b>Industrialized countries</b>	<b>Developing countries</b>
	<b>% sign. positive associations</b>	<b>% sign. Positive associations</b>
Teacher/pupil ratio	15%	27%
Teacher's education	9%	55%
Teacher's experience	29%	35%
Teacher's salary	20%	30%
Per pupil expenditure	27%	50%

Source: Hanushek, 1995, 1997, quoted by Scheerens, 2004, p.18

Also facilities are a relevant factor in education in developing countries that “amounts to no less than 70 when expressed as the percentage of significant positive studies” (Scheerens, 2004, p.18).

Scheerens explains that this divergence between the studies conducted in developing countries and those conducted in the industrialized countries “can be attributed to larger variance in the independent as in the dependent variables” (Scheerens, 2004, p. 19). The same question can be applied to outcome variables (e.g. educational achievement).

In the same line, the review done by Fuller and Clarke (1994), confirms these results when analysing school input and process variables that showed significant positive associations with achievement in at least 50% of the studies in developing countries:

Table II-3. Significant School Input and Process Variables in Developing Countries.

SCHOOL/TEACHER FACTOR	Number of significant effects divided by the number of analyses	
	Primary Schools	Secondary Schools
<b>School spending</b>		
Expenditure per pupil	3/6	3/5
Total school expenditure	2/5	-
<b>Specific school inputs</b>		
Average class size	9/26	2/22
School size	7/8	1/5
Availability of textbooks	19/26	7/13
Supplementary readers	1/1	2/2
Exercise books	3/3	-
Teaching guides	0/1	-
Desks	4/7	0/1
<b>INSTRUCTIONAL MEDIA</b>		
Quality of facilities	6/8	1/1
School library	16/18	¾
Science laboratories	5/12	1/1
Child nutrition and feeding	7/8	1/1
<b>Teacher attributes</b>		
Total years of schooling	9/18	5/8
Earlier measured achievement	1/1	1/1
Tertiary or teacher college	21/37	8/14
In-service teacher training	8/13	¾
Teacher subject knowledge	4/4	-
Teacher gender (female)	½	2/4
Teacher experience	13/23	1/12
Teacher salary level	4/11	2/11
Teacher social class	7/10	-
<b>Classroom pedagogy and organization</b>		
<b>INSTRUCTIONAL TIME</b>		
Frequent monitoring of pupil performance	¾	0/1
Class preparation time	5/8	½
Frequency homework	9/11	2/2
Teacher efficacy	1/1	0/1
Cooperative learning task student	-	3/3

School Management		
School cluster membership	2/2	-
Principal's staff assessment	¾	0/1
Principal's training level	¾	½
School inspection visits	2/3	0/1
Tracking or pupil segregation	1/1	-

Source: Fuller & Clarke, 1994, quoted by Scheerens, 2004, p. 22.

Analysing these results:

Fuller and Clarke (1994) conclude that rather consistent school effects can be found in three major areas: availability of textbooks and supplementary reading material, teacher qualities (e.g. teachers' own knowledge of the subject and their verbal proficiencies) and instructional time and work demands placed on students (quoted by Scheerens, 2004, p. 22).

Instead, the most distinguishing feature of modern effective schools research is the fact of providing information about characteristics related to organization, form and content of schools. These kind of studies are not very common in developing countries or conclude that "the impact of these variables was relatively low" (Scheerens, 2004, p. 23).

In industrialized countries

the results of the early effective schools research converged more or less around five factors:

- strong educational leadership;
- emphasis on the acquiring of basic skills;
- an orderly and secure environment;
- high expectations of pupil attainment;
- frequent assessment of pupil progress (Scheerens, 2004, p. 8).

These five factors gave place to the so-called “five-factor model of school effectiveness”. This model has developed thanks to multi-level analysis so that:

schools became depicted as a set of “nested layers” (*Purkey and Smith, 1983*), where the central assumption was that higher organizational levels facilitated effectiveness enhancing conditions at lower levels (*Scheerens & Creemers, 1989*). In this way a synthesis between production functions, instructional effectiveness and school effectiveness became possible (*Scheerens, 2004, p. 14*).

These principles can be visualized in the following diagram (*Scheerens, 1990, p. 73*):

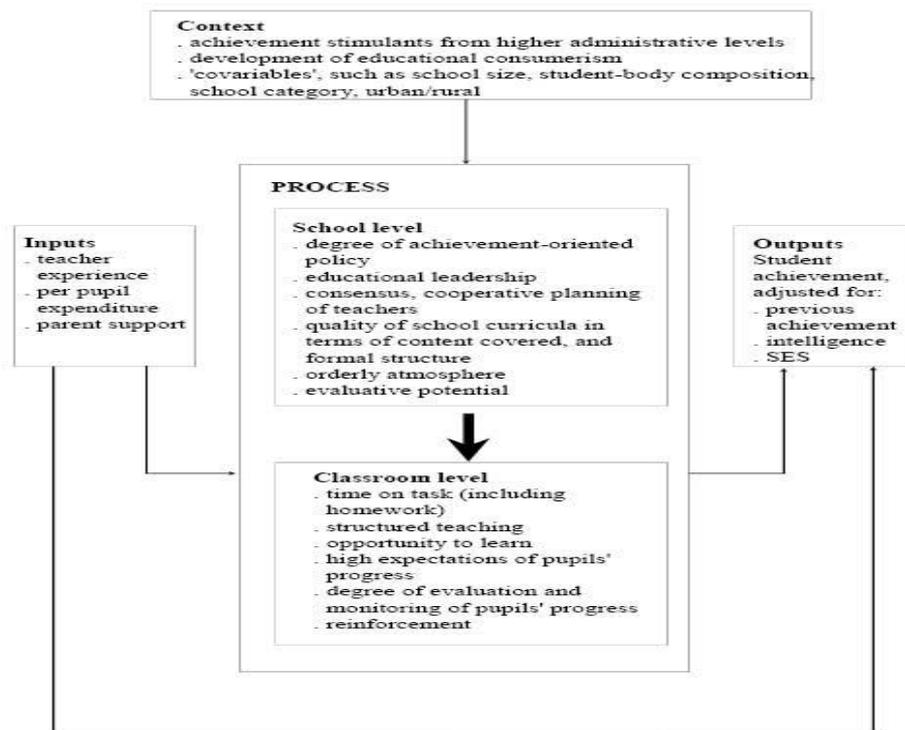


Figure II-4. An Integrated Model of School Effectiveness.

The four studies that are reviewed by Scheerens (*Scheerens, 1999*) related to organizational and instructional factors in developing countries are those by Glewwe et al. (1995) in Jamaica; Fuller, Hua and Snijder (1994) in Botswana; Nyagura & Riddell

(1993); and Van der Werf et al. (1999) in Indonesia. After reviewing these studies, Scheerens suggests two factors that can explain the low impact of organizational and instructional variables in developing countries: “the reference to cultural contingencies” and “the comparative nature of the school effectiveness studies that were reviewed”. Then, he presents an issue that deserves attention: “it could well be that, in some developing countries, the range of variation in teaching practices is quite limited” (Scheerens, 2004, p. 41).

Later on the research of the “Efficient Schools” movement identified six characteristics that define quality: “high moral and expectations of the teaching staff; clear definition of objectives; emphases on the acquisition of basic skills; strong leadership; staff control over instructional decisions; sense of order of the educational centre” (Martín-Moreno Cerrillo, 2007, p. 126).

These criteria are developed by Mackenzie (1983) around three dimensions: leadership, efficiency and effectiveness. The works of Peters and Watermans (In search of Excellency) and Deal and Kennedy (Corporate Cultures) have been used by Clark, Lotto and Astuto (1984, pp. 65-66) to develop this model into what is known as “Excellence Model”. The latter one considers six characteristics: commitment, expectations, action, leadership, focus, climate and rest. Thus, it can be said that school effectiveness is a “comprehensive indicator of quality” (Kumari Nagaraja & Subba Rao, 2012, p. 4) and, in this sense, the modern conceptualization of Total Quality Management includes it and is more comprising.

According to López Cabanes and Ruiz Gimeno “there are two models of quality management with majority implementation” (2004, p. 53). The first was defined by the International Standards Organization (ISO 9000) and is universally applied. This universality concerns both the geographical aspect and the kind of institutions that follow it. The second one is the model of the European Foundation for Quality Management (EFQM), which finds similar correspondent models in USA, Japan and Latin-America.

Both models have as their starting point the identification of the processes that take place in the institutions, the educational centre in our case, their interactions, the

resources they need, the procedures to improve them and the tools to assure their effectiveness.

The EFQM is especially useful in the educational field as a tool for self-assessment of an educational centre (López Cabanes & Ruiz Gimeno, 2004, p. 58) and this is why it was chosen for this study. It facilitates the identification of the strong and weak points of the centre which is the first step to lay down an improvement plan and the concept of institution that lies under it is an effective, operative, evaluable and answerable organization coherent with its mission.

### 2.5.3 Contextualizing Educational Quality

“Sudan has not participated in recent large-scale international learning assessments” to assess the proficiency level in domains such as reading and mathematics (Unesco, 2018, p. 62). Some studies that did this in other countries were the Trends in International Mathematics and Science Study, held in 2007, 2011 and 2015; and the Progress in International Reading Literacy Study held in 2006, 2011 and 2016. “Sudan is also not included in the Southern and Eastern Africa Consortium for Monitoring Education Quality (SACMEQ) examinations” (Unesco, 2018, p. 62).

Even if there is little evidence on the quality education delivered in basic schools in Sudan, it is widely felt that this one “is generally low” (EU, FMoGE and SOFRECO, 2015, p. 206).

An already old international student learning assessment administered in Kassala, North Kordofan and River Nile states in 2009:

found that student learning outcomes were generally weak: the average male student in the sample answered only 35% of the mathematics questions correctly and 38% of the reading questions compared to 37% and 41%, respectively, for the average female student. From a regional perspective, students in the three states performed similarly to their counterparts in Morocco and Tunisia and somewhat better than students in Benin. However, it should be noted that students in northern Sudan were assessed in Grade 5 rather than in Grade 4, as was the case in Morocco and Tunisia, meaning that Sudanese students had the advantage of roughly one additional year of schooling (World Bank, 2012, p. 5).

The Unesco report underlines that key issues affecting the implementation of the Sustainable Development Goal target 4.1 (ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes) are mainly related to limited educational resources. The “Teacher Training Assessment estimates that there may be as many as 110,000 unqualified teachers in the education system” (Unesco, 2018, p. 62).

The same report underlines another aspect that has an impact on the quality of education. “While education is officially free, families still have to contribute financially to their children’s schooling by paying for textbooks, school uniforms, examination fees and sometimes teachers’ salaries” (Unesco, 2018, p. 63). Transport could also be added to these items.

In the study of EU et al. in sixteen schools of Gedarif and South Kordofan, for instance, “Education Councils request parents to make a monthly contribution. The amount of money councils are asking varies from SDG [Sudanese Pounds] 1 to 10 a month” (2015, p. 314). In addition to this contribution, “most schools asked the parents to pay an admission fee for the enrolment of students in Grade 1” (EU et al., 2015, p. 314). Another study carried out in twelve locations of Red Sea State and Blue Nile State shows that parents have to pay a contribution of 30 SDG for every student per year for the first two children. There are also fees for newly enrolled students consisting of “200 SDG per child” (EU et al., 2015, p. 370).

Sometimes these expenses are not affordable for all and many children cannot enjoy the right to Basic Education because of financial reasons. This is one of the reasons why many children go to work instead of attending school.

In the area object of our study, Khartoum State, the possibilities of access to education and quality education are better than in the peripheries of the country. The Sudan population, projecting on data of demographic growth and without South Sudan, is estimated in 42,514,094 (World Population Review, 2019). Almost 8 million live inside Khartoum State.

Another challenge to measure quality or learning outcomes in Sudan is “the limitations of available data” (Unesco, 2018, p. 63). For instance, the official website of the Central Bureau of Statistics cannot be opened properly and technical problems occur when accessing data. Another website called knoema.com has data from official sources; however, the most recent data are from 2009, which are presented in a table format that cannot be easily used.

According to the World Bank’s DataBank, whose data are originally drawn from the Unesco Institute for Statistics (UIS), there are essential education indicators available from 2013, including 1) government expenditure on education as a percentage of GDP, 2) gross enrolment ratios, 3) the gender parity index, 4) net enrolment rates, 5) primary completion rates, and 6) out-of-school children. However, more disaggregated and micro-level data, which could explain details about classifications by state, sex, age, locations and socio-economic status, are not available (World Bank, 2017; quoted by Unesco, 2018, p. 129).

The World Bank has made an effort to fill these data gaps:

through a very simple questionnaire administered by the localities to develop state-level capacity. This tool, called Rapid Results EMIS [Education Management and Information System], uses standard software widely available within the ministry and consists of a one-page questionnaire with selected indicators (World Bank, 2013; quoted by Unesco, 2018, p. 133).

Unfortunately, the system in Sudan is not fully operational.

#### **2.5.4 Impact of Perspective and Culture in the Definition of Quality and the Way of Implementing Evaluation.**

When trying to define quality in education, “the first step is to consider what the ‘product’ might be to possess quality” (Holt, 2000, p.4). If the students are supposed to develop their minds to benefit their society, to define quality means to identify the ways

these benefits are to be constructed and to embrace a scale of values that should have a priority in people's life: happiness, common good, wealth, capitalism, solidarity, spiritual life?

All these choices have an impact on the definition of quality. Some factors are also related to the evaluator who chooses to observe certain aspects and no others. Moreover some factors are related to the context of the evaluated object. And the context includes dimensions like power, economy, living situation, class, "race, ethnicity, language, gender, age, religion, and sexual orientation" (SenGupta, Hopson, & Thompson-Robinson, 2004, p. 5).

Culture is present in evaluation not only in the contexts in which programs are implemented but also in the designs of these programs and the approach, stance, or methods evaluators choose to use in their work. A common thread between culture and evaluation is the concept of values. Culture shapes values, beliefs, and worldviews.

Evaluation is fundamentally an endeavor of determining values, merit, and worth (SenGupta, Hopson, & Thompson-Robinson, 2004, p. 6).

These authors present a confrontation between the values of Eastern agricultural systems and the values of Western industrialized systems (SenGupta, Hopson, & Thompson-Robinson, 2004, p. 7). While in the first group there are values like cooperation or spiritualism, in the second group there are values like competitiveness and consumerism.

Tak Cheung Chan and Yiping Wan (2008) studied for instance the implementation of TQM in Chinese schools and concluded that five TQM principles were particularly compatible with traditional Chinese culture among the fourteen principles described by Deming. The research questions of this study can be useful for this study:

1. Is it feasible to implement Total Quality Management principles to improve education in China?
2. What TQM principle(s) could be best implemented to school improvement in China?

3. What TQM principle(s) could be difficult to implement to school improvement in China?

The relation between quality and values is of paramount importance because “evaluation is a procedure for determining values, which are emergent and transformed through deliberative processes into evaluation findings” (House & Howe, 2000, p. 8). In the case of this study, the researcher is a Spaniard; the object of evaluation are Catholic schools that try to instil certain values; a meaningful percentage of their students and staff are South Sudanese; and the schools are located in a country dominated by Arab culture and Islamic religion that have been considered as the main features of Sudanese identity by the government since the independence.

### **2.5.5 Particular Notes, Values and Challenges Related to the Quality of Catholic Schools**

In this section the study delves into some particular notes that define quality for Catholic Schools in general.

#### ***2.5.5.1 The School Climate***

The working document prepared in view of the World Congress on Catholic Education by the Congregation for Catholic Education, “Educating today and tomorrow: a renewing passion. *Instrumentum laboris*”(2014) defines the kind of relations that should characterize the climate of Catholic Schools:

- respect for individual dignity and uniqueness (hence the rejection of mass education and teaching, which make human beings easier to manipulate by reducing them to a number);
- a balanced focus on cognitive, affective, social, professional, ethical and spiritual aspects;

- encouragement for every pupil to develop their talents, in a climate of cooperation and solidarity;
- the promotion of research as a rigorous commitment towards truth;
- respect of ideas, openness to dialogue, the ability to interact and work together in a spirit of freedom and care (Congregation for Catholic Education, 2014, par. II, 1).

#### ***2.5.5.2 Schools as “Research Communities”***

Catholic schools are called to become *research communities* in which teachers and students are searchers for the truth, everyone with his talents and knowledge. In the same line, “Educating Today and Tomorrow: a Renewing Passion” states that

teaching that only promotes repetitive learning, without favoring students’ active participation or sparking their curiosity, is not sufficiently challenging to elicit motivation. Learning through research and problem-solving develops different and more significant cognitive and mental abilities, whereby students do more than just receiving information, while also stimulating teamwork (2014, par. II, 3).

Moreover, the same document states that “education is based on participation, shared intelligence and intelligence interdependence; dialogue, self-giving, example, cooperation and reciprocity are also equally important elements” (2014, par. III).

#### ***2.5.5.3 Service Oriented Learning***

In Khartoum we find schools that target the elites of the country and will train them to compete and get a high social and economic status. Others try to accumulate the maximum number of students or raise their fees in order to make business.

The Declaration of the II Vatican Council on Christian Education, *Gravissimus educationis* (1965, n.10), insists on the importance of quality over numbers, but at the same time “Educating Today and Tomorrow: a Renewing Passion” clarifies that

“schools would not be a complete learning environment if, what pupils learnt, did not also become an occasion to serve the local community” (Congregation for Catholic Education, 2014, par. II, 4).

Some schools in other countries are already incorporating experiences of service among the students (accompaniment to old people, alphabetization of illiterate persons...) as part of their curriculum, which creates links with the community where the school is inserted. In this way the students “have the opportunity to experience how important what they learn is for their lives and their communities” (Congregation for Catholic Education, 2014, par. III, 1.h). In this way their motivation does change and schools may become agents of transformation of the community.

#### *2.5.5.4 Diversity and Centrality of Learners*

Schools should introduce students to the national culture. The problem comes when countries are not “mono-cultural” bodies and try to impose uniformity as it has happened during the years of the Islamist regime, particularly since 1990. The “official” culture is the Arab one and the educational system has not been inclusive nor considered the multi-culturality of Sudan. Moreover many of the of Catholic students in Sudan are of South Sudanese origin.

The doctrine of the church considers diversity, and not only the cultural one, but also the psychological, the social and the religious ones as “an opportunity and a gift” (Congregation for Catholic Education, 2014, par.II, 5). Moreover Catholic schools are to be open to all. This openness, inclusivity and positive vision of diversity should be a hallmark of Catholic schools.

Other characteristic of Catholic schools should be the centrality of the learners. In the Sudanese legislation there is an instrument that facilitates schools to make concrete this centrality of the learner and valorise his/her uniqueness. This instrument is orientation. Recent educational legislation calls schools to have a social worker or qualified person in the service of orientation.

### *2.5.5.5 Challenges to Quality in Catholic Schools*

#### a) The Challenge of Identity

The Catholic identity of schools is not given by the fact that students or teaching staff are Catholic. The stress is put on the “power of educators’ lives, which must be consistent with the Gospel” (Congregation for Catholic Education, 2014, par. III, 1.b).

Therefore religion is not just regarded as an academic subject but as a spirit that permeates the school (Congregation for Catholic Education, 1977, n. 43).

Some Comboni Schools have a majority of Muslim students and teachers. Nonetheless, this aspect of the Catholic identity of these schools have not been a problem as most Gospel values are not in contradiction with Koranic values or the model of life of the “Prophet Jesus” as he is considered in the Koran.

A more complex issue instead has to do with culture. Schools should lead to a “systematic and critical assimilation of culture” (Congregation for Catholic Education, 1977, n. 26). What is the culture Catholic Schools in Sudan are supposed to propose? In many of these schools students feel more identified with African cultures, especially those coming from Nuba Mountains, South Sudan, Darfur or Blue Nile State. On the other hand, the Sudanese curriculum in force until 2020 introduced the students into Arab culture and neglected others.

#### b) The Challenge for School Communities

Modern trends in education define schools as “research communities”. This concept is coherent with the hallmarks of Catholic schools previously defined. Furthermore, the word community has a very deep meaning in Christian faith. The challenge is not just to be “research communities” but “true living communities that are

animated by the Holy Spirit” (Congregation for Catholic Education, 2014, par. III, 1.b), knowing that this Spirit has no borders of religion in His action. Therefore, Catholic schools need leaders who are able to foster the spirit of community and support and promote mutual encouragement and assistance.

These educational communities should also embrace the families of the students. These values should be instilled through continuous education programs that “focus on the promotion of a just community based on solidarity, that is sensitive to individual needs and is able to systematically help poorer students and families” (Congregation for Catholic Education, 2014, par. III, 1.b).

### c) The Challenge of Dialogue and the Concept of Authority

Sudanese traditional methodology is based upon the concept of the authority of the teacher and has been built on *a banking concept* of education. Modern education instead has a more dialogical character. This fact may put in question the concept of authority. But for Catholic schools, the circular character of communication between teachers and students:

does not mean that adults must relinquish their role as authority figures, but a differentiation must be introduced between the kind of authority that is only linked to a specific role or institutional function, and the authority that comes from credible testimony (Congregation for Catholic Education, 2014, par. III, 1.c).

In many Western schools the concept of authority is in crisis and the risk hinted by the document just quoted is that it may remain blurred. In the Sudanese context the danger could be the opposite one. It remains a challenge to pass from a concept of authority based upon power, symbolized by the whip, to another one based upon “credible testimony” and service.

#### d) The Challenge of Integral Education

Education is not mere instruction but also experience that “links together knowledge and action[,] encompasses the affective and emotional domains, and is also endowed with an ethical dimension” (Congregation for Catholic Education, 2014, par. III, 1.d).

Certainly this challenge is not just a challenge for Catholic Schools. Any educational system and school is in front of the challenge of involving the whole of the person in the educational process.

#### e) The Challenge of Being for All

New schools have appeared in Khartoum in the last years that compete for having the richest families relying on them. They select according to social and economic status. There are also schools that select their students according to religion or race. Catholic schools instead are “schools for all, with special attention to those who are weakest” (Congregation for Catholic Education, 1997, n. 15).

But this also shouldn't mean that Catholic schools have to renounce to have students from the higher classes of society nor should become the excuse to justify the lack of quality.

#### f) Pastoral Challenges and Religious Formation

The document “Educating Today and Tomorrow: a renewing passion” (Congregation for Catholic Education, 2014) calls bishops to rediscover schools as a “precious instrument” for the religious formation of new generations. This religious formation can be done through catechism in the Parish or through Christian religion classes in the school. It's important to have the distinction clear: “While catechesis

promotes personal adherence to Christ and maturing of the Christian life, school teaching gives the students knowledge about Christianity's identity and the Christian life" (Congregation for Catholic Education, 2013, n. 74).

This pastoral care should also reach teachers as the documents of the church insist a lot on the importance of witness (Congregation for Catholic Education, 1977, n.78).

This issue is still more challenging in the Sudanese context, where Catholic teachers may be a minority.

#### *h) Specific Challenges for Multi-religious and Multi-cultural Societies*

It has already been pointed that Catholic schools in Sudan are characterized by cultural and religious diversity while Islam and Arab are the "official" religion and culture respectively. This fact brings us back to the issue of identity:

When schools' identities are weakened, several problems arise, due to the inability to deal with new situations. The answer cannot be to seek shelter in indifference, nor to adopt a kind of Christian fundamentalism, nor – lastly – to define Catholic schools as schools that support "generic" values (Congregation for Catholic Education, 2014, par. III, 1.i).

There is a specific document of the Congregation for Catholic Education issued in 2013 on this challenge: "Educating to Intercultural Dialogue in Catholic Schools. Living in Harmony for a Civilization of Love". The option of the church is clearly expressed in the introduction of this precious document:

Education contains a central challenge for the future: to allow various cultural expressions to co-exist and to promote dialogue so as to foster a peaceful society. These aims are achieved in various stages:

(1) discovering the multicultural nature of one's own situation;

(2) overcoming prejudices by living and working in harmony; and

(3) educating oneself “by means of the other” to a global vision and a sense of citizenship. Fostering encounters between different people helps to create mutual understanding, although it ought not to mean a loss of one’s own identity (Congregation for Catholic Education, 2013, Introduction).

These stages provide a pedagogic methodology that could be transformed into concrete activities in the school and express that the Church does not consider diversity as a problem but as an opportunity “for mutual enrichment, leading to harmony” (Congregation for Catholic Education, 2013, Intr.).

This diversity calls for another aspect to be considered, the relation between culture and religion. “Culture is broader than religion. According to one concept religion can be said to represent the transcendent dimension of culture and in a certain way its soul” (Congregation for Catholic Education, 2013, n. 7).

And in this sense, the documents of the Church propose a clear instrument for the relation with the other religions. This instrument is dialogue that searches to build on what believers or religious persons “share in common” (Congregation for Catholic Education, 2013, n. 13).

And therefore Catholic schools are places of “initiation to the dialogue of life among young people of different religions and social backgrounds” (Congregation for Catholic Education, 2013, n. 17; John Paul II, 1995, n. 102).

The reality of pluralism, either religious or cultural has been faced by two principal approaches: relativism and assimilation. If you examine the policies of emigration of different countries of the world, you realize that some, like France, have opted for relativism and consequently consider religion as a private personal issue. In other countries instead the presence of the *foreigner* is accepted only on the condition that he renounces his identity and cultural roots so as to embrace those of the receiving country. The Church considers these two perspectives incomplete and proposes a third model: inter-culturality.

## The intercultural

approach is based on a dynamic idea of culture, which neither is closed in on itself nor celebrates diversity with stereotypes or folkloristic representations. Intercultural strategies function when they avoid separating individuals into autonomous and impermeable cultural spheres; they rather should promote encounter, dialogue and mutual transformation, so as to allow people to co-exist and deal with possible conflict (Congregation for Catholic Education, 2013, n. 28; cf. also foundations of the intercultural approach in nn. 29-44).

Therefore, Catholic Schools in Sudan should be communities where Christian and Muslim, “Northerners”, Nuba, Darfurians, South Sudanese or Eritrean students and staff, respect the diversity of the other and experience this diversity as a treasure for mutual enrichment. Certainly, a person knows himself/herself better when is surrounded by diversity. Moreover the experience of diversity during the school prepares for life, where the adult person will live surrounded by diversity.

## **2.6 Educational Evaluation**

In this part of chapter 2 a revision of the concept and methods of evaluation is done in view of drawing some principles for the quality assessment of the Comboni Schools located in Khartoum State.

### **2.6.1 The Historical Development of Educational Evaluation**

The evaluation of educational centres develops within the realm of program evaluation. And the history of program evaluation has been organized by different authors in time periods. Eustaquio Martín Rodríguez (2013, pp. 22-23) considers three periods in the genesis and development of evaluation in education: the “pre-tylerian”

and tylerian one ends with the fifties of the past century; the second one is defined as a transition “from students’ evaluation to curriculum evaluation” and its temporal extension depends on the cultural and national context; the third one is named as the period of “diversification of approaches and fields of evaluation” (2013, pp. 22-23).

Madaus, Stufflebeam and Kellaghan (2000), instead, described seven time periods that are also reported by Garanto Alós (1989) and Lance Hogan (2007). This periodization corresponds mainly with the evolution of program evaluation in USA. Nevertheless, considering the influence of the research developed by that country in this field, this temporal classification is also useful for the purpose of this study.

**Time period I: The age of reform (1792-1900’s).** It is the beginning of modern evaluation. The effectiveness of a program or a school is evaluated through “pupil test scores” (Hogan, 2007, p. 4).

**Time Period 2: The Age of Efficiency and Testing (1900-1930).** Following the same concept, tests are developed “to improve the efficiency of the educational district” (Hogan, 2007, pp. 4-5).

**Time Period 3: *The Tylerian Age (1930-1945).*** In the first three periods, the only object of evaluation was the students. Ralph Tyler (1902-1994) enlarges the educational evaluation beyond the mere application of psychometric methods. He “found that instructional objectives could be clarified by stating them in behavioural terms, and those objectives could serve as the basis for evaluating the effectiveness of instruction” (Tyler, 1975; quoted by Hogan, 2007, p. 5).

Under this conception of evaluation yields the understanding of education as “a process of changing the behaviour patterns of people” (Tyler, 1949, p. 53).

Consequently, for Tyler evaluation was “the process of determining to what extent the educational objectives are actually being realized by the program of curriculum and instruction” (Tyler, 1949, p. 69).

**Time Period 4: The Age of Innocence (1946-1957).** At the beginning of this period, Tyler's view of evaluation spread over the academic world. Bloom, Englehart, Furst, Hill, and Krathwohl (1956) developed Tyler's ideas and

gave objective based testing advancement when they published the Taxonomy of Educational Objectives. The authors indicated that within the cognitive domain there were various types of learning outcomes. Objectives could be classified according to the type of learner behaviour described therein, and that there was a hierarchical relationship among the various types of outcomes. Moreover, they indicated that tests should be designed to measure each type of outcome (Reiser, 2001; quoted by Hogan, 2007, p. 5).

Other factors that affect the educational programme start to be evaluated: teachers, resources, contents, activities, organization, methods...

In this period it is worth mentioning the contribution of Cronbach, which underlined the orientation of evaluation towards decision making and the necessity of defining some criteria to which the evaluation should refer.

Scriven instead underlined two previously neglected elements:

- a) The side effects of an educational program can be more relevant than the effects related to the planned objectives;
- b) It is necessary to avoid the bias introduced by the evaluator when he/she defines the objectives of the evaluation.

Scriven distinguished between summative and formative, intrinsic and extrinsic evaluations.

**Time Period 5: The Age of Development (1958-1972).** In this period an important event is the implementation of the Elementary and Secondary Education Act (ESEA) of 1965 that is recognized as "the birth of the contemporary program evaluation" (Hogan, 2007, p. 6). This broader concept of evaluation includes the criterion-referenced testing that "intended to measure individual performance in terms of established criteria" (Hogan, 2007, p. 6). In this period, two levels are distinguished in evaluation:

- a) Individual-oriented evaluation (students, teachers....);
- b) Decisions-oriented evaluations (programs, methods, resources...).

This new ideas do not cancel the previous ones and the importance given to defining educational objectives leads to the proliferation of taxonomies (Bloom, 1956; Mager, 1962; Gagnè, 1965, etc.).

**Time Period 6: The Age of Professionalization (1973-1983).** It is a period of economic crisis in Europe and USA and consequently there is more control on public resources. The concept of *accountability* acquires great importance and public administrations and civil society demand results from the educational centres. On the other hand, the perspectives, methods, approaches and realms of evaluation diversify.

A hallmark in this development of the concept of evaluation is the Conference that was held at Churchill College (Cambridge University) on 20<sup>th</sup> December 1972 (Martín Rodríguez, 2013, p. 29) and aimed at exploring “non-traditional modes of evaluation” (Macdonald & Parlett, 1973, p. 74). Two papers of this Conference deserve a careful reading: *Evaluation as Illumination: A new Approach to the Study of Innovatory Programmes*, written by Malcolm Parlett and David Hamilton; and *Evaluation and the Control of Education*, by Barry MacDonald (1974).

The conference participants discussed the aims and procedures of evaluating educational practices and agreed on the criticism of previous efforts because of:

- a) an under-attention to educational processes including those of the learning milieu;
- b) an over-attention to psychometrically measurable changes in student behaviour;
- c) and the existence of an educational research that rewards accuracy of measurement and generality of theory but overlooks both mismatch between school problems and research issues and tolerates ineffective communication between researchers and those outside the research community (Macdonald & Parlett, 1973, p. 79).

**Time Period 7: The Age of Expansion and Integration (1983-Present).** In the 1980s in a context of global competition between North American, Japanese and European companies there is a stress on excellence. This trend extends to many

countries and evaluation becomes the tool “to ensure quality, competitiveness, and equity in delivering services” (Stufflebeam, 2001, p. 8). The concepts of quality control and management are transferred to the educational field. On the other hand, the educational centre becomes the basic unit of evaluation.

## 2.6.2 Diversity of Scientific Paradigms and Different Approaches to Evaluation

After a quick revision of the historical development of educational evaluation, this section deepens into some approaches to it. MacDonald and Parlett define different kinds of evaluation in a critical way:

- Bureaucratic evaluation:

is an unconditional service to those government agencies who have major control over the allocation of educational resources. His criterion of success is client satisfaction. The key concepts of bureaucratic evaluation are ‘service’, ‘utility’ and ‘efficiency’. Its key justificatory concept is ‘the reality of power’ (MacDonald, 1976, p. 133).

- Autocratic evaluation:

is a **conditional** service to those government agencies who have major control over the allocation of educational resources. It offers external validation of policy in exchange for compliance with its recommendations. [The evaluator] focuses upon issues of educational merit, and acts as expert adviser. His technique of study must yield scientific proofs, because his power base is the academic research community. The key concepts of the autocratic evaluator are ‘principle’ and ‘objectivity’. Its key justificatory concept is the ‘responsibility of office’ (MacDonald, 1976, p. 133).

- Democratic evaluation:

is an information service to the whole community about the characteristics of an educational programme. The basic value is an informed citizenry. His techniques of data gathering and presentation must be accessible to non-specialist audiences. The key concepts of democratic evaluation are ‘confidentiality’, ‘negotiation’, and

‘accessibility’. The justificatory concept is ‘the right to know’ (MacDonald, 1976, p. 134).

After describing different approaches to evaluation these authors propose a change of paradigm in evaluation. Parlett and Hamilton name the old paradigm as “‘classical’ or ‘agricultural-botany’” (Parlett & Hamilton, 1972, p. 4) and the new one they propose is called “anthropological paradigm”. The classical paradigm “utilizes a hypothetic-deductive methodology derived from the experimental and mental testing traditions in psychology” and consists of examining whether the object of evaluation “has reached required standards or pre-specified criteria” (1972, pp. 5-6).

Among the four ‘shortcomings’ of the ‘classical-botany’ that Parlett and Hamilton describe, we bring here three that should be considered in this research:

- 1) It describes educational situations by parameters or factors and neglects ‘individuals’ and ‘institutions’. Moreover it demands “a major data collection exercise and is expensive in time and resources” (1972, p. 7).
- 2) “The methods used in traditional evaluations impose artificial and arbitrary restrictions on the scope of the study” (1972, p. 8).
- 3) “Research of this type, by employing large samples and seeking statistical generalizations, tends to be insensitive to local perturbations and unusual effects” (1972, p. 9)

All this criticism does not mean that the collection of numerical data for statistical analyses, the use of parameters such as Intelligence Quotient (IQ), social class or test scores, or the use of experimental longitudinal and survey research methods are useless. What Parlett and Hamilton state is that they are “usually inappropriate, ineffective, or insufficient for program evaluation purposes” (1972, p. 9).

Moreover, the increasing demand of accountability by the public opinion and the administration may become a danger if it leads to the adoption of decisions merely based on performance. Parlett and Hamilton propose instead a model of evaluation they

call “illuminative evaluation”<sup>2</sup> whose “primary concern is with description and interpretation rather than measurement and prediction” (1972, pp. 10-11). These authors call the paradigm within which they place their model as ‘anthropological’. Other authors would call this paradigm as interpretative (Schultz, Cicourel, Garfinkel, the Chicago School of Sociology, Boas, Anthony Guiddens and Malinowski).

When this model of evaluation is applied on an innovatory programme, the questions are “how it operates, how it is influenced by the various school situations in which it is applied; what those directly concerned regard as its advantages and disadvantages; and how students’ intellectual tasks and academic experiences are most affected” (1972, p. 11).

This change of paradigm, however, also implies a change of premises, terminology and concepts. Among the latter ones, two concepts are central for the illuminative evaluation: “the ‘instructional system’ and the ‘learning milieu’”. In the EFQM 2020 Model this term could be translated into “ecosystem”.

Connecting changes in the learning milieu with intellectual experiences of students is one of the chief concerns for illuminative evaluation. The learning milieu concept is necessary for analysing the interdependence of learning and teaching, and for relating the organization and practices of instruction with the immediate and long term responses of students (Parlett & Hamilton, 1972, pp. 15-16).

Apodaca (1999, p. 366) calls *participatory evaluation* the new paradigm and summarizes the transition into it with the following table:

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<sup>2</sup> The term illuminative research is drawn from Trow (1970).

Table II-4. Differences between Traditional and Participatory Evaluation (Own elaboration).

	Traditional evaluation	Participatory evaluation
Who	External expert	Community, facilitator, managers...
What	Standard indicators	The stakeholders define the indicators
How	Scientific objectivity focus	Self-evaluation and simple methods adapted to the culture of the group
When	Normally at the end and sometimes during the process	Monitoring and evaluation are intertwined
Why	Accountability, normally summative	Enable the stakeholders to start, modify and control the action
Generalization	Basic objective of the evaluation The external validity is supported by the random character	The objective is transformation and improvement
Internal validity	Based upon right method of sampling and control over the variables (classical experimental approach)	Based upon triangulation of information and consensus as intersubjective validity
Assessment of the impact	Clear and identified effects and distinguished from variables strange to the design	The impact is assessed starting from the social or community perception of the effects/utility of the program

Source: Apodaca, 1999, p. 366.

R.E. Stake distinguishes instead between a ‘preordinate’ and a ‘responsive’ evaluation. The evaluation is responsive:

(1) if it orients more directly to program activities than to program intents (2) if it responds to audience requirements for information, and (3) if the different value-perspectives of the people at hand are referred to in reporting the success and failure of the program. In these three separate ways an evaluation plan can be responsive (Stake, 1973, p. 5).

We have again the emphases on processes rather than on results and a different perspective from Scriven’s that distinguishes between formative and summative evaluations.

Other approaches that are quite relevant in the history of evaluation are the models of Cronbach, Scriven and Stufflebeam. The latter one

proposed a model for evaluation that emphasized the particular decisions that a program manager will face. Data-gathering would include data on Context, Input, Process and Product; but analysis would relate those things to the immediate management of the program (Stake, 1973, p. 2).

The concept of *context* of Stufflebeam could be considered the equivalent concept to *learning milieu* in Parlett and Hamilton and *ecosystem* in the EFQM 2020 Model. This model, known as CIPP, “was popular in the U.S. Office of Education for several years. Gradually it fell into disfavour because it was not generating the information—or the protection—that program sponsors and directors needed” (Stake, 1973, p. 2).

Cronbach instead defines evaluation as a “systematic examination of events occurring in and consequent on a contemporary program – an examination conducted to assist in improving this program and other programs having the same general purpose” (Cronbach et al., 1980, p. 14).

Stake mentions that for Scriven, “evaluation is an observed value compared to some standard” (Stake, 1973, p. 2). This author also quotes different factors that are necessarily interrelated: people expectations, evaluation purposes, program values, the kind of data collection. These expectations may be: to document events, to record student change, to detect institutional vitality, to place the blame for trouble, to aid administrative decision making, to facilitate corrective action or to increase our understanding of teaching and learning. He logically states that:

all the purposes cannot be served with a single collection of data. The evaluator has to decide. I advise the evaluator to give careful attention to the reasons the evaluation was commissioned, then to pay attention to what is happening in the program, then to choose the value questions and criteria. He should not let a list of objectives or an early choice of data-gathering instruments draw attention away from the things that most concern the people involved. Many of my fellow evaluators are committed to the idea that good education results in measurable outcomes: student performance, mastery, ability, attitude. But I believe it is not always best to think of the instrumental value of education as a basis for evaluating it (Stake, 1973, pp. 5-6).

Another perspective to classify the different approaches to evaluation is the one proposed by Ángulo Rasco and Martín Rodríguez (2013) who find inspiration in a classic article of Nevo (1998). They distinguish three different kinds of evaluation. The first one is the goal-based evaluation. In this kind they place the model of Ralph Tyler. The goals are evaluated through the realization of tests that measure if the goals have been reached. The second kind is called “non-actionable descriptive” evaluation. They refer to the evaluation as a data collection process aiming at decision-making or problem solving (Norris, 1990). The third kind is called “actionable descriptive evaluation”. This third kind of evaluation is based upon description and judgment. Similarly, Stufflebeam defines evaluation as “a study designed and conducted to assist some audience to assess an object’s merit and worth” (Stufflebeam, 2001, p. 11).

Guba and Lincoln also underline the words merit and worth in their definition of evaluation. The latter one is:

one of the three basic forms of disciplined inquiry, the others being research and policy analysis. It is that form of inquiry whose focus is some evaluand (program, process, organization, person, etc.) and which results in “merit” and/or “worth” constructions (judgments) about it. Merit constructions converge on the intrinsic quality of an evaluand, irrespective of the setting in which it may find applications. Worth constructions converge on the extrinsic usefulness or applicability of an evaluand in a concrete local setting. Evaluation of a proposed or developing evaluand is termed “formative,” while evaluation of some developed evaluand is termed “summative” (2001, p. 1).

Ángulo and Martín Rodríguez (2013, p. 65) consider Robert Stake the main promoter of this new approach to evaluation based on description and judgment. This vision of evaluation is not shared by those evaluators who think that scientific evaluation should be free from values.

Stufflebeam proposes to move ahead towards objectivist evaluations that “are based on the theory that moral good is objective and independent of personal or merely human feelings. Fundamentally, objectivist evaluations are intended to lead to conclusions that are correct” (Stufflebeam, 1994, p. 326).

When assessing the worth of a certain item, there is need of defining *educational indicators*, that is, “a statistic [singular] on the educational system that reveals something about its performance” (Ángulo Rasco & Martín Rodríguez, 2013, p. 76).

Certainly, the choice of indicators reflects “a way of conceiving the school” (Ángulo Rasco & Martín Rodríguez, 2013, p. 78). This choice should consider that “the publication of the indicators should be interpreted by the receivers” (Ángulo Rasco & Martín Rodríguez, 2013, p. 80) and that these indicators “shouldn’t substitute the judgment of the receivers” (2013, p. 80) since there is always a gap between reality and the picture presented by indicators.

Daniel Stufflebeam identifies and critically appraises “twenty-two approaches often employed to evaluate programs” (Stufflebeam, 2001, p. 7) that classifies into four

categories: Pseudoevaluations; Questions and Methods-Oriented Approaches (Quasi-Evaluation Studies); Improvement/Accountability-Oriented Approaches and Social Agenda/Advocacy Approaches.

Worthen, Sanders & Fitzpatrick (1997) instead “classified the different evaluation approaches into the following five categories: (a) objectives-oriented, (b) management-oriented, (c) consumer-oriented, (d) expertise oriented, (e) adversary-oriented, and (f) participant-oriented evaluation approaches” (quoted by Hogan, 2007, p. 6). And Preskill lists 13 approaches or models (Preskill & Russ-Eft, 2005, pp. 101-103).

At the end of his historical revision of the development of educational centres and teachers evaluation, Martín Rodríguez concludes that two different approaches remain: “one related to managerialist and control guidelines in view of accountability; and the other one linked to institutional and professional development of teachers so that these processes, internalized by the institution, shape and base the improvement of learning, teaching and school organization” (Martín Rodríguez, 2013, pp. 39-40).

### **2.6.3 The Relation between Evaluation, Assessment and Research and Scientific Paradigms**

After reviewing the historical development of educational evaluation, it is worth mentioning that while in some languages there is no distinction between assessment and evaluation, English language does differentiate between them.

A schematic way of expressing this distinction could be this table:

Table II-5. Differences between Assessment and Evaluation

Dimension	Assessment	Evaluation
Timing	Formative	Summative
Purpose	Process-Oriented	Product-Oriented
Relationship between administrator and recipient	Reflective	Prescriptive
Findings and Use	Diagnostic	Judgmental
Modifiability of Criteria, measures	Flexible	Fixed
Standards and Measurement	Absolute (individual)	Comparative
Outcome	Improves learning quality Provides feedback on performance and ways to enhance performance in future.	Judges learning level Whether the standards are met or not
Criteria set by	Both parties jointly	Evaluator

Another question that should be considered in a scientific study of evaluation or assessment is the relation between these terms and research. For some authors, evaluation is a form of research and for some others research is a tool for evaluation.

From the perspective of the “objectivist or realistic epistemology” the evaluation is a scientific process of applied nature (Ángulo Rasco & Martín Rodríguez, 2013, p. 63). In this line we can consider this definition:

Evaluation research is systematic, data-based inquiry to determine the merit or worth of a program, product, organization, intervention, or change effort. Evaluation research applies social science and related inquiry methods for the systematic collection of information about the activities, characteristics, and outcomes of change efforts to inform judgments about goal attainment, improve program effectiveness, identify costs and benefits, and/or inform future decisions (Quinn Patton, 2013, p. 337).

This perspective should be placed within the frame of the “rationalist tradition, also known as empirical-rationalist, positivist, hypothetical-deductive, behaviourist...” (Ángulo Rasco & Martín Rodríguez, 2013, p. 67). This tradition stresses the objective character of science, separates facts from values and holds an universalist vision of science that dispenses social implications and the human contexts in which is developed. In this perspective the researcher searches for cause and effect relationships in human phenomena (Ángulo Rasco & Martín Rodríguez, 2013, p. 71).

The **interpretative-symbolic paradigm** does not consider knowledge to be objective nor universal for every situation or human context. There are no objective and universal solutions. “Scientific knowledge is socially and historically conditioned” and “impregnated with values, ideological options, symbols, traditions...” (Ángulo Rasco & Martín Rodríguez, 2013, p. 72). In this paradigm the researcher searches for the meaning of the facts. Its main objective “is pure and complete description” (Proppe 1990, p. 328; quoted by Ángulo and Martín Rodríguez, 2013, p. 72).

For the **socio-critical paradigm instead**, education is a tool of liberation for human beings. Therefore scientific knowledge cannot limit itself to describing, understanding or explaining human phenomena, but should contribute to the transformation of society in order to stop reproduce the injustice currently present. Research starts from practice and the practitioners should be the main protagonist and research agents, those who should control the process. The question is not just to describe or understand, but to react. “In this paradigm is essential the knowledge of the concrete cultural and historical context” (Proppe 1990, p. 330; quoted by Ángulo and Martín Rodríguez, 2013, p. 74).

In this paradigm we can place the methodology known as “action - research” that aims at supporting making decisions and fostering change. This methodology is based upon the concrete situation of the object of evaluation; it is collaborative; it is participative as all the participants assume the role of researchers; and it is based upon continuous self-assessment (Cohen and Manion, 1990, p. 270).

Michael Scriven (2001) instead has defined evaluation as a trans-discipline: “[E]valuation is one of the elite group of transdisciplines, a term used in this context to refer to disciplines that are most notable for their service to other disciplines, although having their own autonomous status as well” (p. 304).

#### **2.6.4 Which Model of Quality Evaluation for Comboni Schools?**

Among the many models of educational evaluation that developed towards the end of the XX century, Stufflebeam identified nine approaches as those that deserved to be developed beyond 2000. The one that fits better the purpose of this research is the one called “Decision/Accountability-Oriented Studies” (Stufflebeam, 2001, p. 42). This approach “should be used proactively to help improve a program” (Stufflebeam, 2001, p. 42) and, in fact, the goal of this research is not just to produce an academic paper, but to foster processes of improvement in the schools where the assessment will take place. On the other hand, the same approach can be used “retroactively to judge its merit and worth” (Stufflebeam, 2001, p. 42), which will allow to establish comparisons between different schools and provide the Education Office of the Archdiocese with an instrument to know the quality of its schools.

This approach is underpinned over an objectivist epistemology. But at the same time, it “engages stakeholders in focusing the evaluation; addressing their most important questions; providing timely, relevant information to assist decision making; and producing an accountability record” (Stufflebeam, 2001, p. 56). And this involvement is very important as it’s fundamental to support a process of sustainable change.

When applying this approach to evaluation, Stufflebeam indicates that “the evaluator should establish and engage a representative stakeholder advisory panel to help define evaluation questions, shape evaluation plans, review draft reports, and help disseminate findings” (Stufflebeam, 2001, p. 57).

In the same line, this approach helps “program personnel be accountable for their program decisions and actions [and] it balances the use of quantitative and qualitative methods” (Stufflebeam, 2001, p. 58).

Other valid approaches were the client-centred studies or *responsive* one, the *democratic/deliberative* and the *utilization-focused evaluation* but were discarded by several reasons. One positive point of these three approaches is that they include the different stakeholders and help the persons involved in the program to evaluate and use this evaluation to improve the school.

But the *client-centred studies (or responsive evaluation)*, whose pioneer representative is Robert Stake, assumes a relativistic epistemology. And this is its weak point, in especially when one of the aims of this research is to compare several centres, which demands some objective points of reference and not just interpretations.

The *democratic/deliberative* approach also considers the participation of all the stakeholders at all stages of the evaluation and the quality of this participation which is assessed through a checklist that can be useful for this research (House & Howe, 2000). However, this approach, for the time being, is considered “unrealistic and often cannot be applied” (Stufflebeam, 2001, p. 76).

The first positive point of the *utilization-focused evaluation* is the role of the evaluator as facilitator who works with the targeted users. This makes changes more likely to happen since its major focus is “intended use by intended users” (Quinn Patton, 2013, p. 1). Other positive aspects are that it is a contextualized evaluation, which is interesting considering the particular characteristics of the object of this research; and that it works with a representative group of users, which facilitates the implementation and the efficiency of the evaluation.

The limit of this approach in relation to this research is that the evaluator is at the service of the specific needs of the stakeholders and should select “from the entire range of evaluation techniques those that best suit the particular evaluation” (Stufflebeam 2001, p. 79). Thus, this approach would have been suitable if the research was concentrated on a single educational centre, but makes the comparison between the evaluation of the different educational centres difficult as every one may present

different kinds of needs. Moreover, Quinn Patton himself says that the approach is “vulnerable to corruption by users groups, since they are given so much control over what will be looked at, the questions addressed, the methods employed, and the information obtained” (quoted by Stufflebeam, 2001, p. 79).

The paradigm that underlies the “Efficient Schools Model” has been criticized (Purkey & Smith, 1983, p. 66; Rowan, Bossert, & Dwyer, 1983, pp. 25 and ff.; Clark et al., 1984) because modern theories of organization consider top-down approaches inefficient. The research about efficient schools has also been criticized both conceptually and methodologically (Frechtling, 1982; Rowan & Denk, 1982). Martínez-Moreno Cerrillo adds the fact that the paradigm “has not offered models of school efficiency that help to carry on an improvement process in the school” (2007, p. 135).

As a response to top-down approaches, the School Based Management paradigm (SBM) considers that change will be possible if the whole educational community is considered and involved (David, 1982, pp. 1-2). The scope of this paradigm is to develop the capacity of the educational centre for the solution of problems according to a flexible organizational approach that consists of three stages: “diagnosis of problems; response to the problems; evaluation of the responses” (Martín-Moreno Cerrillo, 2007, p. 136). This model fosters creativity, gives a priority role to the centre that defines the objects of its evaluation, how to evaluate that object and what changes should be implemented (Robinson, 1984, p. 141). This process facilitates the institutionalization of change and combines top-down and bottom-up strategies.

In this paradigm we can consider the Quality Circles defined by Ishikawa in "What is Total Quality Control? The Japanese Way"(1985) that are formed to solve concrete problems, the Kazen Groups and the Z theory of Ouchi (1981).

But the passage from the concept of quality control to the educational realm is not easy as the primary tendency is to “search exclusively for quantifiable variables: student/teacher ratio; students’ marks; quantity and kind of resources; estimated cost for school place” (Martín-Moreno Cerrillo, 1996, p. 96). And when trespassing the concept of quality according to the TQM model into the educational field it will be necessary to define what a “product” is and “who are the customers” (Sallis, 2002, p. 18). And certainly is not so easy to define the product of the educational process.

Quintina Martín-Moreno Cerrillo proposes a step beyond TQM and suggests the application of the “Reengineering Work” approach to educational organizations (2007, p. 150-179). This concept was introduced by Michael Hammer in an article called “Reengineering Work: Don’t Automate, Obliterate” for the magazine “Harvard Business Review”. This approach tries to overcome the fragmentation of tasks and functions and reduce the hierarchical levels through an analysis and change of the processes of the organization.

Hammer and Champy (1994) state that the Total Quality Management approach operates inside the existing processes and try to improve them through Kaizen strategy (on going improvement). But they don’t change the perception about one’s work and the other members of the organization. They produce gradual improvement up to a certain point and in the end they are not able to transform the organization. Another critical point is the leadership role. The Total Quality model requires a charismatic leadership that embodies the vision of the institutions and has clear its mission so that they can lead the members according to it.

The reengineering work instead emphasizes the cross-sectional dimension of organizations and proposes a more participatory approach. On the other hand, it cannot be neglected that the word “*total* in TQM dictates that everything and everybody in the organization is involved in the enterprise of continuous improvement” (Sallis, 2002, p. 24). Finally, Martín-Moreno Cerrillo criticizes the Total Quality Model because of “being based upon an idealistic image of the institution that often is not observed in the practice” (2007, p.157).

Martín-Moreno proposes the implementation of the principles of the “Reengineering Work” theoretical framework to the educational organizations instead of the Total Quality Management model because of the necessity of continuous innovation in a competitive and constantly changing society (2007, pp. 150-179). Nevertheless, it should be said that the European context in which she works is so different from the Sudanese one. The diminution in the natality in Europe provokes a strong competition into public and private schools that fight to recruit students. There is also a strong pressure from the parents that like to be involved in the school making decision processes. These ones also have much more autonomy in relation to the public administration. The Sudanese context is different and the Total Quality Management

model looks a better point of reference to evaluate and improve the quality of educational centres.

In fact, the 2020 version of the EFQM model is conceived as a management tool in a rapidly changing context. In the same line, Holt does not see a contradiction between Total Quality Management and the need of innovation as he states that “quality certainly involves a desire for improvement, but improvement alone is not enough. Innovation is needed” (2000, p. 3). The Total Quality Management philosophy:

stresses a systematic, integrated, consistent organization wide perspective involving everyone and everything. It focuses primary emphasis on total satisfaction for both internal and external customer, within a management environment that seeks continuous improvement of all processes and systems (Saylor, 1992, quoted by Kumari Nagaraja & Subba Rao, 2012, p. 9).

This philosophy emphasizes the use of people to bring about improvement from within the organization and therefore includes the characteristics of the “Decision/Accountability-Oriented Studies” (Stufflebeam 2001, p. 42) that had been identified as suitable for the aims of this thesis.

There is a lot of literature on the application of TQM to education. Kumari Nagaraja & Subba Rao (2012) collected about 40 studies on its application in different parts of the world with special focus on Secondary Schools. These studies underline that TQM “involve[s] students more fully in their learning; encourages accountability and ongoing assessment; continuous process improvement groups are empowered in decision making; immediate change is seen” (Danne, 1992; quoted by Nagaraja, 2012, p. 29).

Other benefits were “positive changes in the elements of school climate, curriculum development, instructional delivery and technology integration” (Kilmer, 1998; quoted by Kumari Nagaraja & Subba Rao, p. 38).

Among the different ways of applying TQM to education, Gonzalez Lopez mentions “ISO 9000, Deming, Baldrige, EFQM, Ibero-American Quality Management Model (IBAQM)”(2004, p. 167). They are all based upon the concept of stakeholders

satisfaction and give great importance to the students as receivers of the actions of the centre.

From the articles of Vokurka, Stading and Brazeal (2000), Giorgetti, Romero & Vera (2014) and De Nieves Nieto & Ros McDonnell (2006) the following charter can be drawn to compare these models:

Table II-6. Comparison of TQM Models

Topic	Baldrige Model	Deming Model	EFQM	ISO 9000
Definition of Quality	“Customer-driven quality”. It views quality as defined by the customer	“Conformance to specifications”. It views quality as defined by the producers	Excellence is about doing your best	Fulfilment of certain standards
	Subjective	Objective	Objective	Objective
Primary Focus	Customer satisfaction and quality	Statistical quality control	Stakeholders satisfaction and impact on society	Customer satisfaction and quality
Overall Approach	Quality of management	Management of quality		Management of quality
Involves	Processes and all the stakeholders	Processes	Processes and persons	Every process and the personnel
Purpose	Promote competitiveness through total quality management	Promote quality assurance through statistical techniques	Stimulate and assist organizations in improving customer and employee satisfaction, impact on society and business results.	Continuous improvement and customer satisfaction
Types of Organization	Manufacturing, service and small business	Essentially private or public	Any kind	

	manufacturing			
Orientation	60% result, 40% process	60% process, 40% results	50% results, 50% enablers	
Scoring Weight	Different weight for each criteria	Equal weight in 10 criteria	Different weight for each criteria	
Sponsor	National Institutes Standards and Technology	Union of Japanese Scientists and Engineers	European Foundation for Quality Management	International Organization for Standardization
Feedback system	Approach – Deploy - Refine	Plan – Deploy - Check - Act	Results - Approach – Deploy – Assess– Refine	
Year of creation	1987	1951	1992	1987

All these models share goals and aim at continuous improvement of the organization, even if the EFQM CEO, Russel Longmuir (2019), explains that the 2020 EFQM model rather than solely deal with continuous improvement also pays special attention to manage transformation and disruption. On the other hand, it is convenient to consider that even though all these models are applicable to different kinds of organizations, they also express the different cultural frameworks in which they were developed.

Vijandea & Álvarez González (2007) collect some works that point some limitations of ISO 9000 in relation to the EFQM model. Some of these ones are the limited character of the requirements of ISO 9001:2008 to reach excellence in the management of quality. The EFQM Excellence Model is more explicit in recognizing the importance of strategic alliances; emphasizes better the importance of learning and innovating; it is better balanced in the consideration of the needs of the different stakeholders; and includes social responsibility in the assessment of the results.

In fact, among the different models of Total Quality Management, the EFQM looks the most suitable for educational purposes for different reasons:

- being more recent than the models of Deming and Baldrige, benefitted from both experiences. It integrates the “logic of statistical control of quality from the Japanese Model and assumes the objective of satisfying the customer” (Gonzalez Lopez, 2004, p.167), which is a priority for the American Model.
- As the Ibero-American Model developed starting from the European one and is so similar to it (De Nieves Nieto & Ros McDonnell, 2006, p. 10), a Sudanese Model could also develop from the European one. In fact, the EFQM Model is more flexible than ISO.
- It works with a longer perspective than other models like Baldrige’s, Deming’s or ISO that aim at quicker changes. Educational processes are supposed to be slow and gradual.
- EFQM is more focused on processes and the satisfaction of the customer (parents, students...) than on results (45%) like the Malcolm Baldrige Quality Award does.
- EFQM has a more ethical profile than Demings’, “that is more technical” (De Nieves Nieto & Ros McDonnell, 2006, p. 10), and therefore looks more suitable for Catholic schools.
- EFQM gives more importance to the impact on society which is very important in an educational institution.

Several authors who compare the different models of excellence prefer the EFQM Model for Higher Education (Zink & Schmidt, 1995; Osseo-Asare, A. E. Longbottom & Murphy, 2005; Sheffield Hallam, 2003). Some of the reasons they present are also valid for Primary education and this study. They defend that the EFQM model provides a basis for benchmarking and inherently stimulates organizational learning and innovation; focuses on relevance to society and quality; embraces all functions and activities; is based on internal self-evaluation capable of external review; takes into account diversity and avoids uniformity; and involves stakeholders (especially students) as an integral part of the process.

In 2012, more than 30,000 organizations were using the EFQM Model all over the world (EFQM, 2012). As for Primary schools, after a large-scale project at 47 schools of Portugal the researchers concluded that “the results obtained so far indicate that the EFQM excellence model can be easily applied and adapted by schools as a

powerful performance improvement driving force” (Saraiva, Rosa, & D’Orey, 2003, p.47). Moreover this model “is not prescriptive but instead recognizes that there are different ways to achieve organizational excellence” (Saraiva, Rosa, & D’Orey, 2003, p.47).

Also organizations that experienced first the ISO model and secondly the EFQM concluded that the latter one worked better with educational institutions. One factor that may explain this can be the fact that the motivation to use ISO is more external –that is external accreditation- while “the motivations to use the EFQM model, seem to be generally internal” (Heras Saizarbitoria, I. Marimón Viadiu, F. Casadesús Fa, 2010, p. 1581; cf. also López Cabanes & Ruiz Gimeno, 2004).

Considering all this, the EFQM model looks the most suitable as point of reference to fulfil the goals of this research. The model aims at helping the institution to know itself better in order to enter into a dynamism of continuous improvement. The foundation of the model is self-evaluation understood as holistic and systematic exam of the activities and outcomes of the organization put in comparison with a model of excellency. This evaluation should help the institution to identify its strong points and the areas that need to be improved and provide it with a tool to improve the organization. This tool is not a normative one and because of this, it respects the characteristics and experience of the members.

The concept of institution that lies under the EFQM model is an effective, operative, evaluable and answerable organization coherent with her mission.

In his doctoral thesis, Sommerville (2007) analyses the application of the model to educational institutions in England, a country with a rich experience in quality management. Even if the model was applied to higher education institutions, the list of benefits supports the choice of the EFQM model for this research:

- Intangible and unexpected change in people’s interaction (Liverpool John Moores University, 2003). As the project progressed they saw people thinking about how things look from another point of view;
- Giving staff at all levels a voice and bringing them closer together (Liverpool John Moores, 2003);
- Promoting the value of data and facts (Liverpool John Moores, 2003 and Sheffield Hallam, 2003);

- The connection between strategic plans and how they will be achieved (Liverpool John Moores, 2003);
- Demonstrating that the Model can help an institution continuously improve the way it manages itself, whilst at the same time satisfying the demands of external agencies like the QAA (Liverpool John Moores, 2003).
- Making cost of quality savings (Liverpool John Moores, 2003);
- It offers a holistic approach in looking at all aspects of the organisation (Sheffield Hallam, 2003);
- It provides a process of self-assessment against a non-prescriptive but detailed set of criteria (Sheffield Hallam, 2003). It offers a means by which other initiatives like Investors in People can be knitted together (Sheffield Hallam, 2003);
- It offers a way in which a common focus can provide a new way of working that could be embedded into the organisation (Sheffield Hallam, 2003);
- It offers benchmarking opportunities with others within and outside the sector (Sheffield Hallam, 2003);
- It provides a framework through which the kernel of the organisation's issues could be surfaced, investigated and improved - continuously (Sheffield Hallam, 2003) (quoted by Sommerville, 2007, p. 22-23).

## **2.7 Comboni Schools: Historical Background and Previous Research**

This chapter traces the history of Comboni Schools at Khartoum State and reviews the information on their characteristics so that the self-assessment tool and the understanding of quality can be properly contextualized.

### **2.7.1 “Comboni Schools” before Comboni**

The schools of the Catholic Church in Sudan are popularly known as “Comboni Schools”. They take their name from an Italian missionary called Daniel Comboni (1831-1881) who in the Sudanese collective imagination is the founder of all these

schools. In Sudanese academic literature they are usually known as *madāris al-ʿirsāliāt* (“mission schools”) (Aḥmad, 2002; Allah bn Al-Ḥāj, 1949).

However, the first school of the Catholic Church in Khartoum was not opened by Comboni but by an Italian priest called Luigi Montuori in 1842 according to Sundkler & Steed (2001, p. 137) and Lozano (1996, p. 70) and in 1843 according to Toniolo & Hill (1974, p.1 and p.35) and Saʿād ʿAbd Al-ʿAzīz Aḥmad (2002, p. 44). The divergence may have to do with the fact that Montuori “arrived in Khartoum in May 1842” (González, 1993, p. 178) but the opening of the school did not take place immediately. Fr. Montuori wrote on March 12, 1843 that he had already “opened a school where there were some white, black and mulatto boys. Four of them are boarders” (letter written by Fr. Montuori on March 12, 1843 and reported by Bano, 1979, pp. 201-202; quoted also by Ballin, 2001, p. 96).

At the time Khartoum had about 13,000 inhabitants. Two hundred of them were Copts. There were also some few “Catholics, Turks and Algerians” (Toniolo & Hill, 1974, p. 33). The students of this school were the children of freed slaves and of some Europeans who had been born in Khartoum. They just studied “reading and writing and the Gospel” (Aḥmad, 2002, p. 45). The school was a big hut made of wood and mud (Lozano, 1996, p. 70) and its scope was to train the students “to be catechists in their countries” (Ballin, 2001, p. 97).

Fr. Luigi Montuori left Sudan in 1844 for Ethiopia after having entrusted the mission of Khartoum to another Lazzarist<sup>3</sup> missionary, Fr. Serao (APF, SC, AC-E-A, 4, ff. 404; quoted by Ballin, 2001, p. 98). This latter missionary left Sudan “between May and the Autumn of 1845” (Ballin, 2001, p. 99).

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<sup>3</sup> The Congregation of the Mission is a Roman Catholic society of apostolic life of priests and brothers founded by Saint Vincent de Paul in 1633. In France and in almost all countries they are called Lazzarists, because it was in the Priory of St. Lazare in Paris that St. Vincent de Paul dwelt and that he established his principal works. In the Irish province, which includes practically all English speaking countries except the United States, they are called Vincentians. In countries whose language is Spanish they are called Paules. The name Congregation of the Mission indicates their first and chief object.

Pope Gregory XVI erected Khartoum as site for the Vicariate of Central Africa<sup>4</sup> in 1846 because of its strategic position on the junction of the Blue and White Nile, “which was to be the base for the missions on the White Nile, to the Mountains of the Moon, to Kordofan and to the Darfur” (McEwan, 1987, p. 16). At the same time, it was feasible to reach this city from Europe through the Nile, which is very relevant when we consider that there were no good maps of the interior of the continent. The limits of this ecclesiastical territory were not well defined for the same reason. The Vicariate of Central Africa included the lands currently belonging to Sudan, South Sudan, Uganda, Kenya, Tanzania, Chad, Central African Republic, Niger, Rwanda and Burundi (Ballin, 2001, p. 103).

The second Pro-Apostolic Vicar of Khartoum, Maximilian Ryllo, bought the plot where the Council of Ministers is located today in Khartoum (Abū Salīm, 1991, p. 55; quoted by Ballin, 2001, p. 106) and in 1848 reopened there the school of Montuori “for negro children whom they bought in the slave market” (Hill, 1959, p. 79). In a second moment, the students were also Copts and Europeans. They studied “writing and reading, mathematics, music, handwork, Arabic, French and Italian languages” (Aḥmad, 2002, p. 45). Toniolo & Hill report that that “reading, writing, arithmetic, music and handwork were taught” there (1974, p. 4). In 1850, already under the administration of the Apostolic Vicar who succeeded Ryllo, Fr. Dr. Knobleher, the school consisted of one room in the only stone building of that time in Khartoum (Toniolo & Hill, 1974, p. 4; quoting the British trader John Petherick). According to Melly the school “consisted of about twenty boys in various costumes and of almost as many hues. Many of them are children of the European residents. Some can speak a little French and Italian, and

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<sup>4</sup>An Apostolic Vicariate is a form of territorial jurisdiction run by an “Apostolic Vicar or Apostolic Prefect” (Code of Canon Law, 1983, c. 371§1). It is normally created in places where there is not a well established local church yet. When this territory has a sufficient number of Catholics and local clergy to minister them, it is usually raised to diocese under the authority of a Bishop. Before the confirmation of the territory as Apostolic Vicariate, the Holy See may appoint a Pro-Apostolic Vicar. The document of erection of the Vicariate by Pope Gregorio XVI was called “Ex debito pastoralis officio” (APF, LDB 1846, n. 333, pp. 286-287; published in *Jus Pontificium of Propaganda Fide*, Vol. V, p. 361, n. CCLXVIII). The first Apostolic Vicar of Central Africa was Annetto Casolani (1846-1847).

nearly all can read and write” (Toniolo & Hill, 1974, p. 4). The German geographer Carl Ritter wrote the vision and mission of that school. Some concepts will be later included in Comboni’s *Plan for the Regeneration of Africa*:

the Catholic Mission intended to establish in Khartoum a day and a boarding school for boys of different negro tribes. In addition to the usual subjects they would be taught agriculture and handicrafts. After their training they would return to their tribes and become the instructors of their own people (Ritter, 1852; quoted in English by Toniolo & Hill, 1974, p. 4).

Another aspect already present in this school that will also appear as a basic principle of Comboni’s *Plan* is that these schools were not just conceived as places where European missionaries taught African students. Dr. Knoblecher and his companions were also supposed to learn from African people their language and culture. Thus they became “disciples of their own pupils, as they endeavoured to learn the language of the different tribes; they also collected all the facts that could make known their character, habits and customs” (Toniolo & Hill, 1974, p. 5).

In 1853 the person in charge of the boys’ school was a priest from Slovenia called Fr. Matthew Milharcic. The school had forty boys (Toniolo & Hill, 1974, p. 8). On that same year, it started the construction of the big mission building that is currently the oldest part of the Council of Ministers complex. The director of the works was Pietro Agati who introduced in the country the art of burning bricks<sup>5</sup>. The new building was finished in 1856 and included a school where “mathematics, singing and drawing” were added to the existing academic subjects (Toniolo & Hill, 1974, p. 10).

Later on, “physical exercise” was also included in the curriculum of studies (Aḥmad, 2002, p. 45). In 1853, according to the Proceedings of the 11<sup>th</sup> Annual Conference of the Philosophical Society of the Sudan, the beneficiaries were “104 students” (Bedri, 1963, p. 123). The school, a trade one, “attracted the attention of

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<sup>5</sup> Pietro Agati will build later the residence of the successor of Mohammed Ahmed Al-Mahdi in Omdurman that is today known as the “Khalifa’s House”.

Khartoum and its visitors. Many of its pupils afterwards found employment in the government workshops” (Hill, 1959, p. 10).

In the annual Report of the Viennese missionary journal, *Marien Verein*, it is mentioned that in 1855 “the number of the school boys is now twenty-eight” (Hill, 1959, p. 10), which looks to contradict the amount reported by the Philosophical Society of the Sudan. One of the teachers, Mr. Hansal, was very happy with them because “they could read the Arabic and Roman alphabets, write in Arabic and Italian, and do arithmetical exercises on the blackboard” (Hill, 1959, p. 11).

Girls were also admitted to the school in a second moment and other sections were added: commerce, carpentry, welding, tailoring and production of shoes.

It is worth mentioning the relevance of that school in a context where the first formal Primary School opened by the Turco-Egyptian government in Khartoum was inaugurated in 1853. The motivation after the opening of that school is discussed. For some authors, ‘Abbās I, the grandson of Muḥamad ‘Alī, sent the Egyptian scholar Rifā’a Rāfi al-Ṭaḥṭāwi as headmaster of that school to get rid of him (Shibeika, 1959). For others, the Governor of Egypt and Sudan sent this scholar, even if he was opposing the policies of ‘Abbās I, to meet the need of training “future administrators for that region” (Warburg, 1992). In any case, that school was closed “after only nine months of existence” (Gizouli, 1999, p. 5) and reopened in 1863 during Ismaīl’s reign who created other schools for Sudanese boys. “In 1868 two similar schools were established, one at Berber and the other at Dongola” (Gizouli, 1999, p. 5).

The Ottoman authorities just opened five schools in different towns of northern Sudan before the Mahdi’s revolution and some new Koranic schools (*ḥalwa*, pl. *ḥalāwī* in Sudanese Arabic) that were added to the existing ones (Mohammad, Eisa, & Elhaj, 2017, p. 1). In these schools, the pupils studied Arabic language, basic arithmetic, the Quran, and Islamic jurisprudence (Ibrāhīm, 1987; Ḥājj, 2005; cited by Seri-Hersch, 2017, p. 3). Unfortunately, these schools degenerated with the passing of time and “the few that remained were wiped out by Mahdism” from 1885 on (Gizouli, 1999, p. 7).

As for the ecclesial context, it is necessary to recall that on September 4, 1861, *Propaganda Fide* entrusted the Vicariate of Central Africa to the Franciscan Order<sup>6</sup>, but the death of 23 of their members in the first months of presence in the region led the General Superior to decide their withdrawal from this mission. Moreover, the Holy See decided the suspension of the erection of the Vicariate in 1867. In spite of this, a Franciscan missionary, Fr. F. Pfeifer, and a lay Brother remained in Khartoum for nine years and were replaced by Frs. D. Stadel-Meyer and H. Schlatter (Toniolo & Hill, 1974, p. 18). Thus, when the Holy See decided to appoint Daniel Comboni as Pro-Vicar in 1872 in view of resuming the activities of the Vicariate, he did not have to start from scratch.

## **2.7.2 The Origins of Comboni's Educational Vision**

### ***2.7.2.1 Towards the Plan for the Regeneration of Africa***

As already said, Catholic Church schools in Sudan are known as “Comboni Schools”. Daniel Comboni was an Italian priest born in a small village in the North of the country called Limone sul Garda in 1831. That region was under Austrian administration and therefore had a good service of primary education. Then, even if he came from a poor family, Comboni enjoyed the opportunity to continue his studies as he was admitted to Saint Carlo School of Verona, an educational center run by “Don Mazza Institute”.

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<sup>6</sup> A Religious Order is a category of Catholic religious institutes. In the past, it was distinguished between Congregations and Orders according to the way of professing their religious vows of chastity, poverty and obedience. The new Code of Canon Law (1983) doesn't make any distinction between their juridical effects and gathers both categories under the term “Institutes of Consecrated Life”. The Franciscan Order was founded by Saint Francis of Assisi in 1209. A Religious Institute is governed by a “General Superior”.

This Institute educated young boys who were “rich in intelligence and virtues but poor in financial means” (Vanzan, 1996, p. 110). One of their graduates, Angelo Vinco, became a Catholic priest and travelled to Sudan in 1847 with Mons. Maximilian Ryllo and his successor, Ignaz Knoblecher (Ballin, 2001, pp. 104-106). When Fr. Vinco came back in 1849, he instilled in the students of the Mazza Institute the desire to go to a continent whose interior was unknown to Europeans of the time.

This educational institution will also welcome African students from 1851 with the idea of training them to be promoters of both development and evangelization in their places of origin (Lozano, 1996, p. 82).

On January 6, 1849, Daniel Comboni “vowed to consecrate [his] whole life to the apostolate of Central Africa” (Comboni, 1876, W4083)<sup>7</sup>. As mentioned before, this region had been established as “Apostolic Vicariate” by Pope Gregory XVI in 1846.

In 1854 Daniel Comboni was ordained priest. As spiritual director in the Mazza Institute, he had the opportunity to know the African students in depth. Through his service as spiritual guide, he could go beyond the stereotypes that European people of his time had towards African people.

In 1857 Don Mazza organized a missionary expedition to Sudan made of six members of his Institute (five priests and a craftsman). Daniel Comboni was one of them. Three of them died in Sudan. Daniel Comboni survived and was asked to come back to Italy. The Vicariate of Central Africa became the tomb of 57 priests and numerous lay missionaries that succumbed to the African climate and tropical diseases from 1848 to 1862 (Gonzalez, 1993, p. 209). Being so, as already mentioned, the Vatican decided to suspend the erection of the Vicariate.

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<sup>7</sup> The Writings (W) of Comboni have been translated from Italian into English, Spanish, German and Portuguese. The number after the letter “W” refers to the paragraph, that is numbered in the same way in the different translations. As for the year, it refers to the year on which Comboni wrote the respective document. The published English edition of these writings is: Comboni, D. (2006) Writings. London: Comboni Missionaries.

After meeting several explorers and missionaries, Comboni analysed the mistakes committed by all previous missionary attempts in Central Africa and elaborated a “Plan for the Regeneration of Africa” in 1864 (first edition). This Plan was updated several times. In the 1871 edition of the Plan, Daniel Comboni distinguishes his way of looking at Africa from the one of the European powers, who were about to start the colonization of the continent:

The Catholic, who is used to judging things in a supernatural light, looked upon Africa not through the pitiable lens of human interest, but in the pure light of faith; there he saw an infinite multitude of brothers who belonged to the same family as himself with one common Father in heaven (Comboni, 1871, W2742).

Daniel Comboni felt that the love of God pushed him to “enclose in his arms in an embrace of peace and of love” these brothers and sisters in Africa (Comboni, 1871, W2742). In his analysis of previous attempts of evangelization in Africa, he underlined the “ineffectiveness and inadvisability” of the initiative to take African people to Europe in order to train them (Comboni, 1871, W2750). He instead proposes the identification of a “centre of operations in a place where Africans can live without changing and Europeans can live without succumbing” (Comboni, 1871, W2753).

Daniel Comboni proposed to create in those centres “Institutes for both sexes” where young African men and women would be educated both in the “Catholic religion and in Christian civilization” (1871, W2764-2765).

It is important to understand that Comboni was a man of his time. Thus, even if he considers that African people should not be changed; in his mind, Catholic religion was condition for the eternal salvation of the person. In fact, in the mentality of the time of Comboni, there was a growing conviction that the missionary activity was urgent as an imperative that emanated from the love “of the heart of Jesus” (Gonzalez, 1993, p. 153) and should lead to the “expansion of the kingdom of Christ” (Gregory XVI, 1901, p. 277).

These religious motivations went along with the dissemination in Europe of liberal and humanist ideas “that proclaimed the universal rights of man” and “the fight

against slavery and trade from both Western and Oriental” powers (Gonzalez, 1993, p. 157). Consequently, also African people had the *right* to eternal salvation and to freedom. In his Plan, Daniel Comboni described the goals at which the education of his institutes would aim:

To impress and plant in their souls the spirit of Jesus Christ, integrity of behaviour, firmness of faith, the principles of Christian morals, a knowledge of the Catholic catechism and the basic elements of necessary human knowledge. Besides this, all the men will be instructed in the practice of agriculture and in one or more skills of first importance; and every woman will be similarly educated in the most necessary of women’s skills. Thus the former will become honest, virtuous, useful and active men and the latter virtuous and capable mothers and wives (Comboni, 1871, W2770).

From these educated men, some will be catechists, teachers, “farmers, doctors, phlebotomists, nurses, pharmacists, carpenters, tailors, tanners, blacksmiths, builders, shoemakers” and traders who will raise the condition of the continent (Comboni, 1871, W2773). As for women, he foresaw instructresses and:

teachers and housewives who must promote the education of women in reading, writing, keeping accounts, spinning, sewing, weaving, caring for the sick and practising all the domestic skills most useful in the countries of Central Africa (Comboni, 1871, W2774) .

Daniel Comboni also specified the need of creating universities and vocational training institutes in the centres previously mentioned (Comboni, 1871, W2783). In order to implement this Plan, Daniel Comboni, not a member of the Mazza Institute anymore, founded in Verona the *Institute for the Missions of Africa* on June 1, 1867<sup>8</sup>.

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<sup>8</sup> After the death of Don Nicola Mazza (August 2, 1865), his successor, Fr. Gioacchino Tomba (1819-1889) wrote on April 19, 1866 to Card. Barnabò, Prefect of Propaganda Fide, stating that the Saint Carlo of Verona Institute could not continue with the mission at Central Africa due to “lack of personnel and because the economic conditions [of the Institute] were very serious” (Vilardi, 2016, p. 51). Then

This Institute would become a male Religious Congregation that is known today as the *Comboni Missionaries of the Heart of Jesus* and that owns in Sudan a Primary and a Secondary School (Comboni College Khartoum-Primary Section and Secondary Section) and runs others that belong to the Catholic Archdiocese of Khartoum (Comboni Boys-Omdurman, Comboni Boys-Port Sudan...). “On the basis and as a result of [...the] Plan”, in 1867, Daniel Comboni founded an Institute of Formation for African men and a second Institute for African women in Cairo (Comboni, 1867, W1427). The first one was entrusted to seven priests trained in the *Institute for the Missions* of Verona and the second one to four Sisters of Saint Joseph of the Apparition<sup>9</sup> along with:

Fourteen black women teachers: these are all from the White Nile and the neighbouring tribes; they have been in Europe for ten years and are versed in all the feminine crafts; they have the qualifications of school mistresses in France (Comboni, 1867, W1427).

The goals of these Institutes in Cairo were two. The first one was “the religious, moral, intellectual and technical education of Africans so that they may return to the tribes of Africa to be apostles of faith and civilisation among the African peoples” (Comboni, 1870, W2226), as mentioned by Ritter (1852; quoted in English by Toniolo & Hill, 1974, p. 4). And the second one was “the acclimatisation of European missionaries” and their training in the study of “Arabic, the African languages, the oriental customs and the ways of the Muslims [... and] a little medicine” (Comboni, 1870, W2227-2228).

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Cardinal Barnabò insisted on the Bishop of Verona, Luigi di Canossa, to entrust the creation of an Institute for the Missions of Central Africa to Daniel Comboni.

<sup>9</sup> The Sisters of Saint Joseph of the Apparition are a religious institute founded in France in 1832 by Saint Emily de Vialar.

From these words we can draw some principles that shape the educational vision of Comboni:

- It is a practice oriented education where students experience and practice already during their learning process what they are studying. In fact, Comboni defines his Institutes of Cairo as “schools of experience” (Comboni, 1871, W2583).
- It is holistic as it deals with the spiritual, the intellectual, the social and the moral dimensions of the person.
- It is contextualized for the needs of Central Africa.
- It respects the inner freedom of the student to choose the way and state (catechist, Priest or Sister, craftsman...) in the light of the personal gifts and after a personal dialogue with God: “on the choice of their religious state, they [i.e. the educators] will leave them [i.e. the students] completely free to seek counsel with God and their spiritual father” (Comboni, 1870, W2283). It is important to mention here that one of the pillars that imbued Mazza’s educational work was “the centrality of the free human person” (Valente da Cruz, 2007, p. 69), which certainly had an impact on Comboni’s educational vision.

#### ***2.7.2.2 The Debate on Faith and World in Comboni’s Time and Its Impact on His Educational Vision***

In order to understand the educational vision of Daniel Comboni in its historical context, it is important to mention the existing tension inside Catholicism at that time between religion and modern civilization. Pope Pius IX had issued on December 8, 1864 a document called the “Syllabus of Errors” (*Syllabus Errorum* in Latin) that condemned some philosophical trends of the time like liberalism, modernism, moral relativism, secularization and the political emancipation of Europe from the tradition of Catholic Monarchies.

An Italian priest and philosopher called Antonio Rosmini (1797-1855), a close friend to Don Nicola Mazza, Comboni’s mentor, held a more dialoguing attitude with

those philosophies (Valente da Cruz, 2007, p. 67). Rosmini tried to reconcile Christian religion with modernity and fought against the use of “religion as a weapon of temporal power” (De Giorgi, 1999, p. 28). He was not afraid of human progress. According to De Sanctis, the Lombardian<sup>10</sup> approach to education that Rosmini also represents, considered that “in order to regenerate Italy, the education of the bourgeoisie is not enough but there is need for the instruction of all people” (De Sanctis, 1953, pp. 222-223). These educators opposed those who proposed an “education tailored to the social class” (De Giorgi, 1999, p. 98) and defended the “*universality of charity*” (Zovatto, 2002, p.534). Moreover they implemented curricula that integrated scientific and religious subjects.

On the educational side, the ideas of Rosmini meant “a pedagogy of freedom, inner autonomy and reinforcement of character” (De Giorgi, 1999, p. 31). In fact, “responsibility and freedom” were two key words to understand the educational style of Mazza’s Institute (Valente da Cruz, 2007, p. 69). An Italian journalist, A. Caperle, after visiting Mazza’s Institute, stated in the newspaper *L’Eco del Veneto* on May 18, 1865 that a main educational principle in the Institute was “the respect for the student, who learns in this way to respect himself and others” (cited by Valente da Cruz, 2007, p. 69).

A sign of the impact of these ideas on Comboni could be his preface to the Rules of the Institute for the Missions of Africa. Far from a legalistic understanding, Comboni states that these rules:

must be based on general principles. If they were too detailed, either necessity or the desire for change would soon undermine the foundation of their structure, and they would become a heavy and unbearable burden for those bound by them (Comboni, 1871, W2640).

Another input that may have had an impact on Comboni’s educational vision was the proposal of Giacomo Giovannetti, written in 1840, of passing from “relief

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<sup>10</sup> Lombardy is a region in Northern Italy whose capital is the city of Milan.

charity to empowering charity through the instruction of people” (cited by De Giorgi, 1999, p. 99).

In the XIX century, many religious Institutes or Congregations that were founded in Europe “addressed a specially neglected sector of society: the popular instruction of women” (De Giorgi, 1999, p. 95)<sup>11</sup>. De Giorgi mentions the example of one of the biggest cities in Italy in 1825, Turin, where “no woman was registered in public primary schools” (1999, p. 95). Daniel Comboni’s Institute will transfer these principles to the education of African people and African women in a special way.

On January 1, 1872 Comboni founded in Verona a Congregation of Sisters firstly called the *Institute of the Pie Madri della Nigrizia* and today known as the *Comboni Missionary Sisters*. This religious congregation currently owns two schools in Sudan (Villa Gilda Primary School and Comboni Girls-Omdurman) and runs one that belongs to the Catholic Archdiocese of Khartoum (Sisters School Khartoum).

The efforts of Comboni to resume the missionary work in Sudan were recognized by the Pope who nominated him Pro-vicar of Central Africa in 1872. He would be appointed Apostolic Vicar in 1877, after the Vatican deemed reasonable to reopen the Vicariate.

### **2.7.3 The Educational Work of Daniel Comboni in the Sudan**

In 1871 eighteen Sudanese girls trained in Cairo returned to Sudan. Comboni opened a school in El Obeid in 1871 and other one in Khartoum where the “African women teachers formed in Cairo” became “the most able teachers to catechize and

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<sup>11</sup> Some examples of these Congregations are the Canossian Daughters of Charity founded by Magdalen of Canossa in Verona in 1808 and also present in Sudan; the Daughters of the Sacred Heart of Jesus, founded in Bergamo in 1831 by St. Ignazia Verzeri and her collaborator, Giuseppe Benaglio; the Handmaids of Charity, founded in Brescia in 1840 by Maria Crocifissa di Rosa.

educate the local people” (Comboni, 1873, W3361). With the passing of time, the educational work developed according to the model of the two institutes of Cairo:

The two Institutes of Obeid, each with their own chapel, but temporarily built in sand and mud, are organised, properly arranged and spacious enough to accommodate both the Missionaries and the Sisters and the male and female schools they will direct, and to enable them to exercise their apostolic ministry in that densely populated city (Comboni, 1876, W4101).

This work claimed the attention of the inhabitants of the Nuba Mountains. Kakum, the tribal leader (*sultān*) of Delen (Dilling) “decided to come in person to visit” Comboni and ask the opening of a missionary station in his town (Comboni, 1876, W4101). Other chiefs “had asked Kakum to make [Comboni...] decide to go and settle among them” (Comboni, 1874, W3492).

Comboni also “opened the Mission in Berber in November 1874 with premises for schools” (Comboni, 1876, W3908). As for Khartoum, the growing number of students “demanded the enlargement of the school buildings. On June 9, 1874 the Sisters moved to the new brick building built on the same style as the older part of the block” (Toniolo & Hill, 1974, p. 21).

Licurgo Santoni, an Italian postal officer in the Egyptian service describes the missionary school of Khartoum in the course of an inspection tour in the Sudan on January 1, 1878: “The boys were taught, according to their aptitudes, carpentry, blacksmithing, tailoring and shoe-making by experts especially brought from Italy” (Santoni, 1905, p. 371).

“In 1878 the 200 employees at the Khartoum dockyard were mostly former pupils of the mission school, where they had picked up a little Italian” (Hill, 1959, p. 127). The number of male students reached 300 and the number of she-students 200 (Toniolo & Hill, 1978, p. 38).

Comboni found some limits when choosing the curriculum for the local students. The Viceroy had forbidden the training of Sudanese assistant doctors in Khartoum. A Sudanese person called Ja’far Mazhar, who had a serious regard for public health,

“began to train twenty elementary school pupils in simple medicine; like Comboni he sought the regeneration of Africa through Africans” (Hill, 1959, p. 128).

Daniel Comboni died in Khartoum on October 10, 1881 when he was fifty year old. His life, his work and the main idea of his Plan, to regenerate Africa through African people, left a deep impact in Sudan. In the list of the texts which were examined in Khartoum during the period that goes from February 6 to June 7, 1929, as part of the process to verify the holiness of Comboni, eight Muslim Sudanese people who had personally known him came forward among thirty eight witnesses<sup>12</sup>. Their age spanned between 70 and 92 years at the time of their declaration.

From these witnesses it is possible to have a picture of Daniel Comboni complementary to the one that comes out from his letters to Church partners or authorities. These witnesses underline the care of Comboni for the sick and the poor: “In El Obeid he was himself curing sick people with smallpox” (Ottaminu Tiu, par. 85) up to the point of being considered “Father of the Poor” (Ottaminu Tiu, par. 84a; Mohammed Joseph el-Ezzi, par. 261a; Somit Ahmed Habib, par. 80b). And these poor were from “different religions” (Mohammed Joseph el-Ezzi, par. 261b). Comboni helped Blacks and Arabs, Christians and Muslims (Mohammed Joseph el-Ezzi, par. 261b and Ottaminu Tiu, par. 85). Comboni himself recognized this fact during the famine of 1878 in Khartoum when he helped very poor Christian families and “also the Moslems in extreme necessity because in this cases charity makes no distinction between Greek, Arab or Syrian” (1878, W 5152).

The above mentioned witnesses also underlined the depth of the relation of Comboni with God: “Comboni prayed a lot” (Ottaminu Tiu, par. 85; Mohammed

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<sup>12</sup> *Positio*, Vol. II, Document XXIV: Processi Ordinari (1928-1929) –B, p. 1253. The notary registered in Italian language the words of the witnesses who spoke in Sudanese dialect and translated in a second moment the texts into Latin. The author of this research had access to a copy of 1937 of the handwritten original documents present in the Central Library of the Comboni Missionaries in Rome. In Sudan there is a copy at the Provincial Archives of the Comboni Missionaries (Cupboard 3, Section 1), Khartoum Bahri. Here we quote the name of the witness and the number of the paragraph of his/her testimony.

Joseph el-Ezzi, par. 261a). “He loved God so much, he honoured and worshipped Him and invited others to do the same” (Said Mohammed Taha, par. 244a). His bounty is even compared with the one of “Jesus the prophet” (Mohammed Joseph el-Ezzi, par. 261b).

They considered him a “holy man” (Somit Ahmed Habib, par. 81b) and they saw people who went to pray to his tomb and were healed. Somit Ahmed Habib affirms: “Bishop Comboni may be very powerful in front of God since he was a holy man on this earth” (par. 81b).

## **2.7.4 Comboni Schools during the Condominium (1899-1956)**

### ***2.7.4.1 Introduction to the Period***

In 1881 Moḥammed Aḥmad bin ‘Abd Allah proclaimed himself the *Mahdī*, with the mission of “purifying Islam and make it return to its primitive integrity” (Ballin, 2001, p. 187). His proclamation got impetus from the widespread resentment among the Sudanese population towards the oppressive policies of the Turco-Egyptian rulers and from their religious expectations (Ballin, 2001, pp. 209-215).

*Al-Mahdī* conducted a successful military campaign that led his soldiers until the city of Delen (Dilling) (Ballin, 2001, p. 430). The Christian community was obliged to convert into Islam and the missionaries, who refused conversion, were taken prisoners first to El Obeid (1883) and then to Omdurman in 1885. Comboni’s work in Sudan seemed destroyed.

But outside the country, a decision was made that would have an important impact on the field of education in Sudan. The *Institute of the African Missions* founded by Daniel Comboni in Verona in 1867 became a Religious Congregation on October 28, 1885 under the name of *Sons of the Sacred Heart of Jesus (Congregatio Pro Gentium Evangelizatione, Prot. N. 6070/87)* - that is, an association of Priests and Brothers consecrated with the vows of poverty, obedience and chastity. This Congregation would

give continuity to the work of Comboni and was known in some English speaking countries as *Verona Fathers*. The name would be changed into *Comboni Missionaries of the Heart of Jesus* in 1979.

In January 1899, after defeating the Mahdist State, the Anglo-Egyptian army restored Egyptian rule in Sudan but as part of a condominium, or joint authority, exercised by Britain and Egypt. Article III of the agreement specified that:

the supreme military and civil command in Sudan shall be vested in one officer, termed the Governor-General of Sudan. He shall be appointed by Khedival Decree on the recommendation of Her Britannic Majesty's Government and shall be removed only by Khedival Decree with the consent of Her Britannic Majesty's Government (quoted by Kramer, Lobban, & Fluehr-Lobban, 2013, p. 484).

It is worth mentioning that until 1914 Egypt itself was nominally part of the Ottoman Empire and that between 1914 and 1922 Egypt, and thus the Sudan, were formally a part of the British Empire. “After the Egyptian Revolution in 1919, Britain tried to minimize Egypt’s role in the government of Sudan, as well as reduce the Muslim presence in the south of the country” (Sundkler & Steed, 2001, p. 691). The so-called Southern Policy, in force until 1946, aimed at eliminating any kind of Arab-Islamic influence and developing local cultures in the South (Vantini, 2005, p. 532). At the same time, the Government did not invest in education in the South until 1926 as its policy “was to tolerate rather than to encourage education” (Sanderson, 1962, p. 105). Thus they left the provision of education to missionary societies like the Anglican Church Missionary Society, the Comboni Missionaries, the Australian and New Zealand Sudan United Mission and the American United Presbyterian Mission without even contributing economically in that first period. Later on the Government “took an increasing interest in educational matters which gradually led to direct intervention by means of financial subsidies and later by provision of government schools as alternatives to mission education” (Sanderson, 1962, p. 108-109).

In the North the Mahdist regime had closed missionary and state schools and left a network of 1,500 *ḥalāwī* that provided literacy and Koranic learning to 60,000 children (Osman, 1979, p. 356). The new colonial government created a network of

elementary schools (*kuttāb*) “that was supposed to replace the existing *ḥalāwī* in the longer run” and coexisted with Egyptian schools, missionary schools, community schools and Sudanese private schools (Seri-Hersch, 2017, p. 4).

Whereas Arabic and English were the media of instruction in Northern schools, local vernaculars, English and Romanized Arabic were used in missionary schools of the South.

Therefore, “two educational systems developed, one in the North and the other in the South” (Sanderson, 1963, p. 70). This policy gave place to a situation whereby the number of Northern Sudanese elementary pupils was more than five times greater than the number of Southern Sudanese pupils, although the Northern total population was only three times greater than the Southern population. Whereas in the North government schools represented 90% of the elementary school system, such schools constituted less than 7% of the Southern school system in 1948 (Aḥmad Maḥjūb, 1934).

This policy of separate development for the South would later on contribute to the feeling of marginalization that provoked their rebellion in 1955. Another aspect of the educational policy of the Condominium for the period between the 1920s and the 1930s was the “fear of, and hostility to, the growth of an educationally ‘westernized’ urban intelligentsia; the change to a less restrictive and cautious approach is traced through the educational reports of the late 1930’s” when the colonial power started planning the independence of the country (Sanderson & Sanderson, 1970, p. 167).

The first director of education of the colonial period, James Currie (1901-1914) defined the priorities for his department as the creation of a “native artisan class”; spreading education among the “masses of the people” in a way that would enable them to “understand the merest elements of the machinery of government; and the creation of a “small native administrative class who will ultimately fill many minor government posts” (Gordon Memorial College Annual Report and Accounts, 1901, p. 9; cited by Beshir, 1969, p. 29; Daly, 2003, p. 242).

Along with these orientations, it is necessary to mention the educational vision of Lord Kitchener, first Governor-General of Sudan after the Mahdist State. On November 30, 1898 he addressed the British public to raise funds for the establishment

of the Gordon Memorial College. In that speech he explained that his country should play in Sudan the role of “a civilizing power” (Gizouli, 1999, p. 229; quoting a letter by Lord Kitchener of Khartoum and Aspoll to the Public Press on November 30, 1898; obtained from Mr. L.C. Wilcher’s Private Archives, Oxford). This role would be implemented through the introduction of an educational system “gradually built up” that would “begin by teaching the sons of leading men, the heads of villages and the heads of districts” (Gizouli, 1999, p. 229). This vision was supported by Salisbury, Prime Minister of Britain (Gizouli, 1999, p. 230).

#### *2.7.4.2 The Spreading of Missionary Schools: Need and Caution*

In October 1899 the missionaries of Comboni were allowed to come back. They settled in Omdurman where they established a house for the Priests and Brothers and another one for the Sisters (Vantini, 2005, p. 46). When the new Apostolic Vicar, Mons. Roveggio, arrived there in January 1900, he immediately opened a school for boys and another one for girls (St. Joseph Girls’ School). This one consisted of Kindergarten and Primary One and Two. The name of this school was changed into Comboni Girls’ School in 1953 (Vantini, 2005, p. 604).

In 1902 the missionaries opened a small school for boys in the plot where the Catholic Cathedral of Khartoum is located today, Catholic Mission Boys’ School (Vantini, 2005, p. 120) and one year later the Comboni Missionary Sisters opened another one for the girls called Saint Anne in the centre of Khartoum. From a report of 1903-1904 it is possible to know that Saint Anne School started with “4 Sisters and 17 students” (Vantini, 2005, p. 96). In 1912 the number of students reached 162 and 227 in 1923 (Aḥmad, 2002, p. 58).

The successor of Mons. Roveggio, Mons. Franz Xavier Geyer, opened a coeducational school in Port Sudan and another for girls in Halfaya (Khartoum North) before 1905. During his twenty years as Apostolic Vicar of Khartoum (1903-1922), Mons. Geyer “made of the Catholic school the first priority of his plan for the North by

developing the existing ones and extending and raising their standards” (Vantini, 2005, p. 126).

Also the Anglican and the Presbyterian Church in Sudan made a great contribution to the development of education in Sudan. Anglicans were to develop girls’ education while the Presbyterians would provide education for boys. In 1902 the Anglican Church (CMS) opened a Coptic community school for girls in Khartoum. “Subsequently, three more girls’ schools were opened: in 1905 at Omdurman, in 1908 at Atbara, and in 1912 at Wad Medani” (Sundkler & Steed, 2001, p.147). Education in these schools was in Arabic.

In a context of great scarcity of educational opportunities, many Sudanese Muslim families applied to have their girls enrolled in the schools of the missionaries, both Catholics and Anglicans. These Muslim students were exempted from the lessons of Christian religion but the educational vision had a Christian foundation and outlook. Nonetheless, these schools “came to be accepted by both the administration and the local population as useful contributors to education and pioneers of girls’ education” (Sundkler & Steed, 2001, p.147). “The first girls’ schools in the twentieth-century Sudan were established by the Italian Roman Catholic Verona Fathers” (Sanderson, 1961, p. 95). “The first [government] girls’ intermediate school was opened in Omdurman in 1940” while the first girls’ government Secondary School was “opened in Omdurman in 1945” (Mohamed El Gizouli, 1999, p. 27).

In 1905 the Government created a body to supervise that Muslim students in mission schools were not encouraged to conversion. This supervising section became a way of controlling education and avoiding any conspiracy against the established power (Aḥmad, 2002, p. 54). The colonial government was still reluctant to a full opening of education opportunities for the local people and to the presence of the missionaries. In fact, the British Consul General, Lord Cromer, did not really want the missionaries in Sudan (Cromer, 1900; cited by Sanderson, 1961, p. 127).

In 1925 the Governor of Sudan invited the new Apostolic Vicar of Khartoum, Mons. Paolo Tranquillo Silvestri, to reopen the mission of Dilling. But this bishop “refused the invitation in order to concentrate his personnel in South Sudan” (Vantini, 2001, p. 135). On the same year, Mons. Silvestri closed the Catholic Mission Boys’

School in Khartoum and Comboni Boys' School in Omdurman. The Vicariate suffered from "financial problems" (Aḥmad, 2002, p. 58; Vantini, 2005, p. 364) and the Bishop preferred to concentrate the limited resources on the activities of evangelization in the South (Villa, 1931). Mons. Silvestri was also suffering from a nervous breakdown that did not help him in the management of tensions (Vantini, 2005, p. 365). In order to face these financial challenges, he rented the building of Saint Anne. The school was transferred to its current location and renamed as Comboni Sisters School in 1928.

The school of Omdurman would be reopened in 1931 by the successor of Mons. Silvestri who also opened "Comboni Sisters' School" in 1928. The Catholic Mission Boys' School of Khartoum instead would not be reopened any more.

As a reaction to the policy of Mons. Silvestri, the Comboni Missionaries decided in their General Chapter<sup>13</sup> of 1925 to open a school in Khartoum under the name of Comboni College Khartoum (Meroni, 1929, par. I). Therefore, the opening of this school was not a decision of the Apostolic Vicar of Khartoum, but came from the central Direction of the Comboni Missionaries in Rome, "persuaded of the need of a good school in Khartoum" (Chapter Acts, 1925; quoted by Vantini, 2005, p. 511). It was decided to name it "Comboni" because in the same General Chapter it had been decreed to start the process for the beatification of Daniel Comboni. People in Sudan still considered him a saint and a research started to verify if this fame of holiness was well founded.

During the four years in which Catholic schools had remained closed, other communities, either religious or national, had opened new primary schools. Therefore, there was more need of a high school where the students coming from the other basic schools could converge (Villa, 1931). "The Gordon Memorial College was Sudan's single secondary school" (Seri-Hersch, 2017, p. 5). Inaugurated in 1902 with Primary

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<sup>13</sup> The General Chapter of a religious institute is an assembly of representatives of the different regions where the institute is present in the world. They usually choose the General Superior, revise the life of the institute and define its policies for a certain period that goes up to the following General Chapter.

School students, it included an “ordinary secondary school” since 1905 (Gizouli, 1999, p. 13).

The Coptic community had established a Primary School in 1902 that would become the Church Missionary Society Khartoum Girls School in 1903 and added a Secondary Section in 1928, but just for girls, under the name of Unity High School.

Comboni College Khartoum was “firstly established for Catholic students of any nationality” without excluding “non-Catholic teenagers as far as their parents and tutor allow them to attend the religious instruction” (Meroni, 1929, par. IV) and its orientation was mainly “technical and commercial, according to the needs of the country” (Meroni, 1929, par. VI). Thus Comboni College Khartoum (CCK) opened its doors initially just to non-Sudanese students, also because the Colonial Government wanted Sudanese students under their direct control at the Gordon Memorial College.

In fact, the school was authorized by the colonial authorities “on the conditions that the school is for non-Sudanese [sic] boys” (Director of Education, May 26, 1929). This condition appears in a “strictly confidential” letter while it is not present on a non-confidential version signed the following day (Director of Education, May 27, 1929). The Director of Education of the time (1927-1931) was Matthews J.G. (Gizouli, 1999, p. 237).

Among the first CCK students, some were coming from Saint Anne School (Aḥmad, 2002). Its statute prescribed that “every student should show, inside and outside the school, respect for order, morality, personal honour and the rights of the other, as requests to [being] good citizens” (Comboni College Khartoum, 1930, p. 9). In 1933, CCK became official site for the Oxford Certificate exams, which allowed students to continue their education in British universities. In order to keep that accreditation, the Congregation of the Comboni Missionaries sent some priests periodically to study in British universities, which gave CCK a very high standard and fame even abroad.

The creation of Comboni College coincided with the call for educational expansion and reform that repeatedly appeared in the press of Khartoum from some Sudanese leaders since the 1930s. One of them, Muḥammad Aḥmad Maḥḡūb, who

would become Minister of Foreign Affairs of the independent Sudan (1956–1958) and Prime Minister later on (1965–1966 and 1967–1969) wrote an article in the *Al-Fajr* newspaper (1935) asking the colonial government to revise the educational aims and curricula of the Gordon Memorial College along the model of British secondary schools. A few months later, an editorial in the same magazine was unambiguously titled “Give Us Education (‘*allimūnā*) and leave us alone” (1935, p. 1065–1066).

On October 13, 1936 Sir Lancelot Oliphant, deputy under-secretary of state, accused the British authorities in Sudan of neglecting “the education of the natives and, instead, had concentrated solely on efficient government” (Foreign Office 407/219, quoted by Warburg, 2003, p. 97).

In 1938, Sayyed Abdel Rahman el-Mahdi, son of Muḥamad Ahmed el-Mahdi, presided over the awards’ ceremony to the best students of Comboni College Khartoum. Impressed by the quality of the institution, he registered some members of his family in the school in 1940. At the time, the students were already 317, “150 Egyptians, 49 Sudanese, 48 Syrians, 32 Greeks, 26 Italians, 16 Armenians, 13 Palestinians, 2 Indians, one Ethiopian, one Polish and a Yugoslavian” while the teaching staff “consisted of 17 priests, 4 consecrated Brothers and other 16 teachers” (Vantini, 2005, p. 515).

From then on, the school would educate great part of the male Sudanese elite of the independent Sudan.

Along with the academic and cultural activities, the students practiced different sports and were invited to pray. Christian students could do it in the Chapel of the school both in the morning and in the evening. These prayers were not compulsory (Vantini, 2005, p. 515) which indicated the care for the spiritual dimension of the students but also the respect for their inner freedom.

On April 19, 1944, the Colonial Government cancelled the restrictions for Muslim Sudanese students to register in church schools (Vantini, 2005, p. 517). According to Sa’ād ‘Abd Al-‘Azīz Aḥmad, the doors were fully open for them after the Second World War (2002, p. 59). This opening was in line with the Ten Year Plan of the colonial Education Department for the period 1946-1956 as the Director “expressed the determination of the government to push the country’s advance towards self-

government as quickly as possible” (Gizouli, 1999, p. 25; quoting Education Department, file n. 9-7-1 (S.F), 1943).

The number of Muslim students at CCK grew up very quickly. Three children of the Minister of Education, ‘Abd-el-Raḥmān al-Maḥdī, and members of the *Mirḡani* family, two of the most prominent families in Sudan, studied at CCK. One of those students, Sādiq al-Maḥdī would become Prime Minister of Sudan (1966-1967 and 1986-1989). The Gordon Memorial College instead educated other future personalities of the country who became Prime Ministers in different periods like Ibraḥīm Abūd Aḥmed, first President and fourth Prime Minister, Sirr Al-ḥatim Al-ḥalīfa, Moḥamed Aḥmed Maḥḡūb and Bābiker Awaḍallah.

In 1949 CCK was “recognized as exams centre of the London Institute of Bookkeepers” (Vantini, 2005, p. 519). It became the point of reference for those who wished to study sciences and commerce while the Gordon Memorial College trained civil servants for the Government. An expression of the high level of CCK was the fact that in 1950, 92.5% of its students succeeded in the University of Oxford School Certificate.

As already said, the Comboni Missionary Sisters had opened the Comboni Sisters School in Khartoum in 1928, enrolling the girls who were studying at Saint Anne. In the same year of the opening of Comboni College Khartoum, 1929, Catholic Schools were also opened in Atbara and Port Sudan.

The successor of Mons. Silvestri, Francesco Saverio Bini, reopened the missionary stations of Omdurman and El Obeid in 1947. This bishop led the Catholic Church in Sudan from 1930 to 1952 and believed that “Catholic Schools were the best way to serve in the North” (Vantini, 2005, p. 492).

In 1952 a Comboni Missionary called Fr. De Tommasi reopened the school of Omdurman for boys that came to be called “Comboni Boys’ School”. The school started with 6 students (Vantini, 2005, p. 604). The number was continuously increasing and in 1979-1980 got a prize as the “third school among all the Primary schools of Sudan” (Vantini, 2005, p. 604).

The successor of Mons. Bini was Mons. Agostino Baroni, who had been the principal of Comboni College Khartoum. During his mandate (1953-1981), the Catholic Church opened the missions of Dilling, Kadugli, An-Nahud and El-Fasher in 1954 (Vantini, 2005, p. 510). This Bishop led the Catholic Church in Sudan in the last years of the colonial rule and the first years of the independent Sudan. Iris Seri-Hersch (2017, p. 1) describes the period in this way:

The last colonial decade (1947–1957) witnessed a triple process of educational expansion, unification, and nationalization. Mounting Anglo-Egyptian rivalries over the control of Sudan and the polarization of Sudanese nationalists into “pro-British” independentists and “pro-Egyptian” unionists led the British authorities in Khartoum to boost government education while giving up the policy of separate rule between North and South. In practice, educational unification of the two Sudanese regions meant the alignment of Southern curricula on Northern programs and the introduction of Arabic into Southern schools, first as a subject matter, then as a medium of instruction. Missionary and other private schools were nationalized one year after Sudan gained independence from Britain and Egypt (1956).

Church schools were administratively independent from the Ministry until 1948 when “a unified educational policy began to be adopted for the northern and southern Sudan” (Sanderson, 1963, p. 69). The only aspect where they always had a close eye from the Government was on the issue of religious instruction because of the fear to “arose the wrath of fanaticism and provoke a revolution with similar consequences to the *Mahdiya*” (Geyer, 1907; cited by Vantini, 2005, p. 127).

Nonetheless, with the passing of time, Catholic Schools were characterized by their religious diversity as they included “Christian, Hindu, Jew, pagan and Muslim students” (Aḥmad, 2002, p. 62). Most subjects of the government schools were also taught in these schools even during the colonial rule. Arabic was the main language for primary school and English for secondary. Distinctive aspects of their teaching were “shorthand typing and library science” and the inclusion of “sport and cultural activities” (Aḥmad, 2002, p. 62).

Catholic Schools developed in an extraordinary way because “there was more demand for boys’ education in the northern Sudan than the government could provide” (Sanderson, 1963, p. 74). The same need could be applied to girls’ education.

Table II-7. Statistics of Schools during the Condominium.

Year	Missionary Schools		Government Schools					
	Primary Schools		Primary Schools		Vernacular Schools		Subsidised ḥalāwī	
	No.	Students	No.	Students	No.	Students	No.	Students
1901			3					
1906			6					
1914					49			
1918					73			
1921			6	1,238	87			
1930	18		10	1,280	81	7,827	589	21,060
1940		6,000*	30,000 students					
1950	130*	15,487*	99,452 students		964 schools		Northern Sudan	
	381	22,630					Southern Sudan	

Sources: Based upon Gizouli, 1999, pp. 15.18.24.28; who got his statistics from the Gordon Memorial College Reports and Accounts: 31.12.1914, p. 12; 31.12.1918, p. 11; 31.12.1929, p. 7; HENDERSON, K.D.D. (1946) *Survey of the Anglo-Egyptian Sudan, 1898-1944*. London, pp. 11-12; DUNCAN, J.S.R. (1952). *The Sudan. A Record of Achievement*. Blackwood, Edinburgh and London, pp. 225-266.

\* Where the symbol “\*” appears, the statistics refer to non-government schools and not just missionary schools.

NB. In 1950 there are no statistics on the subsidised ḥalāwī and the table distinguishes between the North and the South of the country.

Just some years before the independence, the colonial government invested seriously in education. By that time, “elementary schools catered for 76,996 pupils, while intermediate schools counted only 4,675 pupils and secondary schools 1,700 pupils; some 722 students were then enrolled in higher education” (Beshir, 1969, p. 208).

As for the quality of those schools, it is worth mentioning that in February 1937 the Governor-General, Sir Stewart Symes, invited the De la Warr Educational Commission to visit Sudan. “The great fault of Sudanese schools was the tendency to memorise without understanding with the result that they failed to produce qualities of initiative, foresight and judgment” (Gizouli, 1999, p. 22; quoting the Report of Lord De la Warr’s Educational Commission, Khartoum, 1937, p. 8). This point is still today a

challenge for the Sudanese educational system conditioned by an evaluation system where exams oblige students to memorise the school books in order to succeed.

The development of Comboni Schools during the colonial period can be summarized in the following chart:

Table II-8. List of Catholic Schools created in Sudan until 1957.

School	Foundation
Comboni Boy's Omdurman (reopened in 1952)	1900
St. Joseph Girls' School – reopened as Comboni Girls' Omdurman in 1931	1900
Catholic Mission Boys' School - Khartoum	1902
Saint Anne School - Khartoum	1903
School of Port Sudan for foreign families	1904
Comboni Girls Halfaya	1904
Sisters School Khartoum	1928
Comboni College Khartoum	1929
Comboni Girls Atbara	1929
Comboni Girls El Obeid	1947
Comboni Boys Port Sudan	1948
Comboni Boys Atbara	1948
St. Francis	1951
Schools at Dilling, An-Nahud and El Fasher	1954
St. Joseph Technical School	1952
Comboni Boys El Obeid	1953
Villa Gilda School	1953
Comboni Girls Port Sudan	1957

Source: Own elaboration.

### 2.7.5 Comboni Schools during the Independent Sudan

The independence of Sudan on January 1, 1956 opened a new era for *Comboni Schools*. This period is signed by some historical events that had a great impact on them: the two Civil Wars between the South and the North (1955-1972 and 1983-2005), the Second Vatican Council (1962-1965), the Arabization-Islamization of the educational *curricula* in 1991 and the independence of South Sudan in 2011.

### *2.7.5.1 Independence, Sudanization, Arabization and Islamization*

Immediately after the independence, “education at all levels, received a great impetus and its development was characterized by the fruitful cooperation between the ministry of Education and the United Nations Organisation” (Mohamed El Gizouli, 1999, p. 31). This increase in the number of government schools diminished the quantitative weight of missionary schools at general level.

In July 1956 the Minister of Education of the newly independent Sudan, ‘Uthmān Ziada Arbāb, announced that the Government would “take over” the schools of the missionaries in the South (Vantini, 2005, p. 544). In 1960 these schools passed to be under the jurisdiction of the Ministry of Education that established for them the same curricula that was in force in the North and had been prepared at Baḥt Ar-Rūda Institute. The process of Arabization, started in 1957, was in progress with the aim of making Arabic “the language of instruction” (Mohamed El Gizouli, 1999, p. 31).

This policy was implemented in spite of the cultural diversity of the country and the impact that such decision could have for the learning process of non-Arab Sudanese children:

As the recent PASEC (CONFEMEN Programme for the Analysis of Education Systems) (2015) report shows, the distance between home language and language of instruction is one of the main factors explaining the lack of better learning outcomes in Africa (Unesco, 2018, p. 96).

Even today, more than sixty years after the beginning of this policy of Arabization, “some children speak a tribal or local language different from Arabic at home. As a result, young children cannot speak or understand Arabic when they enter school” (Unesco, 2018, p. 96). At the time this problem was a challenge for linguistic minorities located in specific geographic areas. “But internal migration in the modern era” transferred the problem also “to sizeable communities residing in the greater

Khartoum area” (Unesco, 2018, p. 114). This policy was still justified in the last years of the regime of Omar El Bashir

as both reflecting and supporting national unity. There is also a perception that the use of other languages in local schooling would disadvantage those students in terms of their ability to transition to higher education levels (Unesco, 2018, p. 114).

In spite of this policy of Arabization-Islamization, CCK and other Comboni schools in Khartoum continued their development without great problems and with a growing number of Sudanese students who, in 1959, reached a percentage of 73.6% at CCK. These schools (CCK, Bahri, Saint Francis and Villa Gilda) had 379 boys (all at CCK) and 171 girls in High School, 629 boys (365 at CCK) and 404 girls in intermediate and 450 boys (just 86 at the just started Primary Section of CCK) and 552 girls in Primary (Figli del Sacro Cuore, 1961, p. 319).

In 1964 the Government issued the Missionary Act that commanded the expulsion of the missionaries working in the South. They were accused of inspiring the revolt in that part of the country. Some members of the Government pressurized to have the missionaries expelled also from the North. But others were former students of Comboni College Khartoum and kept a very positive esteem of the work of the missionaries in that institution. Nonetheless, a good number of foreign teaching staff of Comboni College left the country after the riots that took place in Khartoum on December 6, 1964 between Southern Sudanese people and Northerners that would eventually ended up with the killing of 250 people. The triggering incident was the rumour of the death of the highest-ranked Southern member of Prime Minister al-Sirr's cabinet, Interior Minister Clement Mboro (Rolandsen & Daly, 2016, p. 83).

According to a Comboni Brother of the time, Pietro Ferré, the missionaries were not expelled from the North thanks to the positive impact of Comboni College Khartoum (quoted by Vantini, 2005, p. 522).

After those events, the ongoing process of *sudanization* of the teaching staff of CCK and other Comboni Schools accelerated:

Table II-9. Sudanization of CCK Teaching Staff.

Year	Percentage of CCK Sudanese teaching staff <sup>1</sup>	Number of Comboni Missionaries working at CCK	
		According to Vantini <sup>1</sup>	According to the Comboni Missionaries Catalogues
1946	26.3%		11 <sup>2</sup>
1955	49.3%	23	23 <sup>3</sup>
1959	73.6%	20	26 <sup>6</sup>
1993		9	13 <sup>4</sup>
2000	93%	6	9 <sup>5</sup>

Sources:

1. Vantini, 2005, p. 519.
2. Figli del Sacro Cuore di Gesu, 1947.
3. Figli del Sacro Cuore di Gesu, 1955.
4. Comboni Missionaries, 1994.
5. Comboni Missionaries, 2000.
6. Comboni College Khartoum, 1959.

The diminution of the number of Comboni Missionaries among the teaching staff of the College had also to do with the increasing number of commitments due to the arrival of displaced people from the South because of the Civil War. Their number became especially huge after the beginning of the Second Civil War in 1983.

Moreover, in 1993 the Ministry of Education of Khartoum State issued a decree according to which the headmaster and the vice-headmaster of every private school had to be Sudanese and could not be a foreigner (Vantini, 2001, p. 520). This decision was made in the context of the reform of the educational system that took place in 1992. The new system became the third one of the XX century.

After the independence of the country in 1956, the educational system of the colonial period had continued in force until 1992 when the Government of Omar El Bashir issued the General Education Organization Act that defined “objectives, examination regulations, educational policies and general administration” (UNESCO, 2012, p. 2). The perception in the new government was that the educational system had been adapted from a foreign model without relation to the cultural roots of Sudan so that “most students who completed the Secondary School bore Sudanese features and British

minds” (Mahdī, 2006, p. 25). In order to correct this situation and “shape the Sudanese person integrated spiritual, moral, intellectual and physically” (Mahdī, 2006, p. 18), the government took a step further in the policy of Arabization and Islamization of all the educational levels, as they were identified as the two main characteristics of Sudanese identity.

As for basic education, its new objectives were defined as follows:

- 1- To consolidate the religious doctrine and the instruction of the youth on that doctrine; the transmission of the national cultural heritage; the amendment of their behaviour and habits according to the religious teachings, the heritage of the Islamic nation and the values of a virtuous society.
- 2- To transfer linguistic skills (listening, speaking, reading and writing) to the youth, fundamental knowledge of Mathematics.
- 3- To provide the youth with information and the basic experiences that prepare them for active citizenship.
- 4- To provide the youth with the opportunity for an integral growth and for the discovery of their capacities and tendencies.
- 5- To instil in the youth the sense of belonging to the country.
- 6- To help the youth acknowledge the gifts of God in the environment and prepare them for the development of these gifts, their preservation and harnessing for the benefit of the human being (Mahdī, 2006, p. 41).

The new educational system brought also a new distribution of the educational stages. The following chart presents it along with the previous ones:

Table II-10. Educational Systems in Sudan.

Age	Before 1950	1950-1992	After 1992	
4			<i>halwa</i> or Kindergarden	
5				
6				
7	Preparatory	Basic School	Basic School	
8	Basic School			
9				
10				
11				
12	Intermediate	Intermediate	Secondary      Vocational Training	
13				
14				
15	Secondary	Secondary	University first year	
16				
17				

Source: Own elaboration

This policy was also applied to the Southern region of the country, inhabited by different Black-African ethnic groups. Sudan at the time had an area of 2.5 millions square kilometers and about 500 ethnical groups. With the new educational system, the responsibilities of general education were distributed between the Federal Ministry of Education, the State Ministries and the Municipalities.

The State Ministries of Education (SMoE) are responsible for planning and implementing national education policies and strategies at state level, including developing financing plans and budgets from State Government finances. In addition, SMoEs are required to coordinate the work of Directorates of Education at municipality level (EU et al., 2015, p. 307).

As for the Federal Ministry of Education, it “remained responsible for (i) educational research, (ii) curriculum development, (iii) monitoring of the quality of instruction and learning and (iv) for the coordination between the states” (EU et al., 2015, p. 308).

This decentralization implied a huge diminution in the allocations for education that diminished from 15% of the total budget in 1985/1986 to 1.7% in 1992/1993 (Wani, 2002, p. 13).

Some more adjustments to the curriculum were introduced in 1996/1997. Through them “more emphasis was given to practical aspects and life skills” (UNESCO, 2012, p. 9).

In 1998 Primary education became compulsory. At the beginning of the reform, Primary School was co-educational while Secondary education was not. Today both levels are not co-educational.

A new curriculum was gradually introduced in basic level starting from 2015-2016. But in November 2019 the Director of National Curriculum and Research of the Ministry of General Education of the Transitional Government announced the introduction of a new curriculum and new ladder similar to the one previous to 1991 that was supposed to enter into force gradually from September 2020, new beginning of the academic year.

In the beginning of the millennium there was a substantial increase in education spending— from SDG 660 million in real terms in 2000 to SDG 2.4 billion in 2009— which indicated the government’s commitment to expand and improve education. That increase happened in the context of the financial growth of the country due to the income coming from oil. But even if the share of gross domestic product (GDP) allocated to education doubled to 2.7 percent over this period, “northern Sudan still spends less on education compared with similar lower-middle-income countries in Africa and the Middle East” (World Bank, 2012, p. 13).

This situation just improved with the arrival of the Transitional Government in August 2019.

In that period, most of the spending was done at states level rather than federal:

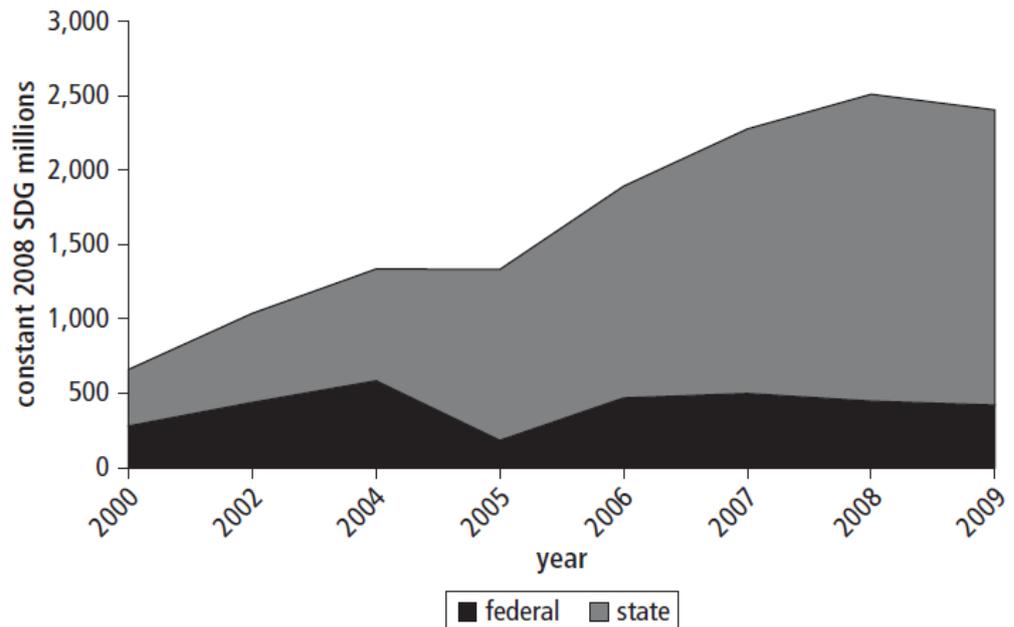


Figure II-5. Public Education Spending by Administrative Level, 2000–2009 (World Bank, 2012, p. 14).

In 2003 a bylaw was issued that allowed non-governmental schools to “teach the approved translation of the national syllabus in English” (UNESCO, 2012, p. 3). It is worth mentioning that while Unity High School, founded by the Church Missionary Society in 1902 as a Girls’ Schools and transformed into a co-educational school in 1928 when it passed to the Anglican Church, followed British curriculum, the schools of the Catholic Church instead, even those that have been educating part of the elite of Sudan like CCK, Saint Francis or Sisters Schools Khartoum, kept the Sudanese curriculum.

A new stage in the history of Sudan started with the signing of the Comprehensive Peace Agreement (CPA) in January 2005 between the two warring parties, the central Government of Khartoum and the Sudan People Liberation Movement. The new Constitution, which is still in force, stated that basic education should be compulsory and free (Sudanese Constitution, arts. 13.1 and 44.2).

This agreement also included the elaboration of “a national curriculum framework that addresses the multicultural, multi-ethnic, and multi-religious context of

Sudan” (World Bank, 2012, p. 26). This new curriculum was never implemented and the Independence of the Republic of South Sudan in 2011 opened the way to a new emphasis in the Islamic and Arab character of the Sudan. The Transitional Government is now trying to integrate Sudanese cultural diversity in the new curricula.

#### *2.7.5.2 The Impact of the Civil Wars and the Development of Emergency Educational Programs*

This study has already mentioned the beginning of the First Civil Sudanese War. In 1955 a group of Southern Sudanese soldiers started a mutiny against the Central Government of Khartoum. Some of those Southern Sudanese soldiers would become the Sudan People Liberation Army (SPLA). This conflict pushed a first wave of Southern Sudanese displaced people towards the North. A Peace Agreement was signed in 1972, which closed the first period of war. But in 1983 the attempt to impose the Islamic Law in the South provoked a new military reaction from the SPLA. This second stage of the conflict was much more violent and generated the displacement of more than 4 million people. About 1,8 million displaced people moved to Khartoum by 2002 (Norwegian Refugee Council, 2005, p. 66). In addition to this, the advance of the desert in the West and the North of the country and the severe droughts were also factors behind the massive displacement of people from the peripheries towards the capital.

In 1986 the Archdiocese of Khartoum started an emergency educational program for the Internal Displaced Persons (IDPs). It opened 48 educational centres that catered “for 8,500 students mainly in Khartoum” with the aim of enabling the displaced children “to enter the government primary school, and this was to be done up to the third grade of education” (Wani, 2002, p. 5). It is necessary to note that the “majority of the children were considered over-aged to be accepted in the government regular schools” (Wani, 2002, p. 11) that, in addition to it, had also lack of space and resources.

According to UNICEF (1996), Sudan had one school every 512 children in the school-going age of 6-13 years, one for every 431 children in the North and one for every 3,417 children in the South. Moreover these displaced children did not know

enough Arabic “to enable them to study in the government schools” (Wani, 2002, p. 9). Certainly, it was also very difficult for municipalities to deal with such a great challenge as the presence of refugees was. With the new distribution of responsibilities, local councils were supposed to pay for textbooks, teachers’ salaries... The integration of displaced people was beyond their capacities. The number of displaced children in 2002 was estimated in 792,000 in the metropolitan area of Khartoum in 2002 (Wani, 2002, p. 16). In fact, some municipalities asked the Catholic Church to extend their educational offer beyond fourth grade of basic school instead of sending the students to government schools, as initially planned by the emergency program (Wani, 2002, p.5).

This emergency program was called “Save the Saveable” and developed thanks to the support of foreign donors. In 2002 the number of educational centres reached 90 and the number of students 54,000 from pre-school level to primary eight. Therefore, at the end the program instead of facilitating the insertion of these children in government schools became “a parallel program to the regular government education program” that educated Christian and non-Christian children (Wani, 2002, p.5). Displaced from other regions, mainly Darfur and Nuba Mountains, also settled in the peripheries of the capital and benefitted from these schools.

At the beginning, the so called “*Save the Saveable Schools*” were distinguished from the previously existing “Comboni Schools” but after the beatification of Saint Daniel Comboni in 1996, even the first ones came to be known as “Comboni Schools” (Wani, 2002, p. 11). One of the differences between these two kinds of schools was that the latter ones were normally self-sufficient, at least for the ordinary running, while the first ones depended from foreign funding.

Sa’ād ‘Abd Al-‘Azīz Aḥmad affirms, quoting Fahmi Suleiman, Director of the Biblical Society in 1977, that Catholic schools were financed by the Vatican (2002, p. 58). This is a quite generalized misconception. Most external donors of the “Save the Saveable” Program had nothing to do with the Vatican. These donors were *Misereor* (NGO of the Catholic Church in Germany), *Cafod* (a NGO of the Catholic Church in England and Wales), and *Bilance* and *Christian Blind Mission (CBM)*, two Dutch NGOs.

In 1994 the Comboni Schools that had been working outside the “Save the Saveable” Program in Khartoum State with their respective numbers of students were:

Table II-11. Comboni Schools in Khartoum State (January 1994).

School	Modern foundation	Christian students	Muslim students	Total
Sisters School Khartoum (SSK)	1928	293	483	800*
Comboni College Khartoum (CCK)	1929	697	704	1439*
Comboni Girls’ Omdurman	1931	653	937	1590
Saint Francis School	1951	970	1106	2076
Comboni Boy’s Omdurman	1952	385	439	824
St. Joseph Technical School	1952	640	50	690
Villa Gilda School	1953	249	546	795
Comboni School-Khartoum North	1971	365	20	385
Comboni School-Saggana	1973	359		359
Comboni Girls Schools Hela Mayo	1974	577		577
Saint Augustine	1991	205		205
<b>TOTAL</b>		<b>5,393</b>	<b>4,285</b>	<b>9,740</b>

Source: Puttinato, 1994.

\* SSK and CCK had 24 and 38 students respectively who were neither Christians nor Muslims

NB. The Comboni Schools located outside Khartoum State have been removed from the original document.

St. Augustine was created in the period in which “Save the Saveable” Program was already in force but was not considered as part of it, since it was a Secondary School planned to be stable from the very beginning.

*Comboni Saggana* and *Comboni Hela Mayo* instead were created before the Save the Saveable Program even if they were already a response to the growing presence of IDPs.

An internal evaluation of the “Save the Saveable” Program was carried out in 1997 in order to report to donors about the progress of the program. In 2001 an external consultant visited the schools twice and wrote a new report. The main focus of these two evaluations was to assess the sustainability of the program. In fact, the report underlined the need of passing from an emergency to a developmental program through the involvement of local resources. The main recommendation of the study was:

that the Church must maintained [sic, maintain] its role in education and should continue to be involved in the educational system through Christian education in government schools and by maintaining its own Church schools. The Church should maintain its “Christian philosophy” to education, and thus should not give up its right of evangelization. The mission of the Church is to educate its own children in the Christian way of life (Wani, 2002, p. 12).

It is worth mentioning that in Sudan, Christian students in Government schools have the right to attend the lessons of “Christian Religion” instead of “Islamic Religion”, but only Christian schools would provide Christian religion to students.

A third evaluation was written in 2002 under the title of “A Comprehensive evaluation of the program of education in Archdiocese of Khartoum, including the school feeding program”. The purpose of the evaluation was to “evaluate the performance, access and achievement” of the students of the schools of the Catholic Church in the Archdiocese of Khartoum from pre-school to primary 8 (Wani, 2002, p. 12).

This latter evaluation reported that the Archdiocese of Khartoum was running 13 Comboni Schools (the schools of Atbara and Port Sudan, two cities located outside Khartoum State, are also considered here), “about 212 pre-school (Kindergartens) and basic schools serving a total of about 71,000 pupils, the majority of them are Christians, with a total of 1,832 teachers and 770 auxiliary staff” (Wani, 2002, p. 11)

Given the poor living conditions of these displaced families, with the passing of time, this program was enriched with the implementation of a school feeding program “in about 95 centres in Khartoum operating 47,000 pupils in addition to over 1,200 teachers and 540 support staff” (Wani, 2002, p. 5). This program was never evaluated until 1998.

The impact of Save the Saveable Program in the extension of the educational service of the Catholic Church can be seen in this chart that contains the number of students who sat the General Primary School Certificate Exam (GPSC):

Table II-12. Development of Comboni Schools under Save the Saveable Program: 1987-2002 (Wani, 2002).

Year	Centres	Classes	Teachers	Pupils	Staff	Pupils who sat for GPSC	% of pass
1987-1988	48	250	250	8,500	150	-	-
1988-1989	52	295	302	10,300	175	-	-
1989-1990	60	390	345	17,200	200	-	-
1990-1991	68	430	510	22,100	220	-	-
1991-1992	70	450	590	23,500	270	320	83
1992-1993	71	470	620	27,600	280	400	85
1993-1994	72	480	720	31,500	302	420	72
1994-1995	75	499	900	35,300	320	450	68
1995-1996	79	596	1110	39,500	320	507	60
1996-1997	82	798	1150	41,600	325	1389	72
1997-1998	87	810	1200	44,500	350	1737	72
1998-1999	85	699	985	42,112	484	1725	71
1999-2000	89	798	1025	45,154	514	1834	81
2000-2001	90	790	1078	48,172	549	2777	79
2001-2002	87	784	1179	46,267	519	-	-

The growth in the number of students can be visualized in this graphic:

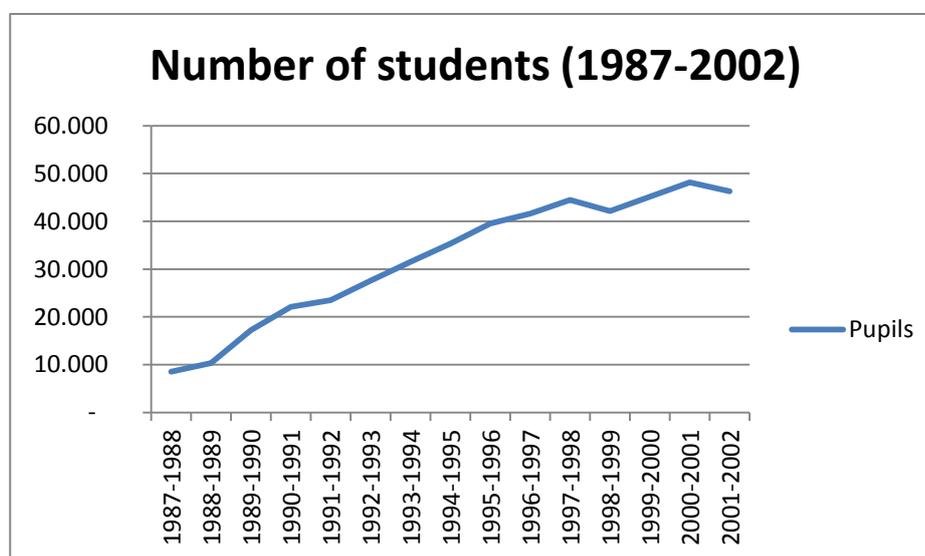


Figure II-6. Demographic Growth in the Number of Students of the Save the Saveable Program (1987-2002)

From Table II-11 it is possible to elaborate a chart with the average of students per class and students per teacher and the percentage of success in the General Primary Education Certificate (GPSC):

Table II-13. Students per Teacher and Class in the Save the Saveable Schools.

Year	Students per class	Students per teacher	% of pass in the GPSC
1987-1988	34	34	
1988-1989	35	34	
1989-1990	44	50	
1990-1991	51	43	
1991-1992	52	40	83
1992-1993	59	45	85
1993-1994	66	44	72
1994-1995	71	39	68
1995-1996	66	36	60
1996-1997	52	36	72
1997-1998	55	37	72
1998-1999	60	43	71
1999-2000	57	44	81
2000-2001	61	45	79
2001-2002	59	39	

These data can be presented in the form of a graphic that shows how the increase in the ratio of students per class had a negative impact on the results of the National Grade 8 Exams:

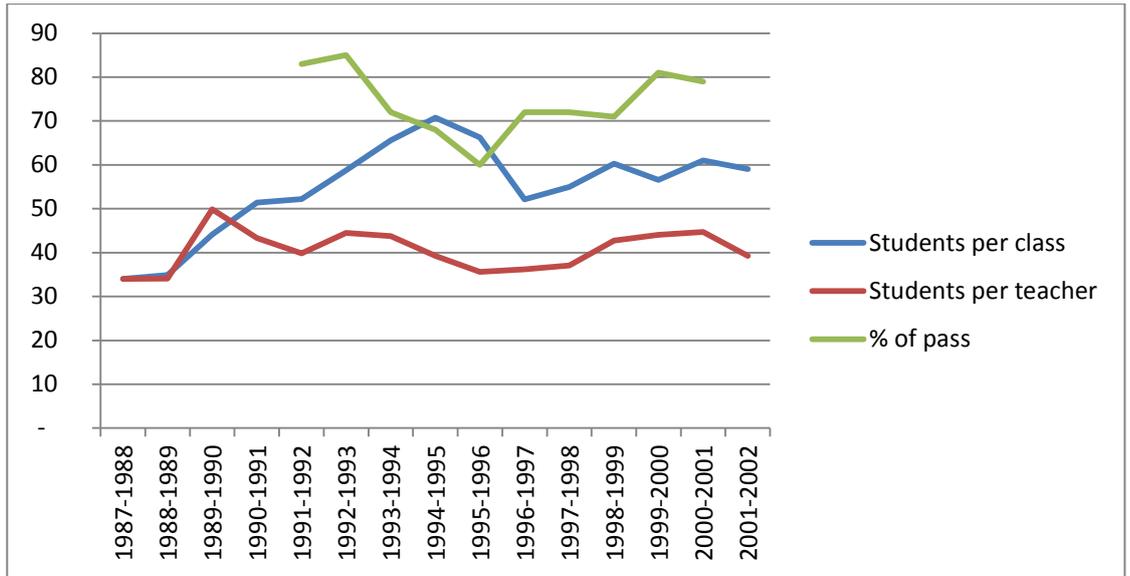


Figure II-7. Students per Class, Students per Teacher and % of Pass.

As for the gender ratio, it is possible to have an idea from the statistics of Grade 8 National Exam for Save the Saveable Program Schools. In 2001, 1,456 boys sat the exam and 84% passed while 858 girls sat and 70.8% passed.

Between 1991 and 2002 the pass rate of those schools varied between 60% and 85%. The percentage of students who succeeded in the GPSC was 74.3%.

Table II-14. Descriptive Statistics for % of Pass for Save the Saveable Schools (1991-2002)

Mean	74,3
Median	72
Mode	72
Standard Deviation	7,66
Sample Variance	58,68
Kurtosis	-0,22
Skewness	-0,30
Range	25
Minimum	60
Maximum	85
Count	10

The skewness is negative, which means that the best results happened in the last years. If we calculate the correlation between the pass rate and the variables “students per class” and “students per teacher” for the results of the National Exams of Grade 8 during the years 1991-1992 to 2000-2001, we will get these results:

Table II-15. Correlation between % of Pass and Students per Class and per Teacher Ratios

Save the Saveable Schools Results National Exams of Grade 8 From 1991-1992 to 2000-2001	Students per class	Students per teacher
% of pass	-0,54	0,64

There is an intermediate negative correlation between the pass rate and the students per class ratio (-0.54). The respective coefficient of determination is 0.29, which indicates that there are 71% of other factors that explain that result.

While the previous result looks coherent, the student per teacher ratio surprisingly shows a positive correlation with the pass rate.

In 2013, the ratio in Sudanese schools had gone down to 25.33 students per teacher, which is lower than the ratio of the schools of the Save the Saveable program and other countries of the context. The average class size for basic education in northern Sudan was “approximately 48 students per class, according to the FMoGE 2008–09 statistical yearbooks” (Unesco, 2018, p. 93).

“Save the Saveable” improved access to education for the children of the IDPs families. It also gave the possibility to Christian parents to have their children studying in a kind of school coherent with the religious beliefs. Nonetheless, many IDPs children never attended school in that period and many dropped out after grade 4.

The Program was run by an Office that was part of the Secretariat of Education of the Archdiocese of Khartoum of the Catholic Church. In their evaluation, the team in charge of the Program stated that the number of schools was too big to serve the objective of quality and therefore suggested “eliminating those schools that have very few children and those others that are located close to each other” (Wani, 2002, p.9).

The evaluation also pointed out that the quality of these schools depended on the support of the Parish Priest. When the Parish was entrusted to the care of a priest<sup>14</sup> who belonged to a Congregation, there was better follow-up of the school administration and more material resources. Diocesan Priests found it more difficult to identify additional funding for these schools (Wani, 2002, p. 7).

Another critical issue of the report is the “Church Dependency Syndrome” (Wani, 2002, p. 7). Supported by foreign organizations and considering the poverty of the population, these schools were free of charge. This fact conditioned the sustainability of the project and became a problem that led to the closure of the program in 2010, after the progressive withdrawal of donors that logically considered that an emergency program should have a limited duration.

As for the traditional Comboni Schools that had been working in the North, some Southern Sudanese displaced accused the Comboni Missionaries of collaborating with the elite in the North and looked as if they had “a different pastoral strategy” from that of the Archdiocese of Khartoum (Vantini, 2005, p. 523). However, if we check the statistics of Comboni College Khartoum, for instance, it can be verified that it was not alien to the coming of displaced people:

Table II-16. Southern Sudanese Students at CCK-Secondary Section (Vantini, 2001, p. 520; Education Office, 2017).

Year	Number of South Sudanese students	Total Number of students	Percentage of SS students
1987	17	340	5%
1989	61	407	14%
2000	147	441	33%
2017	298	427	69.8%

---

<sup>14</sup> Every priest is either diocesan, - that is incardinated in a local church (diocese)-, or a member of a religious Congregation (Canon Law Society of America, 1983, c. 265).

As just said, in 2010 the Archdiocese of Khartoum decided to conclude the “Save the Saveable” Program. Every Parish was supposed to reduce the number of schools that were under its territory and keep no more than two. These selected schools would become “Community Parish Schools” under the responsibility of the Parish Priest. Normally, the Parishes identified the schools with better premises and a community that had showed readiness to pay the school fees and ensure, in this way, the self-reliance of the school.

The consequence was that some schools that had been under the Save the Saveable Program were closed, especially when the independence of the Republic of South Sudan caused a great exodus of South Sudanese people away from Khartoum and other Northern cities. Other schools, discarded by the Parishes, came to be run by the Associations of Teachers. In fact, these schools are necessary in a country with “the largest number and highest rate of out-of-school children in the Middle East and North Africa region” (Unesco, 2018, p. 14)

At present time, Comboni Schools in Khartoum State can be categorized as follows:

Table II-17. Categorization of Catholic Schools at Khartoum State.

	Owner	Administration	Schools	No.
1	Comboni Missionaries (MCCJ) or Comboni Missionary Sisters (CMS)	MCCJ and CMS	Comboni College Khartoum, Villa Gilda School, Comboni Girls Omdurman	3
			CCK evening schools	3
2	Archdiocese of Khartoum	Religious Congregation	Sisters School Khartoum, Saint Francis School, Comboni Boys Omdurman, Saint Joseph Technical School, Izba, Saggana	6
3			Parish Community Schools	Parish Priest
TOTAL				38

Schools that were under the Save the Saveable Program and are now run by teachers associations are not object of this study.

The number of Parishes of the Catholic Archdiocese of Khartoum that are within the limits of Khartoum State is 13. Five are located in Khartoum: the Cathedral of Saint Matthew, Jebel Awlia, Mayo, Saint Joseph-Kalakla and Saint Peter and Paul (Imarat). Six are located in Omdurman: Banat-Fittihab, Dar Es-salam, Jabarona, Masalma, Umm Bedda Shimal and Wad Ramly. Two are located in Khartoum North: Bahri and Hajj Yūsif. Altogether, the Comboni Schools located in Khartoum State are these ones:

Table II-18. Comboni Schools Demographics in Khartoum State on 29/9/2017.

	Parish	School	Total	Boys	Girls	Musl.	Christ.	Sud.	Forgn.	
<b>KHARTOUM</b>										
1	Cathedral	1	CCK basic morning	1185	1185		802	383	845	340
		2	CCK basic evening	192	132	60	24	168	3	189
		3	CCK sec. morning	427	427		111	316	129	298
		4	CCK sec. evening boys	354	354		26	328	26	328
		5	CCK sec. evening girls	331		331	44	287	34	297
		6	Villa Gilda	704		704	595	109	654	50
		7	St Francis	1498	188	1310	1265	233	1343	155
		8	Sisters' School	649		649	496	153	594	55
2	St Peter & Paul	9	Bageir Basic	207	140	67	95	112	150	57
		10	Basic Evening	183	117	66	29	154	43	140
		11	St Stephen Soba	200	110	90	166	34	171	29
		12	Basic Morning	296	181	115	33	263	34	262
3	Mayo	13	Boys	645	614	31	116	529	349	296
		14	Girls	563		563	88	475	290	273
4	St. Joseph Kalakla	15	Dekhenat - Kadissiyya	363	221	142	64	299	50	313
		16	Gubba - Girls	288	63	225	36	252	33	255
		17	St. John Bosco Wahda	620	310	310	13	607	2	618
		18	Dar Mariam	428	206	222		428		428
5	Jebel Awlia	19	Comboni Dar el Salam	1279	487	792	80	1199	40	1239
<b>OMDURMAN</b>										
6	Banat	20	Block 8	239	98	141	26	213	7	232
		21	Block 61	570	269	301	90	480	554	16
		22	Angola	442	203	239	133	309	250	192
		23	Banat	252	121	131	21	231	28	224
7	Dar Salam el	24	Kizito block 4	221	132	89	56	165	128	93
		25	Kizito block 8	284	125	159	12	272	171	113

	Parish		School	Total	Boys	Girls	Musl.	Christ.	Sud.	Forgn.
8	Jabarona - St. Bakhita	26	Ezba 3	984	492	492	11	973	732	252
		27	St. Mary	194	97	97	3	191	189	5
9	Masalma	28	Masalma Boys	1039	1039		869	170	1010	29
		29	Masalma Girls	1012		1012	769	243	958	54
		30	Block 55	313	151	162	27	286	279	34
		31	Block 47	653	328	325	28	625	527	126
10	Wad Ramly	32	Comboni Gamaier	222	98	124	17	205	162	60
	Wad Ramly	33	Wad Ramly	0	0	0	0	0	0	0
<b>Khartoum BAHRI</b>										
11	Bahri	34	Bahri	299	75	224	92	207	117	182
		35	Ezba	684	341	343	139	545	580	104
12	Hajj Yūsif	36	St. Stephen - KG	179	98	81	12	158	12	158
		37	Shigla Basic School	191	96	95	3	188	3	188
		38	Takamul Basic School	649	301	348	67	582	137	512
	<b>TOTAL</b>			18.839	8.799	10.040	6.458	12.372	10.634	8.196
	<b>%</b>				46,71	53,29	34,28	65,67	56,45	43,51

Note: Musl.stands for Muslims; Christ. stands for Christians; Sud. stands for Sudanese; Forgn. stands for foreigners. These were the available statistics at the beginning of this research before the field study.

Source: Education Office of the Archdiocese of Khartoum, 2017.

Therefore, in spite of the above mentioned reduction, Catholic Schools are still numerically meaningful in Khartoum State. It is also worth mentioning that in 2007 the share of private sector in basic education in Khartoum State was 28% (UNESCO, 2012). As for basic schools in Khartoum State, their population represented at the time 13 percent of total basic school enrolments (World Bank, 2012, p. 45).

Between 2000/01 and 2008/09, enrolments in non-government schools at the primary and secondary levels were growing faster than those in government schools. At the primary level, non-government schools showed an annual growth of 8%, which was 3% more than government schools (World Bank, 2012). This evidence reveals a strong and growing demand for education that the government may have difficulty responding to (Unesco, 2018, p. 23).

As for the other diocese of the Catholic Church in Sudan, El Obeid, the statistics of Catholic schools are not complete. The Education Office provided a list of eleven

primary schools that are under the jurisdiction of the Cathedral Parish and educate 2,418 students (data provided on 20-3-2019).

Another ecclesiastical region is Kosti where eight primary schools served 1,845 children in the academic year 2018-2019 (data provided by the Financial Administrator of the Pastoral Region of Kosti on 28-5-2019).

More recently, after the field work of this research had been already completed, the Education Office of the Archdiocese of Khartoum updated the data of its schools including some centers that had not been classified previously. In the following table you find the following abbreviations:

Chr. = number of Christian students

Mus. = number of Muslim students

Sud.= number of Sudanese students

For. = number of foreign students

Tot. = Total number students

Tchr. = Number of teachers

Class. = School years that are taught (Kindergarden,Kg; Primary, p.; Secondary, s).

Clsr. = Number of classrooms

St/Tcher = Student/Teacher Ratio

St/Clsm = Student/Classroom Ratio

Table II-19. Catholic Schools' Demographics in Khartoum Archdiocese 2019/2020 (updated on November 25, 2019)

No.	Parish	No.	School	Boys	Girls	Chr.	Mus.	Sud.	For.	Tot.	Tchr	Clss	Clsr	St/Tchr	St/Clsm
<b>KHARTOUM</b>															
1	Cathedral	1	CCK basic morning	1126		344	782	794	332	<b>1126</b>	44	p1-p8	23	25.59	48.96
		2	CCK basic evening	71	55	113	13	11	115	<b>126</b>	10	p6-p8	4	12.60	31.50
		3	CCK sec. morning	682		509	173	512	170	<b>682</b>	35	s1-s3	10	19.49	68.20
		4	CCK sec. evening boys	241		222	19	18	223	<b>241</b>	22	s1-s3		10.95	
		5	CCK sec. girls		191	181	10	15	176	<b>191</b>	23	s1-s3	4	8.30	47.75
		6	Villa Gilda		591	120	471	480	111	<b>591</b>	29	kg-p6	14	20.38	42.21
		7	St Francis	91	1326	255	1162	1221	196	<b>1417</b>	67	kg-p6	32	21.15	44.28
		8	Sisters' School		830	144	686	773	57	<b>830</b>	56	p7-s3	24	14.82	34.58
2	St Peter & Paul	9	Basic Morning	122	113	203	32	38	197	<b>235</b>	20	p1-8	13	11.75	18.08
3	Mayo	10	Model Education	539		433	106	247	292	<b>539</b>	16	p1-8	8	33.69	67.38
		11	Our Lady of Hope		556	425	131	313	243	<b>556</b>	16	p1-8	8	34.75	69.50
4	Kalakla	12	Dekhenat	293	211	395	109	110	394	<b>504</b>	16	p1-p7	9	31.50	56.00
		13	Gubba - Girls	36	187	187	36	42	181	<b>223</b>	13	kg-p7	9	17.15	24.78
		14	Wahda -	287	272	541	18	2	557	<b>559</b>	15	p1-	8	37.27	69.88

			morning								p8				
		15	Wahda - evening	169	152	309	12		321	<b>321</b>	11	p1-p7	7	29.18	45.86
		16	Dar Mariam - morning	248	293	532	9	29	512	<b>541</b>	10	kg-p3	7	54.10	77.29
		17	Dar Mariam - evening	62	48	105	5	2	108	<b>110</b>	6	p4-6	7	18.33	15.71
5	Jebel Awlia	18	Comboni Dar el Salam												
No	Parish	No	School	Boys	Girls	Christ.	Musl.	Sud.	For.	Tot.	Tchr	Clss	Clstrm	St/Tchr	St/Clstrm
OMDURMAN															
6	Banat	19	Fitihab Block 8	92	76	142	26	15	153	<b>168</b>	4	p1-4		42.00	
		20	Banat East	59	67	104	22	16	110	<b>126</b>	9	p5-8		14.00	
		21	Angola	96	116	163	49	92	120	<b>212</b>		p1-8			
7	St Mark	22	al Thura, block 61	266	273	470	69	517	22	<b>539</b>	15	kg-p8	9	35.93	59.89
8	Dar el Salam	23	Kizito block 4	170	98	153	115	193	75	<b>268</b>	14	kg-p8	9	19.14	29.78
		24	Kizito block 8	98	176	260	14	195	79	<b>274</b>					
		25	Kizito block 9	32	54	72	14	63	23	<b>86</b>	9	p7-s2	4	9.56	21.50
9	Jabarona	26	Ezba 3		594	577	17	375	219	<b>594</b>	27	kg-p8	10	22.00	59.40
		27	St. Mary	80	105	183	2	178	7	<b>185</b>	9	kg-p6	7	20.56	26.43
		28	Marual Chok	600		579	21	397	203	<b>600</b>	6	kg-p8	10	100.00	60.00
10	Masalma	29	Masalma	1092		169	923	1052	40	<b>1092</b>	41	kg-	20	26.63	54.60

			Boys									p8			
		30	Masalma Girls												
		31	Block 55	125	134	238	21	220	39	<b>259</b>	11	kg- p6	7	23.55	37.00
		32	St. Joseph's Basic, 11	269	281	536	14	496	54	<b>550</b>	17	p1- p8	8	32.35	68.75
		33	Thaura Block 47	307	308	585	30	558	57	<b>615</b>	19	kg- p8	11	32.37	55.91
11	Wad Ramly	34	Gamair Arabic	95	102	173	24	120	77	<b>197</b>	14	kg- p8	9	14.07	21.89
		35	Gamair English	97	103	190	10	70	130	<b>200</b>	10	p1-7	7	20.00	28.57
No	Parish	No	School	Boys	Girls	Christ.	Musl.	Sud.	For.	Tot.	Tchr	Clss	Clstrm	St/Tchr	St/Clstrm
KHARTOUM BAHRI															
12	Bahri	36	Sisters Bahri (Waburat)	39	199	166	72	91	147	<b>238</b>	21	p1- p8	8	11.33	29.75
		37	Ezba	395	381	611	165	618	158	<b>776</b>	36	kg- p8	20	21.56	38.80
13	Hajj Yousif	38	st Stephen - KG	91	69	148	12	154	6	<b>160</b>	4	kg	3	40.00	53.33
		39	Shigla Basic School	120	108	222	6	4	224	<b>228</b>	11	p1- p8	11	20.73	20.73
		40	Takamul Basic School	327	362	604	85	156	533	<b>689</b>	33			20.88	
	<b>TOTAL</b>			<b>8,417</b>	<b>8,431</b>	<b>11,363</b>	<b>5,485</b>	<b>10,187</b>	<b>6,661</b>	<b>16,848</b>	<b>719</b>				
	%			49.96	50.04	67.44	32.56	60.46	39.54						

### ***2.7.5.3 The New Concept of Mission in the Second Vatican Council and Its Impact on the Comboni Schools***

From the historical background of Catholic Schools in Sudan, some particular characteristics have emerged that shape their identity and concept of quality. In this section, these characteristics are discussed in relation with the reflection that the Catholic Church has done on the mission and quality of schools.

#### **2.7.5.3.1 From “*extra ecclesia nulla salus*” to a Broader Concept of Mission**

For centuries in the history of the Church, the expression “out of the Church there is no salvation” (*extra ecclesia nulla salus* in Latin language) justified the missionary commitment of the Church. To be saved a person had to be a member of the Catholic Church. Therefore, without baptism in the Catholic Church there was no salvation. Baptized people were going to heaven and non-baptized people were going to hell. For this reason, it was considered urgent to reach every corner of the world and baptize people to save them from eternal damnation and fulfil, in this way, Jesus’ missionary mandate: “Go, therefore, make disciples of all nations; baptize them in the name of the Father and of the Son and of the Holy Spirit” (Mt 28:19, The African Bible).

But when missionaries started going around the world, they realized that this mentality was bringing about some contradictions. If a person practiced justice, helped the poor and was morally good but never heard of Christ and therefore died without being baptized, should he or she be condemned to hell forever?

During the II Vatican Ecumenical Council (1965-1969)<sup>15</sup>, the Church reflected upon its nature and mission in a changing world. In this reflection, there was a return to the Scriptures and the writings of the First Fathers of the Church as source of inspiration and doctrine. As a result of this revision, it was found that the expression “out of the Church there is no salvation” had come from the writings of Saint Cyprian (200-258 AC), bishop of Carthage, and Origene (185-254 AC), a Christian scholar of Alexandria. Cyprian and Origene did not intend to pronounce an absolute sentence that condemned believers of other religions, but to exhort to persevere the new Christians who in front of the persecution executed by the Roman Empire were tempted to go back to paganism.

Some centuries later, the understanding of this sentence deviated from the original meaning. In the sixth century, Christianity was the religion of the majority of people in the whole Roman Empire. And from a Western perspective, the Roman Empire was the known world. Territories outside the Empire were inhabited by the so-called “barbarians”. Hence, the whole humankind had heard of Christ and the minority within the Roman Empire, like Jews and heretics, who belonged to other religions, had refused Christ and thus were outside the Church and condemned.

In this sense, Pope Innocent III, for example, would use this expression in 1215 to condemn the Albigenses and Catharist heresies. Islam was also understood as a Christian heresy and not as a religion apart.

Later on, this expression would be applied not just to those who had refused Christ but to the so-called pagans. Pope Eugene IV, in the Bull *Cantate Domino* (1441) would say that “none of those existing outside the Catholic Church, not only pagans, but also Jews and heretics and schismatics, can have a share in life eternal” (nn. 1-2).

From the European perspective, new worlds were discovered in the XVI and XVII centuries. The inhabitants of America and Far East had been living for centuries

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<sup>15</sup>An ecumenical council is an assembly of Patriarchs, Cardinals, Bishops, Abbots, male heads of religious orders and other juridical persons, nominated by the Pope, who gather to define doctrine. The II Vatican Council was the 21<sup>st</sup> council in the history of the Catholic Church.

without knowing Christ and the Church. According to the general mentality it was urgent to baptize them in order to save them from hell. For this purpose, hundreds of missionaries spread over the new territories, America and Far East (S. Francis Xavier in the Far East, S. Francis Claver in Colombia, Mateo Ricci in China...).

But some few people like Francis de Vitoria (1493-1546 AC) or John de Lugo (1583-1660 AC) questioned this interpretation of the expression “*extra ecclesiam nulla salus*”. If God always wanted every person to be saved, how is it that the inhabitants of America and Asia could be condemned without having had the possibility of knowing Christ? John de Lugo “explicitly extended the possibility of salvation despite invincible ignorance to heretics, Jews and Muslims” (Phan, 2000, p. 258).

Similar questions arose when in the XIX century European missionaries, Comboni among them, took up the work of evangelization of Africa. Comboni, a son of his time, was educated in the conviction that outside the Church there was no salvation and therefore it was urgent to evangelize African people.

Within this theoretical frame of mission, Catholic schools were logically understood as strategic instruments to implement a plan that had the conversion of people from paganism into Christianity as its concrete objective.

This restricted vision of mission was enlarged and developed anew with the Second Vatican Council and following documents of the Catholic Church that tried to combine two facts: the universal will of salvation of God (1 Tm 2:4, The African Bible)<sup>16</sup> and the exclusive character of Jesus as mediator of salvation.

One of the main documents of the Council, “Gaudium et Spes: Pastoral Constitution on the Church in the Modern World” (GS), affirms that “since Christ died for all men (Rom 8:32)<sup>17</sup>, and since the ultimate vocation of man is in fact one, and divine, we ought to believe that the Holy Spirit in a manner known only to God offers to

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<sup>16</sup> Quotation from the first letter of Saint Paul to Timothy, chapter 2, verse 4.

<sup>17</sup> Quotation from the first letter of Saint Paul to the Romans, chapter 8, verse 32.

every man the possibility of being associated with this paschal mystery (GS, n.22)” (Vatican II, 1965b, p. 924).

Therefore, salvation is not limited to the formal belonging to the Catholic Church or baptism. In the same line, Pope John Paul II states in his Encyclical letter on the permanent validity of the Church's missionary mandate, *Redemptoris Missio*, that the saving action of God has no limits:

The inchoate reality of the kingdom can also be found beyond the confines of the Church among peoples everywhere, to the extent that they live "gospel values" and are open to the working of the Spirit who breathes when and where he wills (cf. Jn 3:8) (1990, n. 20; cited also by Pontifical Council for Inter-religious Dialogue, 1991, n. 35).

This idea was grounded on another one of the main documents of the Second Vatican Council, *Lumen Gentium* (LG n. 16), which is the Dogmatic Constitution on the Church:

The plan of salvation also includes those who acknowledge the Creator, in the first place amongst whom are the Moslems: these profess to hold the faith of Abraham, and together with us they adore the one, merciful God, mankind's judge on the last day (Vatican II, 1964, p. 367).

Consequently, a broader concept of mission emerges. Mission is not just the activity of the Church to convert people to Christianity: “The Church serves the kingdom by spreading throughout the world the "gospel values" which are an expression of the kingdom and which help people to accept God's plan” (John Paul II, 1990, n. 20).

### 2.7.5.3.2 Mission and the Goal of Catholic Schools in Sudan

The network of Catholic Schools in the world is considered beneficial as they usually perform better than public schools, have a long tradition of serving the poor and “provide valuable options for parents, thus contributing to healthy pluralism in the educational choices available to them” (Wodon, 2018, p. 191). In Africa they represent 10.7% of the total number of schools with the largest enrolment in four countries that were classified in 2018 as low-income by the World Bank: Republic of Congo, Uganda, Kenya and Malawi (Wodon, 2018, p. 200).

The previous analysis of the concepts of salvation and mission in the Catholic Church has to do with the issue of quality, as this concept means the attainment of goals, and the goal of these schools has been, and still is, one of the sensitive issues related to their presence and activity in an Islamic majority country.

Despite their missionary framework, the relation of missions’ schools with the local population in Sudan has been good as they esteem their “efficient contribution to the field of education” (Aḥmad, 2002, p. 76) as mentioned above for Catholic schools in other countries. This positive esteem was possible, according to Sa’ād ‘Abd Al-‘Azīz Aḥmad, because they renounced to their goal and they “were aware of working in the midst of a Muslim community of extreme sensitivity to religion, and for this did not implement their goals” (Aḥmad, 2002, p. 76).

But certainly, if these schools did renounce to the implementation of their goals, they should be considered a failure or of low quality.

One of the few conflictual episodes in mission schools happened in 1925 when the she-Muslim students of the American Mission School in Omdurman participated in classes of Christian religion. “One hundred students left the school” (Aḥmad, 2002, p. 77).

While the direction of the Catholic school of Atbara gave all the students the possibility of attending lessons of Christian religion or staying outside, the school of the American mission refused to give this second possibility (Aḥmad, 2002, p. 78).

Muslim Sudanese people protested against the American Presbyterians who rivalled or exceeded the CMS (Church Missionary Society of the Anglican Church) as schoolroom evangelists. “The movement expanded into a protest against the Christian mission at large” (Sharkey, 2002, p. 62). After these episodes, British authorities “tightened restrictions requiring parental consent”. A movement of Sudanese parents started claiming “independent *ahliyya* (people’s) schools” (Sharkey, 2002, p. 62).

For Beshir “the conversion to Christianity was their only justification for educational activity” (1969, p. 121). Sa’ād ‘Abd Al-‘Azīz Aḥmad also presents the Catholic schools in the context of the evangelizing activities of the missionaries (2002, pp. 43-81). This idea extended among many northerners in Sudan. In fact, the “Church Missionary Society missionaries arrived in the northern Sudan in 1899 with the goal of converting Muslims” (Sharkey, 2002, p. 51). According to Sharkey, “restricted by the Anglo-Egyptian government and by local opposition, they gained only one Muslim convert during sixty years of work” (Sharkey, 2002, p. 51). The Church Missionary Society “was one of many evangelical Protestant missions that moved into Africa and Asia in the nineteenth and early twentieth centuries when European empires were expanding” (Sharkey, 2002, p. 52) and were “increasingly committed to, and aggressive about, work in Muslim regions” (Sharkey, 2002, p. 54).

Sharkey analysed the failure of the schools of this missionary society in Sudan by reasons that have not to do with religion. He pointed the fact that they were producing a “dysfunctional literacy” because of teaching in Arabic language written with Latin characters (Sharkey, 2002, p. 52).

As for the Catholic Church, no Muslim student converted to Christianity. Catholic Schools were “more observant than its CMS counterparts in arranging exemptions from Christian prayer and religious study” (Beshir, 1969, p. 38). It is true that the objectives of the opening of the Vicariate of Central Africa stated in the decree of Pope Gregory XVI of April 3, 1846, were: “the conversion of Africans to Christianity, the bringing of assistance to the Christians who were in the Sudan as traders and officials, and the suppression of the slave trade” (Toniolo & Hill, 1974, pp. 1-2). But with the passing of time, as it was seen previously, Catholic missionaries

developed a wider and more dialogic concept of mission in tune with the Second Vatican Council doctrine.

In the first years of the Anglo-Egyptian Condominium, a public notice announced that if a Sudanese was caught talking to a missionary, both would risk being arrested (Frost, 1984, p. 69). Instead missionary activities were supported south the tenth parallel, where Islam was not allowed to spread.

Yūnān Labīb Rizq (1966, p. 24) recalls that Kitchener considered that

if Christian forces don't occupy the convenient centres in Africa, the Muslim Arabs will take over this issue and if they didn't penetrate in the continent, this will mean that they will manage in the future to promote all the harmful effects up to the Sahel and the country will fall then in this slavery.

This idea justifies, according to Sa'ād 'Abd Al-'Azīz Aḥmad, that the Christian expeditions were allowed to found missionary stations, schools and hospitals in the South. As for the North, the policy was more complex. In fact, she states that the policy of the [colonial] government was not showing "special favouritism for the Christian doctrine and her missions" (Aḥmad, 2002, p. 48). The Government wanted to avoid the conflicts that could derive from the presence in the same area of "opposing religious tendencies" (Aḥmad, 2002, p. 49). The restrictions of the Government to the work of the different churches in the North obliged them to play an indirect role in society through their commitments in "schools, hospitals and social service, and this by giving practical example to Muslims about the extent of Christian Western progress" (Aḥmad, 2002, p. 49).

In the view of Sa'ād 'Abd Al-'Azīz Aḥmad, teaching and the above mentioned activities of the churches were not goals in themselves. Their "main scope was the propagation of the Gospel to include the whole of Africa" (Aḥmad, 2002, p. 53, quoting Trimingham, 1948, p. 12). Thus those social activities were, from this perspective, obliged by the circumstances. Moreover, another factor that added certain confusion was that many educational activities were carried out inside church compounds.

On the other hand, while the Government restricted the work of the different churches, it granted them vast plots of land and some privileges (Aḥmad, 2002, p. 49). Thus the issue of the relation between the colonial government and different Christian churches is quite controversial and would need a specific study that goes beyond the scope of this research.

Therefore, three important questions that have to do with the goals of Catholic Schools in Sudan and, in consequence, with the assessment of their quality are:

- 1) Were these schools mere instruments for the purpose of evangelization or the transmission of Christian views to Muslim people?
- 2) Was the fact of not serving for the purpose of conversion of Muslim students a lesser evil that allowed them to remain in the Muslim North with the approval of the local population (Aḥmad, 2002, pp. 43-81)?
- 3) Was their great contribution to the education of women just a strategic decision that targeted one “fundamental factor of social change” and main door to access families (Aḥmad, 2002, p. 56)?

Comboni described the goal of the two institutes of Cairo as instrumental to the purpose of “plant[ing] the faith solidly in Central Africa” (Comboni, 1870, W2216). As already discussed, the concept of mission at the time of Comboni was identified with the necessity of expanding the Church (the concept was called *plantatio ecclesiae* in Latin language) for people to reach eternal salvation. On the other hand, it is necessary to consider that those two centres and the one in Verona were mainly focused on the training of missionaries. Therefore, their goal cannot be generalized to all his educational vision and work.

In dialogue with reality and finding inspiration in the original sources of Catholic doctrine, that is the Bible and the writings of the Fathers of the Church, the Catholic concept of evangelization developed from a narrower understanding limited to the “conversion of pagans” to a deeper and wider one that can be defined with the words of Pope Paul VI (1975) in these terms: to bring the Good News of the love of God “into all the strata of humanity, and through its influence transforming humanity from within and making it new” (Paul VI, 1975, n. 18).

Consequently, the document produced by the Congregation for Catholic Education<sup>18</sup>, “Educating today and tomorrow: a renewing passion” in 2014, states that Catholic schools, independently of their context and geographical position, should aim at fostering “anthropological and ethical values in individual consciences and cultures, which are necessary in order to build a society that is based on fraternity and solidarity” (2014, Introduction). The same document defines Catholic schools as “places where people learn how to engage in the pursuit of the common good” (2014, Introduction). Certainly, this modern definition goes beyond their being a mere instrument for the conversion of non-Christians.

### **2.7.6 Goals and Characteristics of Comboni Schools**

This section deepens into the goals and characteristics of Comboni Schools. As already said, Comboni Schools belong to the Catholic Church that has a certain vision on education and schools as is expressed in the Code of Canon Law (CIC) and some documents mainly produced by the Congregation for Catholic Education. This is one of the nine Congregations of the Holy See and is responsible for: (1) universities, faculties, institutes and higher schools of study, either ecclesial or non-ecclesiastical dependent on ecclesial persons; and (2) schools and educational institutes depending on ecclesiastical authorities.

On the other hand, “being Catholic can vary across many cultural expressions” (Groome, 1996, p. 107) and certainly the characteristics of the Sudanese context have shaped the “catholicity” of Comboni Schools in a certain way. These schools have a Statute that contextualizes their mission, vision and organization.

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<sup>18</sup> Here the word “congregation” doesn’t refer to a religious institute but to the second highest-ranking departments of the Roman Curia (the central administration of the Catholic Church).

### *2.7.6.1 Catholicity of Comboni Schools*

The Catholic Church considers that “parents must possess a true freedom in choosing schools” (CIC, c. 797)<sup>19</sup>. This conviction has always pushed the Church in Sudan to own schools in order to guarantee this right of Christian families to choose a Christian education for their children. And this is one of the responsibilities of any Diocesan Bishop (CIC, c. 802). Similarly, the Comboni Schools Statute states that they “were opened and are run by the Catholic Church in the Sudan first of all to cater for the educational needs of the Christian community” (Figli del Sacro Cuore di Gesù, 1967, p. 7). A similar statement is found in later summarized editions (Puttinato, 1994, p. 8; Puttinato, 1995, p. 21).

The Code of Canon Law (CIC, c.803§1) also defines what a Catholic School is: “one which a competent ecclesiastical authority or a public ecclesiastical juridical person directs or which ecclesiastical authority recognizes as such through a written document”.

In the territory of the Archdiocese of Khartoum, all Catholic Schools are registered under the name of the Archbishop or the archdiocese, even though some of them are parish schools, others are diocesan and others belong to religious congregations.

The Code of Canon Law adds that “instruction and education in a Catholic school must be grounded in the principles of Catholic doctrine; teachers are to be outstanding in correct doctrine and integrity of life” (c. 803§2).

Religion is a compulsory subject in the whole Sudanese educational system from kindergarten to university. But only Christian schools offer lessons of Christian religion to Christian students. Therefore, these Schools are a place of instruction in Christian doctrine and normally engage a greater percentage of Christian teachers than Muslim ones.

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<sup>19</sup> The canons of the Canon Law (Codex Iuris Canonici, CIC, in the original Latin language), are quoted after the letter “c.” while the paragraphs inside every canon are numbered after the symbol “§”.

However, Catholic Schools should not just be a place of instruction. These schools are conceived as “a place of testimony and acceptance, where faith and spiritual accompaniment can be provided to young people who ask for it” (Congregation for Catholic Education, 2014, part III).

This fact does not imply that non-Catholic teachers are not welcome to work in Catholic Schools. According to the Canon Law, Catholic Schools can engage non-Catholic staff as far as they have integrity of life and teaching skill (CIC, c. 804§2). This point is especially interesting in the Sudanese context, where the majority of the local population are Muslims (97%).

Some key words describe the *catholicity* of these schools in spite of the different contexts in which they are located and the different ways to conceptualize their identity: “holistic education, community, relationships, visuals/symbols, Gospel values, Catholic social teaching and service” (Fuller & Johnson, 2014, p. 97).

Martin defines the commitment to foster service as a way “to form other-centred men and women who can make a difference in this world” (2012, p. 49).

This “different world” is described in the Catholic social teaching. This doctrine can be summarized in these three principles: the infinite value given to the dignity of the human person; the commitment to the common good; and the preferential option for the marginalized persons.

#### ***2.7.6.2 Quality and Gospel Values***

Catholic Schools in general face the tension between academic achievement, which may lead to focus on the elite of society, and service to the marginalized people. The first element without the second one has the potential to “distort the Catholic educational mission from its Catholic purposes” (Grace, 2002, p. 179). In other words, the trap of fostering an academic success culture may lead to neglect the centrality of Christ, who firstly served the poor. This point will be important when we will define quality of Comboni Schools.

“The Catholic school participates in the evangelizing mission of the Church” (Congregation for Catholic Education, 1997, n. 11) where this evangelizing mission is not defined neither as keeping the already existing Christian community nor as a means of proselytism, but as a service to society. In fact, *Gravissimus Educationis* (GE, n. 10), the Declaration of the II Vatican Council on Catholic education, affirms, even if it refers to Catholic universities, that they should serve societies, and not just the Church (Vatican II, 1965a, p. 735).

In similar way, the *Instrumentum laboris* entitled “Educating today and tomorrow: a renewing passion” produced by the Congregation for Catholic Education states that Catholic schools should aim at fostering “anthropological and ethical values in individual consciences and cultures, which are necessary in order to build a society that is based on fraternity and solidarity” (2014, Introduction).

The same document insists on this point when it says that “schools are places where people learn how to engage in the pursuit of the common good” and gives a very meaningful definition of Catholic schools: “Catholic schools and universities are educational communities where learning thrives on the integration between research, thinking and life experience” (Congregation for Catholic Education, 2014, Introduction).

### ***2.7.6.3 Particularities of Comboni Schools***

The mission, vision and organization of Comboni Schools was described in the Comboni Schools Statute published in 1967 and updated and summarized by Puttinato (1994 and 1995).

Comboni Schools are defined, as mentioned before, as Church institutions opened and “run by the Catholic Church in the Sudan first of all to cater for the educational needs of the Christian community” (Figli del Sacro Cuore, 1967, p. 7). A similar statement is found in later summarized editions (Puttinato, 1994, p. 8; Puttinato, 1995, p. 21) that add that those schools “are owned by the Catholic Church and continue the educational work of Daniel Comboni (1831-1881)” (Puttinato, 1995, p. 21).

Their main purpose is defined as “the fully integrated development of their students, as persons of intellectual attainment and of high moral character, guided by sound principles and strengthened by religious faith” (1994, p. 8). The importance of faith is also expressed by the fact that it is expected from every teacher, not just those of religion, “to offer an example of a highly principled life related to God” (1994, p. 9). This aspect is developed through the special care for both Christian and Islamic celebrations.

Special emphasis is put on the freedom of conscience as these schools are “pluralistic communities, with students of various nationalities, races and creeds” (1994, p. 9).

Another characteristic of these schools has been the importance given to sport as way of implementing the holistic character of education that also includes the physical development (1995, p. 21).

Among the values that the Statutes list and that the educational community should embrace there are respect, sense of community, “freedom, justice, peace and social progress for all” (1994, p. 10). Comboni Schools are well known in Khartoum by their clean environment.

These schools have also been recognized by their high standards “in terms of equipment and disciplinary system” (Silverio Julu, 1995, p. 29)

## **2.8 Previous Research on Educational Quality of Primary Schools in Sudan.**

Fauzia Taha Mahdī states that since the beginning of the XX century, the Sudanese educational system “has not been submitted to any evaluation” (2006, p. 35). In her research, she applied the CIPP model of evaluation (Context, Input, Process, Product) to Primary Schools of Khartoum State. More recently, Al-Tayyib Yūsif Muḥamad (2015) studies the application of Total Quality procedures to a private primary school for girls located in Khartoum (Al-Qabas) and analyses the implementation of Total Quality Management by the Khartoum Foundation for Private

Education Supervision (2016). In his literature review, he concludes that previous studies on the application of TQM to basic schools in Sudan did not mention the way TQM was implemented (procedures, time line...), nor followed up or revised nor the concrete model of reference that was used nor the indicators of satisfaction of the customers (Al-Tayyib Yūsif Muḥamad, 2015, quotes: Ṣalāh Sulīmān ‘Abdallah, 2009; ‘Abdallah Muḥamad Al-Badawi, 2009; Faiṣal ‘Abdallah Al-Ghamidi, 2011; Nadia Adam Idrīs Gibrā’īl, 2011). Who these ones were, was not even defined. Al-Tayyib Yūsif Muḥamad instead concentrates his study on these procedures and concludes that it’s “possible to apply the procedures of TQM to Basic Schools easily and with simplicity” and this implementation does not demand a special budget (Al-Tayyib Yūsif Muḥamad, 2015, p. 45).

In this section we list some studies about quality of Primary Schools in Sudan and some reports prepared by international organizations that help to shape the theoretical framework and the self-assessment tool, provide data for the contextualization of the schools of the sample and for the analysis of the results that come out from the respective self-assessment.

**Study 1:** MUḤAMAD, AL-TAYYIB YŪSIF AL-BADAWĪ (2016) *Fa’lyia taṭbīq idāra al-ḡauda al-ṣāmila fī taqwīm nuḡum al-mu’asasāt al-tarbawya al-ḡaṣṣa, dirāsa ḡāla: isrāfyia mu’asasa al-ḡarṭūm li-ta’ līm al-ḡaṣ* [Effectiveness of T.Q.M. procedures implementation in evaluation of private education organization systems: Case study: Khartoum Supervisory Foundation for Private Education]. *Idāra Al-ḡauda Al-ṣāmila [Total Quality Management]*, 17(1), pp. 45–59. Retrieved from [http://www.sustech.edu.sd.sd/staff\\_publications/20170212092901796.pdf](http://www.sustech.edu.sd.sd/staff_publications/20170212092901796.pdf).

This case study aims at assessing the implementation of the criteria of Total Quality Management to educational assessment in order to improve its efficiency and accuracy. The object of the study is the schools of the “Khartoum Supervisory Foundation for Private Education”. The study is a descriptive-analytical research that uses observation as instrument for the data collection.

The application of the TQM criteria is not integrated in the administration of the foundation or its schools, but considered as “an additional program” (Muḥamad Al-Badawi, 2016, p. 45). The originality of the study according to the author is that “it searches ways for the achievement of the most important criteria of Total Quality Management” (2016, p. 46). The study deals with the following processes: 1) The preparation of students evaluation tests; 2) Exams invigilation; 3) The capacity to correct the mistakes identified in the quality assessment through the complaints of internal and external customers and the observations of different stakeholders.

After examining the results of tests and student exams in the period of application of the TQM procedures (2010-2015), and especially the national exams at the end of Primary Eight and Secondary Three, the author concludes that the “foundation benefitted a lot from the application of the TQM procedures in general, especially in the evaluation” (2016, p. 58). In fact, no student of the foundation failed in the National Basic Certificate and the Secondary School Leaving Certificate in that period.

The author quotes three elements that were in force in the schools of the Foundation that help in the correction of mistakes as they implement the concept of continuous evaluation:

- 1) A detailed quarterly plan that comprises of the works and activities of the year, including the tests calendar; 2) A model that defines ideal forms of teaching and associated activities, including evaluation; 3) A model of lessons plan notebook that also includes evaluation (2016, p. 58).

The author concludes the article with the following statement: “Write what you want to do and do what you wrote” (2016, p. 59).

A limit of this study is that it does not compare school quantitative results before and after the application of the TQM procedures to verify the efficiency of the model.

**Study 2:** MUḤAMAD, AL-TAYYIB YŪSIF AL-BADAWĪ (2015) *Taṭbīq 'Ijra'āt al-ḡāuda al-šāmila fī al-mu'asasāt al-tarbawya tahy'a li-zurūf al-mulā'ima li-'amaliatai al-ta'līm wa al-ta'allum (ḥāla madrasa al-Qabas Asās Banāt - maḥallya al-harṭūm)* [Applying Quality Management Procedures on Educational Institutions to Create the Suitable Conditions for the Teaching-Learning Process - Al-Qabas Basic School for Girls Case - Municipality of Khartoum]. *Idāra Al-Ḡāuda Al-šāmila [Total Quality Management]*, 16(1), pp. 31–45. Available from [http://www.sustech.edu/staff\\_publications/20150922051911589.pdf](http://www.sustech.edu/staff_publications/20150922051911589.pdf)

This study aims at verifying if Al-Qabas Girls Basic School applied some procedures of the TQM model. The study sample was formed by the headmaster, the deputy headmaster and the heads of department of different subjects.

In the literature review, the author quotes a series of studies on Total Quality Management in Sudan. He also mentions the initiative of 50 private schools of Khartoum, Bahri, Port Sudan and Wadi Medani that implemented TQM with the scope of getting the ISO 9001 certificate in 2004 (2015, p. 32).

After that review, the author concludes that previous studies on the application of TQM to Basic schools in Sudan (Salah Suleiman Abdallah, 2009; Abdallah Mohamed Al-Badawī, 2009; Faisal Abdallah Al-Ghamidi, 2011; Nadia Adam Idris Gibrail, 2011)<sup>20</sup> did not mention the way TQM was implemented (procedures, time line,...), nor followed up or revised neither the concrete model of reference that was used or the customers indicators of satisfaction. Who these ones were was not even defined. Al-Ṭayyeb Yūsif Muḥamad Al-Badawī instead concentrates his study on some of these procedures: setting a detailed study plan, the acceptance of new students, the organization of the morning parade (*tabur*), the evaluation of students and the organization of academic and cultural competitions.

At the end of his article, he concludes that the school applied the TQM procedures and achieved the defined objectives and therefore that it is “possible to apply

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<sup>20</sup> Surprisingly, the full quotation of these studies is not present among the references of the article.

the procedures of TQM to Basic Schools easily and with simplicity” and this implementation does not demand a special budget for it (2015, p. 45).

After reading the two articles of al-Ṭayyeb Yūsif Muḥamad Al-Badawī, we can state that there is lack of holistic quality management approaches in the evaluation of quality and lack of empirically sound Total Quality implementation models.

**Study 3:** EUROPEAN UNION, FMOGE and SOFRECO (2015) *Provision of Technical Assistance for the support of the Implementation of the Primary Education Retention Programme (PERP) in the Sudan*. Khartoum.

The study aims at diminishing the rate of dropout children in Sudan so that they “acquire the basic competencies – literacy, numeracy, problem solving, social skills, and more – in order to continue learning and, later, to engage in productive work and participate actively and constructively in society” (2015, p. 8).

This analysis is carried out through six studies designed to complement statistical data “to answer the question ‘why’ and to capture the range of dimensions and factors which contribute to dropout, on the one hand, and to retention, on the other” (2015, p. 9).

The report includes six studies which focus on the following items: why children drop out of school; factors affecting the education and retention of girls; the quality of the teaching and learning process; community engagement in education; the role and value of education – perceptions of parents and community members; improving management for better retention.

**Study 4:** LAKO, MARTIN (2010) *The Challenges facing the Provision of Quality Education in Private and Public Secondary Schools in Khartoum, North Sudan*. Non published thesis (Post Graduate Diploma in Education). Catholic University of Eastern Africa, Nairobi.

The research aims at investigating the challenges facing the provision of quality education in the schools of the Archdiocese of Khartoum of the Catholic Church in Khartoum State. In particular way, the researcher examines three factors: teachers, school facilities and school environment.

The study concludes that the factors related to the teaching staff that affect quality positively are the diversity of teaching methods and aids that are used according to the topic being covered and the application of “continuous assessment exams to test students’ progress in studies” (2010, p. 60).

Decisive factors related to school facilities are: “poor quality of instructional materials, physical facilities, i.e. desks, classrooms, lack of effective use of teaching and learning resources” (2010, p. 60).

The author also affirms that a favourable environment to increase quality includes safety, cleanness and good maintenance of premises.

Finally, he states that the “government is not enough to meet the demands of provision of quality education in Khartoum” and therefore quality demands a “participative approach that involves schools, communities and education partners” (2010, p. 61).

**Study 5:** MAHDĪ, FAWZIA ṬAHA (2006) *Taqwim marḥala al-ta’līm al-asāsī fī wilāyat Al-ḥartūm* [Assessment of Basic Education at Khartoum State]. Khartoum: Jāmi’a al-ḥartūm lil-naṣr [Khartoum University Press]

The book was published in 2006 even if the research was done in 2001 in view of the PhD thesis of the researcher. Dr. Fauzia Taha Mahdī states that since the beginning of the XX century, the Sudanese educational system “has not been submitted to any evaluation” (2006, p. 35). In her research, she applies the CIPP model of evaluation (Context, Input, Process, Product) to Primary Schools of Khartoum State.

The sample of the study is very meaningful as it includes twenty educational inspectors of municipalities, thirty Primary Schools headmasters of Khartoum State and 450 teachers.

The local inspectors and the headmasters underline the overcrowding in the classrooms among the main factors that have a negative impact on the results of the students along with problems related to the school environment like the lack of furniture for instance.

**Study 6:** MUḤAMAD, MUNĪRA MUḤAMAD ḤAMAD (1996) *Al-riḍā al-waḏīfī ladā marḥalat al-'asās wa 'ilāqatuhu bi-al-namaḗ al-qiādī li-mudīr al-madrasat*. [Job satisfaction in relation to the leadership style of the Primary School Headmaster]. Non published Master's Degree Thesis. Khartoum: University of Khartoum.

This research involved 150 teachers of Primary Schools of Khartoum State. It dealt with one element that is part of the quality assessment as the job satisfaction of the teaching staff. The study associates the job satisfaction of the teachers with the democratic style of leadership. The autocratic style instead has a negative correlation with the job satisfaction while the correlation of the laissez-faire style is not meaningful enough to state a positive or negative impact on the job satisfaction.

**Study 7:** RAḤMATU ALLAH, MUṢṬAFA 'AṬYAT (2015) *Al-'idārat al-iliqrūnyā wa-dawruha fī taṭwīr 'idāra ta'līm marḥalat al-'asās fī ḍaw' maḑāhīm 'idārat al-ḡauda al-sāmila – Wilāyatu al-ḥarṭūm* [Electronic Management and its Role in Developing the Basic Level Administration Based on Total Quality Management Concepts - Khartoum State]. Thesis for the PhD. Khartoum: Sudan University of Science and Technology.

It is convenient to place this study within the context of the interest of Khartoum State in the project of implementing e-government in every sector of the public administration. The research aims at assessing the possibility of introducing electronic administration in Basic Level education in the light of the concepts of Total Quality Management.

The study is more focused on the aspects linked to an electronic administration like the existence of the necessary technical infrastructure or the skills of the staff rather

than in the change of culture that would imply the introduction of Total Quality Management into an administrative system that, according to the author, is run in a traditional way.

**Study 8:** SĀLIM, MUḤAMMAD SĀLIM MUḤAMMAD (2010) *Madā 'Imkānya taṭbīq niḏām 'idārat al-ğauda al-šāmila fī wizārat al-ta'līm al-'am* [About the possibility of applying Total Quality Management in the Ministry of General Education]. PhD Research Thesis. Omdurman: Zaim Al-Azhari University.

The author of this thesis was the Director of the Information Unit of the Ministry and therefore had easy access to data. His main aim is to explore the possibility of applying the principles and the criteria of Total Quality Management to the Ministry by its staff considering their gender, academic preparation, kind of work and the years of experience. Other factors that are considered are the organizational and material resources.

**Study 9:** SILVERIO JULU, JULIUS (1995) *The Role of the Sudan Catholic Church in Formal Education. Case Study: Khartoum Province*. Thesis (Post-graduate Diploma in Social Work and Social Administration). Khartoum: University of Khartoum.

The main objective of the this research is to assess “to what extent the Catholic schools have contributed in the education of Sudanese children” (1995, p. 6). The schools that were chosen for the survey were: Comboni College Khartoum, Sisters' School Khartoum, Villa Gilda and St. Francis.

The author identifies some basic problems related to the quality of schools in Sudan:

1. Lack of qualified teachers as a result of expatriation and insufficient wages (salaries).

2. Lack of sufficient school equipment and other necessary items as result of large number of schools and students.
3. The financial budget reserved by the Ministry of Education for educational activities is always insufficient.
4. Lack of proper training courses for teachers and educationalists (Silverio, J., 1995, p. 14)

The main findings of this research are that Comboni Schools “have made chances of enrolment available to all Sudanese children regardless of race, colour or religion” and that they have high quality because of their “educational equipments and disciplinary system” and because of the “high qualifications and training” of their teaching staff (1995, p. 29).

**Study 10:** UNESCO (2018) *Sudan Education Policy Review. Paving the Road to 2030*. Paris.

This report of UNESCO defines some challenges related to Sustainable Development Goal number 4.1 in Sudan for 2030, which is to ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes. To realize this goal in Sudan, the report underlines the following challenges: limited educational resources, shortages of learning spaces and qualified teachers.

**Study 11:** WANI GORE, PAUL (COORD.) (2002) *Final Report on: A Comprehensive Evaluation of the Program of Education in Archdiocese of Khartoum, including the School Feeding Program*. Khartoum: The Catholic Archdiocese of Khartoum.

The evaluation team visited 33 schools in Khartoum and 62 outside Khartoum that were part of the “Save the Saveable Program”. This report aims at evaluating “the performance, access and achievement levels of children” in the pre-schools and basic schools of the Archdiocese of Khartoum (Wani Gore, 2002, p. 12). Therefore it was not an academic research but provides with interesting insights for this study.

The main findings of the evaluation were that the level of dropouts was low before the third grade and increased after the fourth grade onward, without specifying the number. This phenomenon was more frequent among girls as they assumed greater responsibilities in the family at an earlier age than boys.

The evaluation also underlined the poor involvement of the parents in the education of their children and their low expectations concerning their future. In fact, in the “majority of the schools there are no Parents and Teachers Councils. However, communities are very supportive in situations where their schools or centres are threatened by the government” (2002, p. 28).

As for the physical learning environment of “Comboni Schools” is described as “excellent, and in most cases are well above the average government schools” (2002, p.21). Nonetheless, some schools are built with very poor materials, are not fenced and have serious problems of maintenance. This specially happens when the relation between the parish priest and the local communities is also poor.

The report criticizes the practice of providing free school materials to students and the scarce training of the teaching staff. Some of them are just graduates from the Secondary School. Moreover they are overloaded, which surely affected the quality of their teaching. They also worked in other schools to reach a salary sufficient to cover their monthly expenses. Their salary nonetheless was a 58% higher that teachers working for government schools.

The Education Office was continuously organizing training for these teachers in collaboration with the Ministry of Education.

Concerning the quality of the education, the report underlines that the “teaching methods are predominantly teacher-centered” with strong emphasis “on training pupils to pass exams rather than on fostering skills” (2002, p. 24).

The report states that the quality of learning in the different schools of the “Save the Saveable” Program was mainly related to two variables:

- The school environment;
- The management capacity of the schools directors.

These schools also face the challenge of educating non-Arab students and non-Muslim students with a curriculum that aims at Arabization and Islamization of society. Some parents justify in this way the dropout of many children.

Other challenges are the use of corporal punishment to keep discipline and the shortage of school books. In the best schools of the sample, “textbooks were available for only 40 per cent of the students” (2002, p. 24).

As for the management system of the schools, it’s described that every Parish Priest appoints inspectors that in the name of the Parish supervise the work in the schools through daily visits, participation in monthly meetings and periodical revisions of the situation. Nonetheless, the reports states that the “functions of the inspectors are not clearly defined” (2002, p. 29).

The report points that the “statistical records of the schools were generally poor” up to the point that the majority of the directors “did not know the number of pupils who enrolled at the beginning of the year and those who continue to attend schools at the end of the year” (2002, p.30). Moreover, there were no standard forms for the administration of the schools to fill and report.

The report also states that poor attendance is often related to the irregularity of food distribution from the side of the Feeding Program.

At the end, the report concludes that the survival of the Save the Saveable Program will depend on the capacity to involve the local communities and identify new donors and on “its ability to build a strong management capacity” that is “transparent and accountable to the stakeholders” (2002, p.34).

**Study 12:** WORLD BANK (2012) *The Status of the Education Sector in Sudan*. Africa Human Development Series. Washington.

Even if it is not a recent report, this document is still today a point of reference because of the quantity and quality of the data it provides. It was meant as a diagnostic of the education system to build a knowledge base to inform the Government’s preparation of their Education Sector Strategic Plan for 2012-2016. The report presents:

indicative findings on student learning outcomes and on resource availability and management in basic schools in three states; it also presents a brief overview of examination performance in secondary education. The report then addresses teacher-related issues, including recruitment, deployment, utilization, and supervision (World Bank, 2012, pp. 1-2).

The report concludes with the analysis of the education spending, both at national and state levels.

## 2.9 Chapter Conclusions

This chapter identified the EFQM Excellence Model as the most suitable for an assessment of the quality of the Primary Schools of the Archdiocese of Khartoum (Comboni Schools) within the theoretical framework of Total Quality Management.

The first part of the chapter deepened into the EFQM Excellence Model and its adaptation to education. After describing the conceptual principles and the assessment criteria, the chapter studied the different ways of applying the model. The questionnaire looks the most suitable tool for the case of this research as the *Comboni Schools* are not acquainted with the Model and it is considered the “least labour intensive approach” (Davies, 2004, p. 22). Certainly, it will be necessary to adapt the formulation of the criteria and sub-criteria to the context and characteristics of these schools and the Sudanese context.

The chapter also examined the potential problems and some keys that may help to overcome the resistance to change and lead to a successful implementation of the model. Several authors coincide in the importance of the leadership commitment (Davies, 2004), motivation, conviction, feeling the need and a clear vision of the expected benefits (Chin and Pun, 2002; Tan, 1997; Melan, 1998; Thiagaragan et al., 2001; Motwani & Kumar, 1997).

Other authors stress the importance of involving all the staff so that they don't feel the implementation of the Model as an imposed decision from the top (Bolton, 1995; Munro-Faure & Munro-Faure, 1992; Mersha, 1997) and of delivering good communication and information (Vracking, 1995; Poirier & Tokarz, 1996).

Several authors (Davies, 2004; Brunetto, 2001; Bardoel & Sohal, 1999; Chin & Pun, 2002) underline the importance of assessing the organizational culture. This concept was also studied as some cultures are more receptive for change and therefore for the implementation of the Model. Thus, it looks convenient for the selection of the schools of the sample to prepare a questionnaire to assess their organizational culture, their motivation, capacity to change and suitability for the implementation of the Model and their previous ideas about quality (Giertz, 1999; Schein, 2004).

When analysing the characteristics of suitable cultures for the implementation of the EFQM Excellence Model, Raisbeck (2001) mentions openness and co-operation and Moeller & Sonntag (2001) a supportive organizational environment. Instead, when analysing the characteristics of the culture that may hinder the implementation from succeeding, Giertz (1999) mentions that old institutions, since they have stronger cultures, are less flexible to newness. Brunetto (2001) recalls instead the need of rewarding the efforts of the staff to change as condition to succeed in it and Hill & Taylor (1991) the importance of modifying the terminology of the model to the school community and avoiding the use of business language (Geddes, 1993; McCulloch, 1993).

Then, when the time to study the way of implementing the Model with the school team, it will be important to see if it's possible to have it "aligned with activities which are already taking place" (Davies, 2004, p. 86) and to foresee how to manage the anxiety that the relearning process may release.

The second part dealt with the concept of quality. The study of the concept of educational quality revealed that production/function research, that is not so meaningful in developed countries, is instead relevant in developing countries with factors like teacher/pupil ratio, instructional time, frequency homework, teacher training, teacher experience, teachers' salaries and expenditure per pupil (Scheerens, 2004).

Also the availability of text books or a school library and the characteristics of other facilities are a relevant factor for educational quality in developing countries.

The research of the “Efficient Schools” movement identified six characteristics that define quality: “high moral and expectations of the teaching staff; clear definition of objectives; emphases on the acquisition of basic skills; strong leadership; staff control over instructional decisions; sense of order of the educational centre” (Martín-Moreno Cerrillo, 2007, p. 126).

The third part of the chapter dealt with the development of educational evaluation, which is the operation that is supposed to be done on “Comboni Schools”. This literature review underlined the importance of paying special attention to educational processes, including those of the *learning milieu* or the context or the ecosystem according to the EFQM 2020 terminology; of producing results that are useful to the evaluated institution in order to improve; of involving all the stakeholders with their respective expectations without neglecting “that moral good is objective and independent of personal or merely human feelings” (Stufflebeam, 1994, p. 326).

The analysis of the different models for the assessment and management of quality led to the introduction of the Total Quality Management framework as the most updated one and suitable for the purposes of this research as it reflects the values of the “Decision/Accountability-Oriented Studies” (D. Stufflebeam, 2001, p. 42). But when implementing such theoretical framework to education, it looks fundamental to consider the cultural characteristics of the schools object of the study and the relation between quality and values. In the case of this work, the researcher is a Spaniard; the object of evaluation are Catholic schools that try to instil certain values; a meaningful percentage of students and staff are South Sudanese; and the schools are located in a country dominated by Arab culture and Islamic religion that are considered as the main features of Sudanese culture.

The chapter also discussed different models for the implementation of an evaluation based upon the Total Quality Management framework and identified the model of the European Foundation for Quality Management (EFQM) as the most suitable one for this study.

The fourth part of the chapter deepened into the object of this study: “Comboni Schools”. It presented their historical background, educational vision and specific characteristics.

The Catholic Church opened schools in Sudan in the XIX century as alternative to the Quranic schools (*ḥalāwī*) for the small Christian minority, as instrument for the education of local catechists and for the so called “civilization” of the continent. But from the beginning of the twentieth century, the Sudanese Muslim population searched for those schools as they represented a qualified way of achieving an integral and complete education for their children when the offer was so scarce. This mixing of Christian and Muslim students became a laboratory of interreligious tolerance and mutual understanding and esteem that has shaped Sudanese society. This dialogic relation enlarged the target and mission of these schools beyond their initial limited ones.

The British Power took over Sudan in 1898 and they also intended to be “a civilizing power” (Gizouli, 1999, p. 229; quoting a letter by Lord Kitchener of Khartoum and Aspall to the Public Press on November 30, 1898; obtained from Mr. L.C. Wilcher’s Private Archives, Oxford). But while the Catholic mission had a bottom-up approach, the British concept of civilization was meant to follow a top-bottom scheme as was meant to “begin by teaching the sons of leading men, the heads of villages and the heads of districts” (Gizouli, 1999, p. 229).

Nonetheless, in the first decades of the XX century, Catholic schools were mainly associated with the concept of quality education. And one of the distinctive aspects of the Catholic Schools teaching was the introduction of “library science” (Aḥmad, 2002, p. 62) which helped the student to become autonomous in his learning journey.

But from the eighties onward, the stress fell on the dimension of equity as their number multiplied to provide instruction to refugees, displaced and marginalized people of the outskirts of the main cities of Sudan.

“Save the Saveable Program” multiplied the number of “Comboni Schools” since 1986 catering refugee and displaced children. The evaluation of the performance

of this programme revealed that the increase in the ratio of students per class had a negative impact on the results of the National Exams of Grade 8. Their evaluation by Dr. Paul Wani (2002) concluded that the number of schools became too big to serve the objective of quality.

Another decisive factor for quality was school administration. When the Parish was entrusted to the care of a priest who belonged to a Congregation, there was better follow up of the school administration and more material resources. Moreover, Diocesan Priests found it more difficult to identify additional funding for these schools.

The report of Dr. Wani (2002) also states that the quality of learning in the different schools of the “Save the Saveable” Program was mainly related to two variables:

- The school environment,
- The management capacity of the schools directors.

The journey through history has also shown that Catholic schools had also a conflictual relation with groups of power or trends inside different governments. At the beginning of the Condominium, the British authorities were afraid of provoking a reaction from *Mahdist* supporters or fundamentalist groups that could interpret collaboration with the missionaries as part of a strategy for the evangelization of the country. Moreover, during the first decades of their ruling, the colonial power thought of an instruction designed for their mere administrative needs and was reluctant to provide a solid education to the local population.

Later on, some Islamist trends inside the government of the independent Sudan considered Catholic schools as foreign instruments of evangelization and obstacles for the *islamization* of the country.

In spite of all this, Catholic schools developed through history and laid down roots in Sudan because they respected the inner freedom of their students, were appreciated by the local population and were flexible enough to adapt themselves to the changing needs and demands of Sudanese society.

The chapter also dealt with the definition of the mission and goals of “Comboni Schools”. The study presented the historical evolution of the understanding of their mission that passed from an identification of the concept of “evangelization” with the conversion into Christianity to a wider one that includes the building of a society “based on fraternity and solidarity “where people learn how to engage in the pursuit of the common good” (Congregation of Catholic Education, 2014, Introduction).

This part also deepened the values and characteristics of Catholic Schools. These values can be summarized with some key words like: “holistic education, community, relationships, visuals/symbols, Gospel values, Catholic social teaching and service” (Fuller & Johnson, 2014, p. 97).

The holistic character of their educational work is expressed by the integration of academic, sport, religious and cultural activities.

In particular, the main purpose of Comboni Schools is defined as “the fully integrated development of their students, as persons of intellectual attainment and of high moral character, guided by sound principles and strengthened by religious faith” (Puttinato, 1995, n. 3).

Finally, the literature review presented some studies related to the object of this study. As for an important conclusion from the studies of al-Ṭayyeb Yūsif Muḥamad al-Badawī (2015 and 2016), it is worth mentioning the lack of holistic quality management approaches in the evaluation of quality and of empirically sound Total Quality Management models.

## CHAPTER III. RESEARCH DESIGN AND METHODOLOGY

### 3.1 Introduction

This chapter describes the methodology used for this research, *what* was done to collect the data, *how* these ones were collected, *why* these data were collected in this way and how these data should be analysed.

As part of the literature review, references will be made to some academic papers on similar researches to justify the methodology and design applied in this study.

### 3.2 Research Methodology

In order to identify the research design more suitable for this study, it's convenient to define its main purpose. This one can be exploratory, descriptive or explanatory. As for the research strategy, Yin (1994) defines five main ones: experiment, survey, archival analysis, history and case study. This author presents the following table as instrument to select the most appropriate research strategy:

Table III-1. Selection of Research Strategy.

Strategy	Form of Research Questions	Requires control over behavioural events	Focuses on contemporary events
Experiment	How, Why	Yes	Yes
Survey	Who, What, Where, How many, How much	No	Yes
Archival Analysis	Who, What, Where, How many, How much	No	Yes/No
History	How, Why	No	No
Case Study	How, Why	No	Yes

Source: Yin, 1994, p. 6.

We bring back now the aim, objectives and research questions of this thesis and we analyse them in the light of this table.

### 3.2.1 Research Questions and Objectives

The purpose of this study is to build a guidance framework for Total Quality Management (TQM) inspired by the European Foundation Quality Management (EFQM) Excellence Model adapted to the ecosystem of the Comboni Primary Schools located in Khartoum State in order to assess their quality.

The specific objectives of this study are:

- to **analyse** the relation between the particular objectives of these schools and the concept of educational quality;
- to **assess** the viability of the implementation of a tool based upon the EFQM Model in Primary schools of Sudan;
- to help every evaluated centre to know itself better;
- To help every educational centre to produce its improvement plan and enter into a dynamics of continuous improvement.

- To **identify** the main variables that explain the differences of quality among the schools considered in the research.

Therefore, the main research question to be asked is: **How can the EFQM Excellence Model be effectively implemented in Comboni Primary schools located in Khartoum State?**

The key word in this question is “effectively”. The research will explore the possibility of implementing the EFQM model, but this makes sense if this implementation does help improve the quality of those schools.

The secondary research questions are:

- 1. What are the particular characteristics of quality for a Comboni Primary School?**
- 2. Can a self-assessment tool based upon the EFQM Excellence Model be applied to Primary Schools in Sudan?**
- 3. How can the EFQM Excellence Model help the school to know itself better?**
- 4. How can the EFQM Excellence Model help the school to produce its own Improvement Plan?**
- 5. Why is there a difference in the quality of Comboni Primary schools?**

If we analyse these questions, we will realize that the research is about examining, identifying, assessing, exploring, analysing, discovering and explaining. Most questions point at the research being both exploratory (i.e. *identifying, exploring and discovering*) and also explanatory (i.e. *examining, assessing, analysing and explaining*).

In the light of these objectives and questions, the research could be considered exploratory in relation to the object of the application of the EFQM Excellence Model. In this sense, the research lays the ground for future studies on Comboni Schools in Khartoum State and on the application of the EFQM Excellence Model to Basic Schools in Sudan. On the other hand, it could also be considered descriptive as it describes the process of application of an assessment tool based upon the EFQM Excellence Model. But the first specific objective could be deemed more in tune with an explanatory purpose.

If we compare the research questions with those of the table III-1, we will realize that the most appropriate strategies would be experiment, history and case study. In order to decide which one of these three is the most appropriate, we will examine the second factor, which is required control over behavioural events.

### 3.2.2 Research Strategy

The investigator will not have control over behavioural events and therefore the experimental strategy looks out of place. “Experiments are done when an investigator can manipulate behaviour directly, precisely, and systematically” (Yin, 1994, p. 8). Moreover, an experiment “deliberately divorces a phenomenon from its context, so that attention can be focused on only a few variables” (Yin, 2003, p. 13). In the study of the implementation of TQM, instead, the consideration of the context is very important. This fact limits the choice to two strategies: the historical one and the case study.

The focus of this research is not on historical events of the past. The history of these schools was examined in chapter II just with the aim of identifying their characteristics and specific objectives. This facilitates the contextualization of the assessment model and the identification of indicators of quality. But the focus of this research is on ongoing events.

We just pointed out that this research will not have full control on behavioural events and the possibility of manipulating relevant behaviours, but it will have the possibility of including direct observation, systematic interviewing and questionnaires. Therefore, the most appropriate strategy for this research is the case study. Yin defines a case study as follows:

A case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident.

In other words, you would use the case study method because you deliberately wanted to cover contextual conditions - believing that they might be highly pertinent to your phenomenon of study (1994, p.13).

A piece of criticism against case studies “is that they provide little basis for scientific generalization”, but the answer to this is “that case studies are generalizable to theoretical propositions and not to populations or universe” (Yin, 2003, p. 10). Thus, the case study looks the most appropriate strategy for this research.

Among the applications of the case studies quoted by Yin (2002, p. 15), there are two that have to do with this research: the first one is “to describe an intervention and the real-life context in which it occurred” and the second one is the “meta-evaluation”. As a matter of fact, this research will apply a model inspired in the one of the EFQM (intervention) and will reflect on the evaluation process done by the school Quality Team (meta-evaluation).

As stated by Yin, the case study relies on multiple sources of evidence with data “needing to converge in a triangulating fashion” (2002, p. 13). In this sense, Parlett & Hamilton mention that “no method (with its own built-in limitations) is used exclusively or in isolation; different techniques are combined to throw light on a common problem” (1972, p. 18).

### **3.3 Research Design**

We just saw that this study is mainly exploratory but it is also explanatory. It uses the case study as research strategy and combines both quantitative and qualitative methods to throw light on the above mentioned schools. These methods include descriptive statistics, parametric and non-parametric tests, correlations between dependent and independent variables (quantitative methods) and participant observation, interviews, participant action research and questionnaires (qualitative methods) along with the collection of historic and documental sources.

In fact, the research will also analyse historical events of the past and their relation to the present situation.

### 3.3.1 Components of the Research Design

A research design is the “logical sequence that connects the empirical data to a study’s initial research questions and, ultimately, to its conclusions” (Yin, 2002, p. 19).

The research design for this study is presented as a flow diagram:

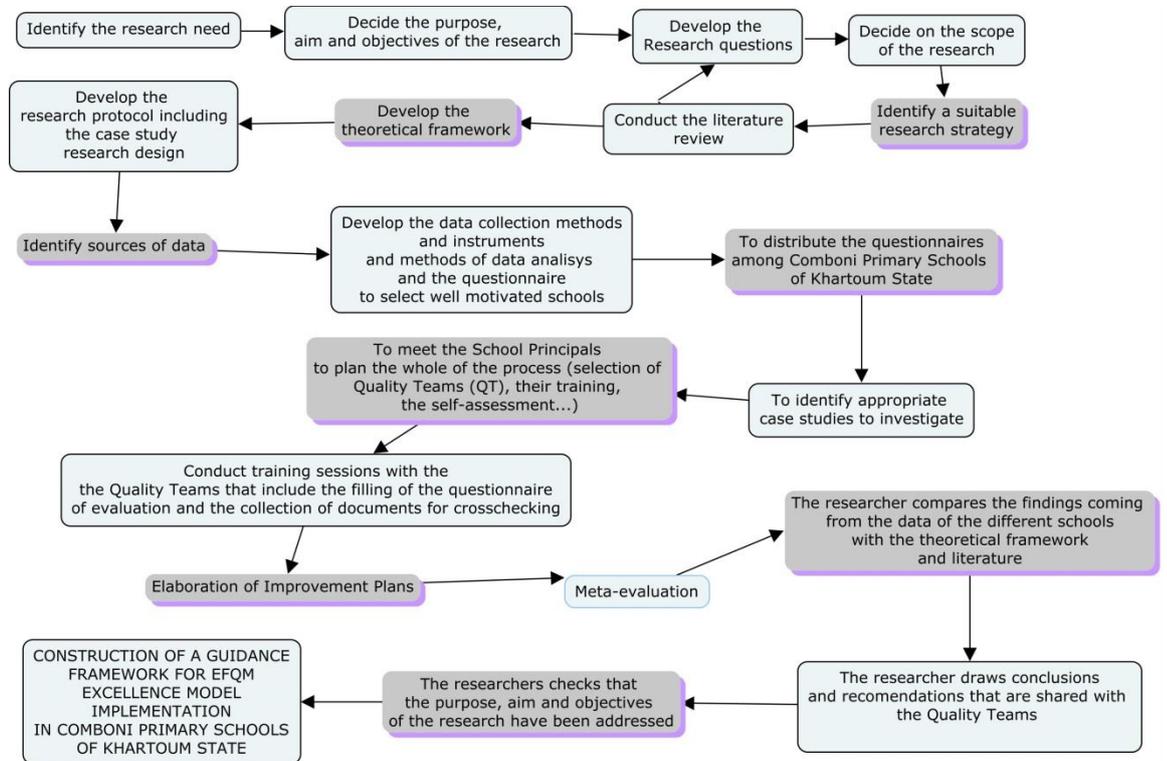


Figure III-1. Research Design for this Study.

Yin (2003) identifies five important components of case study research design that this thesis developed as follows:

### 1. Research questions.

They were presented in Chapter 1 and again on this chapter before selecting the research strategy.

### 2. Study propositions or purpose

In our case, the study propositions derived from the literature review and the goals of the research are the following ones:

- a) A contextualized version of the EFQM Excellence Model can help assess the quality of the Comboni Primary Schools in Khartoum State and elaborate their Improvement Plans.
- b) The questionnaire is the most suitable tool to introduce a contextualized version of the EFQM Excellence Model in the Comboni Primary Schools.
- c) For a successful implementation of the EFQM Model, the following aspects should be considered:
  - Previous assessment of the suitability of the organizational culture of the school and its values.
  - Proper planning on the way of implementing the Model.
  - Commitment of the school leadership
  - Motivation, conviction, feeling the need and a clear vision of expected benefits.
  - Involvement and training of all the staff.
  - Good communication and information.
  - Adaptation of the terminology of the model to the school community avoiding business language.
  - Implementation of the model aligned with already existing activities.

### 3. Units of analysis

In this study the units of analysis is the implementation processes of the EFQM Excellence Model and the schools in which the model is applied.

As for the time limits of this study, the beginning is the moment of the distribution of the questionnaire to select the schools of the sample and the end the collection of the Improvement Plans and Meta-evaluation questionnaire filled by the quality teams of the three selected schools.

#### 4. The logic linking the data to the propositions

This study will deal with this logic later in the section on “Instruments for Data Collection” that will link them with the theoretical framework developed in chapter II.

#### 5. The criteria for interpreting the findings

Some criteria to assess the viability of the effective implementation of the EFQM Model will be the quality and coherence of the self-assessment, the correspondence between the objective data included in the questionnaire and the self-assessment questions filled in by the Quality Teams, the level of involvement of the school staff, etc.

These criteria will also be later studied on the basis of the theoretical framework since theory in doing case studies “becomes the main vehicle for generalizing the results” (Yin, 2003, p. 33).

### **3.3.2 Type of Case Study Design and Selection of Cases**

Yin defines four types of design for the case study strategy: “(a) single-case (holistic designs), (b) single-case (embedded designs), (c) multiple-case (holistic) designs, and (d) multiple-case (embedded) designs” (2002, p. 38).

According to Yin, “each case must be carefully selected so that it either (a) predicts similar results (a literal replication) or (b) produces contrasting results but for

predictable reasons (a theoretical replication)” (2002, p. 46). In this distinction the key point will be the confrontation with the theoretical framework which stated:

the conditions under which a particular phenomenon is likely to be found (a literal replication) as well as the conditions when it is not likely to be found (a theoretical replication) (2002, p. 46).

The replication approach to multiple-case studies as this one can be illustrated as follows:

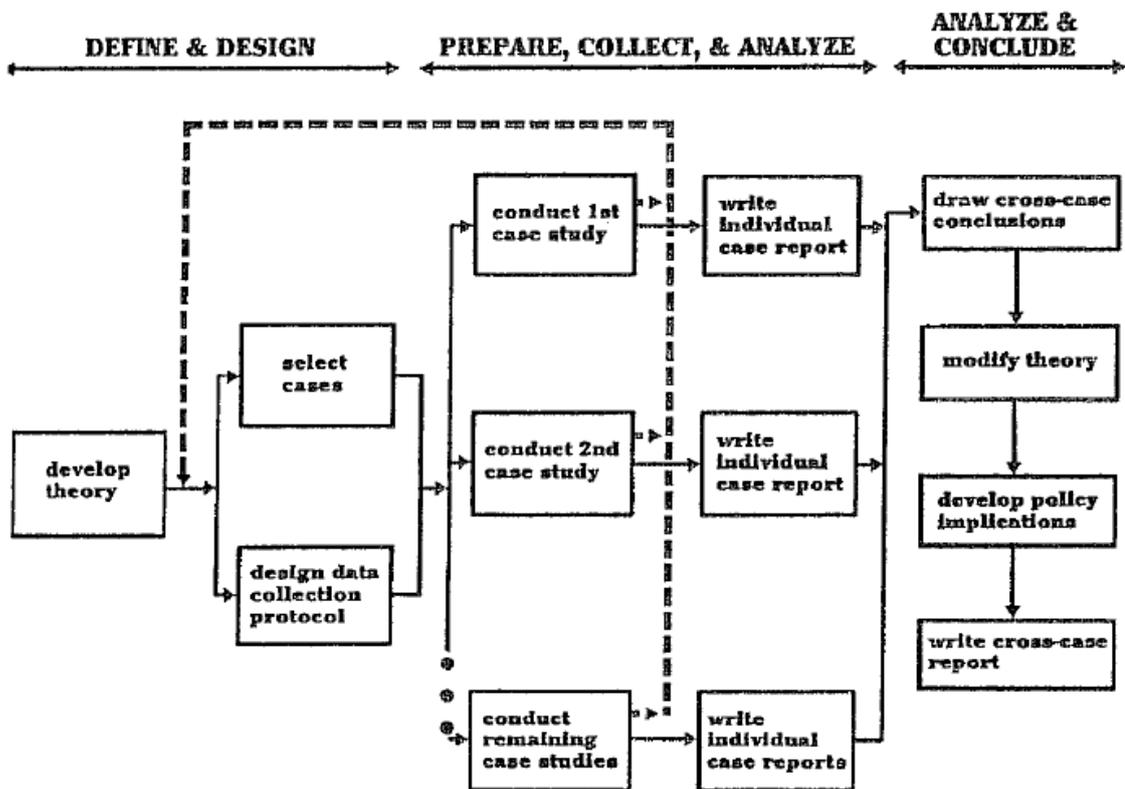


Figure III-2. Case Study Strategy for Multiple Cases (Yin, 2003, p. 50).

After conducting every case study and writing the respective report:

for each individual case, the report should indicate how and why a particular proposition was demonstrated (or not demonstrated). Across cases, the report should indicate the extent of the replication logic and why certain cases were predicted to have certain results, whereas other cases –if any- were predicted to have contrasting results (Yin, 2002, p. 50).

### **3.4 Population and Sample**

Comboni Schools located at Khartoum State on September 29, 2017 were 38 according to the Education Office of Khartoum Archdiocese. Three of them are Secondary Schools that therefore remain outside the scope of this study. Two are primary evening schools that are also discarded. Therefore the eligible schools for the case study are 33.

Moreover it is necessary to recall that 6 schools are owned and run by religious congregations, 6 schools are owned by the Archdiocese of Khartoum and run by religious congregations and 26 are Community Parish Schools.

The Diocesan Office of Education organized a workshop for the schools administrations of those schools. Twenty one headmasters with their administration teams took part in it, which is an indicator of their greater interest for their ongoing education and for the improvement of their schools, but just fourteen filled the questionnaire provided by the researcher.

The researcher selected among them one school owned and run by a religious congregation, a Community Parish School run by a religious congregation and a Community Parish School run by a Diocesan Priest.

This study considers every school as single unit of analysis. Thus the type of study design for this research will be the comparative multiple-case (holistic) design.

Certainly the greater the number of cases, the bigger the external validity is, but Cresswell (1998) instead warns that the more cases an individual studies, the greater the lack of depth in any single case will be. This is why he suggests choosing no more than four cases. Being so, it is very important to select meaningful cases. In fact, R.E. Stake,

(1994) points out that this is the most important operation when using this kind of research strategy. This is why Davies states that “a balance needs to be achieved between the certainty needed for generalisation and the depth of investigation into each case” (2004, p. 13).

In our case, all the schools should be well motivated to face the process of implementation of the model, which would be guaranteed through a previous questionnaire. Then, the cases should show some similar results (literal replication) in some aspects and some contrasting results justified by the difference, for example, in the administration (religious congregation or diocesan priest) of the school (theoretical replication) as predicted in the theoretical framework. Therefore, the study will mix literal and theoretical replications, “which, if all the cases turned out to as predicted, would provide compelling support for the initial set of propositions” (Yin, 1994; quoted by Davies, 2002, p. 112).

### **3.5 Methodology for Data Collection**

This section designs the protocol for the data collection in order to ensure validity and reliability.

#### **3.5.1 Protocol for the Collection of Data**

The first step will be to present the research project to the Director of the Education Office of the Archdiocese of Khartoum and listen to his feedback on this protocol. Also the questionnaires and different materials used for the collection of data will be shared with him and some experts and then adjusted if needed.

The first questionnaire will collect data in view of selecting the three schools of the sample for the case studies. This questionnaire aims at describing the culture of the

schools and assessing their openness and motivation to enter into a dynamics of continuous improvement.

The questionnaire will be presented and filled in the context of the above-mentioned seminar with the headmasters of all the schools of the Archdiocese located within the limits of Khartoum State. Those who wish will also had the possibility of sending their questionnaire to the Education Office via e-mail or letter.

After analysing the data, three schools will be selected as explained before. Then the Principals and headmasters of the three selected schools will be informed and invited to confirm their availability to join the project. Finally, the following protocol will be followed:

#### INTRODUCTORY STAGE

1. Written message to the Principals of the three selected schools and the Director of the Education Office of the Archdiocese of Khartoum

The researcher will explain with detail the process that the schools are invited to start and will verify that every school is ready and willing to carry it out. If the Principal, after deepening the implications of the process, is not ready to assume the commitment, the researcher will move to another school in the list of preferences within the same category and meet the headmaster personally.

The researcher will prepare a calendar with the Principals of the three selected schools that includes: a) the creation of the “Quality Teams” of every school with five members per team. One of them, not necessarily the headmaster, will be the Project Manager; b) their training and work in four workshops with the researcher including the filling in of the Self-Assessment questionnaire; c) the preparation of the Improvement Plan and Meta-evaluation.

2. Sensitization and information to the school staff

The Principals or/and the headmasters of the school will meet their staff to present the process in which they have decided to introduce the school. Then, after listening to the staff feedback, the Principal or/and the headmaster will appoint the five members of the “Quality Team” and the Project Manager among the members of the team. According to Conti (1997), top management should be the members of the steering committee. Burke (1993) instead, argues for the importance of selecting a good project manager.

### 3. Training of the “Quality Teams”

The teams will be trained in the Model and the Self-Assessment process in four workshops. The first session consists of a general description of the model, the principles underpinning it, some practical exercises and a presentation of the first criterion (leadership), with the indications on the way to fill the questionnaire. In the following sessions, two or three criteria per session will be introduced until completing the remaining eight.

## SELF-ASSESSMENT STAGE

4. Realization of the self-assessment by every member of the “Quality Team” with the questionnaire provided by the researcher (appendix 5) in an individual way. Every member of the team transfers his data to the Self-assessment Matrix (appendix 6). The Project Manager collects the copies of the documents requested and calculates the average of the marks of the school in another copy of the Self-Assessment Matrix (appendix 6).
5. The team members share their results and classify the areas that need improvement according to their impact on the key results, the policies and strategies of the school (appendix 7). They prepare a first draft of the Improvement Plan.

6. After completing the self-assessment of every criterion, the members of the team fill in the evaluation of the self-assessment they have completed (meta-evaluation, appendix 8).
7. The researcher interviews the Quality Team Directors (appendix 9) and the Principals. In this latter case, the aim is to collect remaining data and triangulate information.
8. The researcher analyses the results and presents them to the Quality Teams in a final workshop with some recommendations about the design of their school Improvement Plan.
9. The researcher receives a final feed-back from the Quality Teams on the Model.

### 3.5.2 Principles of Evidence and Data Collection

The data sources of this research are the following ones:

Table III-2. Sources of Evidence.

Source of evidence	Items
Documents	<ul style="list-style-type: none"> <li>- Questionnaire for the selection of the schools.</li> <li>- Self-assessment questionnaire carried out by every school.</li> <li>- School strategic planning.</li> <li>- Statement of mission, vision and values.</li> <li>- School improvement plan.</li> <li>- Statistics of students who did not receive the Sacraments of Initiation.</li> <li>- Document that describes the procedure for the recruitment of new staff.</li> <li>- School budget.</li> <li>- Inventory of the furniture and equipment.</li> <li>- Records of the staff attendance.</li> <li>- Other administrative reports: proposals, progress reports, and other internal documents.</li> <li>- Records of teachers' attendance.</li> <li>- GPSC Marks from 2016 to 2019 for School 1</li> </ul>
Archival	<ul style="list-style-type: none"> <li>- Previously executed school self-assessments.</li> <li>- Previously executed questionnaires to assess satisfaction of</li> </ul>

records	students, parents, staff members... - Statistics of success in the Basic School Certificate. - School organizational chart.
Interviews	- Interviews to Quality Team Directors. - Interviews to the Principals of the selected schools at the end of the process or Parish Priest in charge of the school. - Interviews to Parish Schools Supervisors.
Participant observation	- The author participated in the process as trainer who introduced the Model to the Quality Team.

### 3.5.3 Validity and Reliability

An instrument is valid when it measures what it states and not a different aspect. But no instrument is absolutely valid. There is need of defining the grade and nature of validity (Pérez Juste, García Llamas, Gil Pascual, & Galán González, 2009, p. 162). As for the case study research, Yin states that the investigator “must maximize four aspects of the quality of any design: (a) construct validity, (b) internal validity (for explanatory or causal studies only), (c) external validity and reliability” (2003, p. 18). And in order to maximize these aspects, Yin proposes the following case study tactics and defines the phases of research in which those tactics occur:

Table III-3. Case Study Tactics for Four Design Tests.

Tests	Case Study Tactic	Phase of Research in which tactic occurs
Construct Validity	Use multiple resources of evidence	Data collection
	Establish chain of evidence	Data collection
	Have key informants review draft case study report	Composition
Internal Validity	Do pattern matching	Data Analysis
	Do explanation-building	Data Analysis
	Do time-series analysis	Data Analysis
External Validity	Use replication logic in multiple cases	Research design
Reliability	Use case study protocol	Data collection
	Develop case study data base	Data collection

Source: Cosmos, quoted by Yin, 2003, p. 32

*Construct validity* analyses the connection between the theory on which the test is based and the items that constitute it. As for study cases Yin, following Kidder & Judd (1986, p. 26-29), defines it as “establishing correct operational measures for the concepts being studied” (Yin, 2003, p. 33). And for such purpose, he proposes the tactics presented in the previous table: a) Use of multiple resources of evidence; b) To establish the chain of evidence; c) To have key informants review draft case study report.

Thus, the reason to use different sources of evidence is to be able to triangulate the data. In this way the problem of construct validity is addressed because the multiple sources of evidence provide multiple measurements of the same phenomenon (Yin, 1994).

The relation between the objectives of this research, the research questions and the instruments or methods for the collection of the respective data to respond the respective question is presented in this table:

Table III-4. Relation between Objectives, Questions and Instruments of this Research.

<b>Objective</b>	<b>Research question</b>	<b>Instruments</b>
	<b>General Objective</b>	
To construct a guidance framework for TQM inspired by the EFQM Excellence Model adapted to the context of the Comboni Primary Schools located in Khartoum State in order to assess their quality	How can the EFQM Excellence Model be effectively implemented in Comboni Primary schools located in Khartoum State?	Self-Assessment Questionnaire (appendix 5) Meta-evaluation (appendix 8) Interview with Quality Team Directors (appendix 9) Production of improvement plans
	<b>Specific objectives</b>	
To <b>analyse</b> the relation between the particular objectives of these schools and the concept of educational quality;	What are the particular characteristics of quality for a Comboni Primary School?	Self-Assessment Questionnaire (Appendix 5), in particular sub-criterion 2e Revision on literature
To <b>assess</b> the viability of the implementation of a tool based upon the EFQM Model in	Can a self-assessment tool based upon EFQM Model applied to	Production of improvement plans Meta-evaluation (appendix 8)

Primary schools of Sudan;	Primary schools in Sudan?	Interview with Quality Team Director (appendix 9)
To help every evaluated centre to know itself better	How can the EFQM Excellence Model help the school to know itself better?	Comparison between results of the questionnaire for the selection of schools (Appendix 4) and of the Self-Assessment Questionnaire (Appendix 5) Interview with Quality Team Directors (Appendix 9)
To help every educational centre to produce its improvement plan and enter into a dynamics of continuous growth	How can the EFQM Excellence Model help the school to produce an Improvement Plan?	Comparison between results of the questionnaire for the selection of schools (Appendix 4) and of the Self-Assessment Questionnaire (Appendix 5) Selection of Improvement Areas (appendix 7) Interview with Quality Team Director (Appendix 9) Improvement plans
To <b>identify</b> the main variables that explain the differences of quality among the schools considered in the research	Which variables explain the different quality between the schools of the sample?	Questionnaire for the selection of the schools (Appendix 4) Self-Assessment Questionnaire (Appendix 5) Statistic correlations GPSC Marks from 2016 to 2019

In explanatory or causal studies, and not for descriptive or exploratory studies, the *internal validity* can be defined as “establishing a causal relationship, whereby certain conditions are shown to lead to other conditions as distinguished from spurious relationships” (Yin, 2003, p. 33). The proposed tactics to justify the *internal validity* in this case are: pattern matching, explanation-building and time-series analysis.

The *external validity* analyses up to which extent the findings can be generalized. The proposed tactic is the use of replication logic in multiple cases.

Finally, the reliability consists on “demonstrating that the operations of a study- such as the data collection procedures can be repeated with the same results” (Yin, 2003, p. 33).

## 3.6 Data Collection Instruments

This section presents the different instruments for the data collection.

### 3.6.1 Questionnaire for the Selection of Schools

The questionnaire for the selection of schools (appendix 4) is articulated in three sections. The first one collects some demographic data of the schools necessary to classify them according to their size, history and kind of ownership and administration. The data of the three selected schools will be later confronted with those the quality teams will provide during the self-assessment process.

The second section assesses the motivation of the school administration to enter into a self-assessment process so engaging like the one proposed in this research. The answers of the three selected schools will be later put in relation with some research questions and compared with the results after the self-assessment based upon the EFQM Model.

The third part assesses the organizational culture of the school. The following table presents the relation between some research questions and items of parts II and III of the questionnaire:

Table III-5. Relation between Research Questions and Parts II and III Questions

Research question	Questionnaire questions
How can the EFQM Excellence Model help the school to know itself better?	III. 1,3,4,5
How can the EFQM Excellence Model help the school to produce its Improvement Plan?	II. 4, 5 III. 2

Moreover, part III questions can be put into relation with the levels of the school organization culture according to the model of Schein and Otto:

Table III-6. Relation between Schein's and Otto's Models of Culture and the Questions of the Questionnaire for the Selection of Schools.

Aspect of culture	Questionnaire questions from Part III
Level 1A – artefacts	7
Level 1B – patterns of behaviour	5,8,9
Level 2 – patterns and beliefs	4, 6
Level 3 – basic underlying assumptions	1,2,3

### 3.6.2 Questionnaire for the Self-Assessment Based upon the EFQM Excellence Model

The following table presents the weight given to every sub-criterion and criterion of the Self-Assessment Questionnaire based upon the 2013 EFQM Excellence Model and the relation among sub-criteria.

Table III-7. Scoring Matrix and relation among Sub-criteria.

Criterion	Sub-criterion	Max. Mark	Weight within the criterion	Related to sub-criteria...
1 LEADERSHIP	a. Development of mission and vision	20	24%	2e, 2d, 2e, 9c
	b. Continuous improvement of management systems	22	28%	2d, 5b
	c. Leadership and external relations	20	24%	4a, 8b
	d. Leadership and motivation	20	24%	

Maximum Total = 82.

10% of the total Score. Weighted Final Score (over 1,000) = 100

Criterion	Sub-criterion	Max.	Weight	Related to
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		Mark	within the criterion	sub-criteria...
<b>2 PLANNING AND STRATEGY</b>	a. Stakeholder input into strategic planning	12	9,37%	
	b. Performance indicator input to strategic planning	15	11,72%	8a
	c. Designing, communicating and validating the strategic plan	17	13,28%	
	d. Implementation of policies and strategy and updating the strategic plan	18	14,06%	1a, 1b
	e. Catholic identity of the school	64	51,56%	1a, 9c

Maximum Total = 128.

10% of the total Score. Weighted Final Score (over 1,000)= 100

<b>3 PEOPLE</b>	a. Human resources management	17	25%	
	b. Competence development of the staff	27	39,70%	
	c. Staff commitment and involvement	12	17,65%	7a, 7b
	d. Internal communications	12	17,65%	

Maximum Total = 68.

10% of the total Score. Weighted Final Score (over 1,000)= 100

<b>4 PARTNERSHIPS AND RESOURCES</b>	a. External partnership management	12	13,19%	8b, 1c
	b. Economic and financial management	20	21,98%	5d, 9a
	c. Material resources, premises and equipment management	22	24,18%	
	d. Technology management	20	21,98%	
	e. Information and knowledge management	17	18,68%	

Maximum Total = 91.

10% of the total Score. Weighted Final Score (over 1,000)= 100

Criterion	Sub-criterion	Max. Mark	Weight within the criterion	Related to sub-criteria...
<b>5 PROCESSES, PRODUCTS</b>	a. Well-designed processes	15	23,08%	9b
	b. The management of processes lead to continuous improvement	16	24,62%	1b

<b>AND SERVICES</b>	c. Processes are responsive according to students and parents needs and expectations	21	32,31%	
	d. Administrative and financial management	12	18,46%	4b, 9a

Maximum Total = 64.

10% of the total Score. Weighted Final Score (over 1,000)= 100

<b>6 RESULTS ON STUDENTS AND PARENTS (CUSTOMERS)</b>	Students and parents satisfaction	12	63,16%	
	Indicators of performance.	7	36,84%	

Maximum Total = 19.

15% of the total Score. Weighted Final Score (over 1,000)= 150

<b>7 RESULTS ON PERSONNEL</b>	Staff satisfaction	16	44,44%	3c
	Quality of staff	20	55,56%	3c

Maximum Total = 36.

11% of the total Score. Weighted Final Score (over 1,000)= 110

<b>8 SOCIETY RESULTS</b>	a. Image	12	33,33%	2b
	b. Social responsibility	12	33,33%	1b, 4a
	c. Sustainability	12	33,33%	

Maximum Total = 36.

10% of the total Score. Weighted Final Score (over 1,000)= 100

<b>9 KEY RESULTS</b>	a. Financial	25	33,33%	4b, 5d
	b. Academic	25	33,33%	5a
	c. Strategic goals	25	33,33%	1a, 2e

Maximum Total = 75.

14% of the total Score. Weighted Final Score (over 1,000)= 140

The questionnaire includes the presentation of some documents like the school budget, previous improvement plans or self-assessments, the interview forms for the selection of new teachers or inventories of material goods.

### 3.6.3 Interviews Design

The structured interview with Quality Teams directors (appendix 9) was developed from the theoretical framework (chapter II) and the theoretical propositions (beginning of this chapter) in order to have another source of data to answer some of the research questions and to have a feed-back on the process (Part I of the interview) and complementary data on the criteria of quality (Part II of the interview). The interview is therefore divided into two parts.

Question 4 of part I includes a seven point Likert scale as recommended by Hussey & Hussey (1997) in order to be able to differentiate adequately between the views of the interviewees. "Short scales are too crude to provide differentiation whilst scales that are too long give a false sense of precision" (Davies, 2012, p. 122).

The researcher will take detailed notes during each interview.

The researcher will also interview the Principals of the school after the end of the workshops to triangulate or complete some data offered by the Quality Teams. In these cases, the researcher prepares a guide with the items or questions after the first analysis of data coming from the workshops. The researcher conducts the interview and writes the specific information.

The transcripts of all these interviews are not word-for-word ones and are organized in numbered paragraphs to facilitate the citation of information.

## 3.7 Data Analysis

"Data analysis consists of examining, categorizing, tabulating, or otherwise recombining the evidence to address the initial propositions of a study" (Yin, 1994, p.102). In this line, the following table relates the different instruments for the collection of data with the research questions:

Table III-8. Research Questions in Relation to Data Collection Instruments.

Research questions	Data Collection Instrument
How can the EFQM Excellence Model be effectively implemented in Comboni Primary schools located at Khartoum State?	Meta-evaluation of the Self-Assessment Process Interviews to Quality Teams Directors Improvement Plans at the end of the process
Can a self-assessment tool based upon the EFQM Model be applied to Primary Schools in Sudan?	Questionnaire for the Self-Assessment based upon the EFQM Excellence Model Improvement plans
What are the particular characteristics of quality for a Comboni Primary School and how can they be assessed?	Review of literature Questionnaire for the Self-Assessment based upon the EFQM Excellence Model
How can the EFQM Excellence Model help the school to know itself better?	Questionnaire for the Selection of the Schools (Questions III. 1, 3, 4, 5) Questionnaire for the Self-Assessment based upon the EFQM Excellence Model and Self-Assessment Matrix
How can the EFQM Excellence Model help the school to produce its Improvement Plan?	Questionnaire for the Selection of the Schools (questions II. 4, 5, 6; III. 2) Selection of Improvement Areas Improvement plans
Why is there a difference in the quality of the Comboni Primary schools?	Questionnaire for the Self-Assessment based upon the EFQM Excellence Model

### 3.7.1 Analysis of Data Coming from the Questionnaire for the Selection of the Schools

The researcher will identify from the different answers to the questionnaire the schools that show a strong motivation and certain managerial skills to implement the proposed Excellence Model.

### 3.7.2 Data and Statistical Analysis of the Questionnaire of Self-Assessment Based upon the EFQM Excellence Model.

Davies quotes the statement of Trochim (Yin, 1994) according to which “pattern-matching compares an empirically based pattern with a predicted one or with several alternative predictions. If the patterns coincide, the results can help a case study strengthen its internal validity” (Davies, 2004, p. 129).

Krasachol & Tannock (1999) used their theoretical framework as the basis for analysis in their study of TQM implementation in Thailand. Similarly, this study will compare a predicted pattern (the theoretical framework) derived from the literature review with the propositions presented in this chapter (section 3.3.1).

A special type of pattern-matching is the explanation-building where the goal is to analyse the case study data by building an explanation about the case (Yin, 1994). This type can be useful to explain the differences in quality between the schools of the sample and can contribute to theory building.

As for the way of getting a final result for the self-assessment with the questionnaire, it’s necessary to consider that in the EFQM Excellence Model every criterion has a different weight. Here we compare the one adapted by the Ministry of Education, Culture and Sports of Spain (MECSS) with the one adopted in this research:

Table III-9. Weight of the Criteria in the Model

	Criterion	MECSS	In this research
Enablers	Leadership	12%	10%
	Policies and strategies	10%	10%
	Persons	7%	10%
	Partnerships and resources	7%	10%
	Processes	14%	10%
	<b>Subtotal 1</b>	<b>50%</b>	<b>50%</b>
Results	Customers Results	15%	15%
	Staff Results	11%	11%
	Society Results	10%	10%
	Key results	14%	14%
	<b>Subtotal 2</b>	<b>50%</b>	<b>50%</b>

The researcher made some modifications to the weights of some enablers. Greater weight was given to the persons and to the material resources since the literature review has shown that these factors have a very important impact on the quality of primary schools in the so called developing countries.

The questionnaires distributed among the members of the quality teams were collected by the researcher and the data were processed with the software SPSS (Statistical Package for Social Sciences) version 21 for Windows.

For every question, the arithmetic mean of the different answers of the members of the quality teams was calculated and weighted according to the values indicated in the self-assessment matrix (appendix 6). These averages were calculated on the number of answers and not on the number of team members.

As for the questions where the possible answers were “yes” or “not”, a different measure of central tendency was used, the mode. The reason is that when for instance it is asked if the school has a certain document and three or four members of the team answer “yes” and just one answers “no”, it looks closer to reality think that the school really has that document. Just in the case of having a tie (two “yes” and two “no”), the arithmetic mean is the value that is transferred to the self-assessment matrix.

The questionnaire includes self-perception questions but also the collection of some quantitative data (for instance the percentage of teachers with a university degree, percentage of teachers who hold a university degree related to the subject they teach, the average salary) that can be compared or correlated with the final score of the questionnaire after the self-assessment or with the results of the GPSC.

Nonetheless, the reduced number of schools does not allow an inferential statistical analysis.

In some cases, the answers of the team members could be compared with an external source and were different. In these cases, the researcher elaborated a second set of results using the assessment matrix (appendix 6) with the corrected information. For instance, in some cases the team members thought that a certain document existed but

instead there was no or the other way around. These documents are listed in appendix 10.

Therefore, at the end the researchers gets two scores for every school, one merely based upon the work of the quality teams and a second one corrected with some additional information.

The researcher will have to analyse if the Student's-t test or the Wilcoxon Signed Ranks Test can be applied to verify if the comparison with external evidence produces a statistically meaningful difference in the criteria scores.

In spite of the small size of the sample, the author also calculates the correlation between different independent variables (like average salary, preservice training of the teaching staff, inservice training) and the dependent variables “% of pass in the GPSC” and “EFQM Result with data” to identify the most meaningful variables.

### **3.7.3 Nationality and Stream as Strange Variables?**

Considering the great numbers of South Sudanese students in these schools, after the workshops with the quality teams, the researcher asked school 1 a copy of the the marks of the students in the GPSC exams of the last three years to verify if the variable nationality is statistically meaningful to predict academic success. This is why this analysis will be included under the subcriterion 9b, key academic results.

But since school 1 gives students the possibility of choosing between an Arabic or an English stream, this variable was also analysed with SPSS.

In view of further analysis, we apply the Kolmogorov-Smirnov Test to verify the normality of the distributions of frequencies according to nationality and the Levene's test to verify the homogeneity of variance. The results will also be verified with the respective histograms and normal Q-Q plots.

After that, to assess if the different mean between the results of the Sudanese and the South Sudanese students is statistically meaningful, we will choose the most suitable

test, either parametric (Student's t-test for two independent samples) or non parametric (Mann-Whitney U Test) according to the results of the previous analysis.

It will be done similarly for the variable "stream".

Finally, the analysis will try to answer the question if the stream or the nationality is a more determining factor on the dependent variables. The study will compare the means for the four groups resulting of matching the two independent variables: stream (English or Arabic) and nationality (Sudanese or South Sudanese).

The author will also see if there are conditions to apply the ANOVA test with two factors (nationality and stream) where the GPSC Result is the dependent variable.

#### **3.7.4 Data Analysis of the Interviews**

As said before, the research includes some non-structured interviews to headmasters, parish school supervisors, parish priests and principals (listed at appendix 11) carried out to complete missed data or to triangulate previous data.

The author also prepared the questions for a structured interview to the quality team director. The relation among the research questions and the questions of the interview can be defined as follows:

Table III-10. Relation between Research Objectives and Interviews to Quality Team Director

Objective	Research question	Interview questions
<b>General Objectives</b>		
To construct a guidance framework for TQM inspired in the EFQM Excellence Model adapted to the context of the Comboni Primary Schools located in Khartoum State in order to assess their quality	How can the EFQM Excellence Model be effectively implemented in Comboni Primary schools located at Khartoum State?	13 to 22
<b>Specific objectives</b>		
to <b>assess</b> the viability of the implementation of a tool based upon the EFQM Model in Primary schools of Sudan;		2,3,4,5,6,7,8,9,10
to help every evaluated school to know itself better	How can the EFQM Excellence Model help the school to know itself better?	7
To help every educational school to produce its improvement plan and enter into a dynamism of continuous growth	How can the EFQM Excellence Model help the school to produce its Improvement Plan?	11

## CHAPTER IV. DATA PRESENTATION AND ANALYSIS

### 4.1 Introduction

This chapter contains three sections. The first one presents the results of the questionnaires distributed among fourteen schools that led to the selection of the three that were the object of the application of the EFQM Excellence Model.

The second one presents the results collected with the tool for self-assessment and the analysis of those data for the three selected schools.

Finally, the third section refers to their respective improvement plan.

The appropriate data analysis strategies and methods were described and justified in the previous chapter. The general analytic strategy involves comparing the case study data with the theoretical propositions, which have been described in the theoretical framework and with data from other reports carried out on Primary Schools of Sudan.

### 4.2 Results of the Questionnaire for the Selection of Schools

The Education Office of Khartoum Archdiocese prepared a Seminar for its school administrations, including their headmasters. The researcher was invited to

present two sessions on 25<sup>th</sup> April 2018: one on strategic planning and a second one about School Self-Assessment in view of continuous improvement. Representatives of twenty one Comboni schools attended the workshop. At the end of it, as agreed with the Diocesan Director, the researcher presented the project of this study and distributed the questionnaire to select the schools that would become case of study. Before concluding the workshops, the headmasters had twenty minutes to read the questionnaire and could ask in case of doubt. Fourteen headmasters brought the questionnaire filled it in on the following day.

In this section, the researcher presents the data collected through the questionnaires in view of the selection of the three schools.

#### **4.2.1 Schools' Size**

The following table collects the results that have to do with the school size. The questions also helped the researcher to evaluate the capacity of the school administration to provide data.

Table IV-1. School Size and Data of the 2017-2018 Academic Year collected in April 2018

Name of the School	No. of students	Full time teachers	Part time teachers	Administrative staff	Other staff	School building size (m <sup>2</sup> )	Plot size	No. of classrooms	No. of offices	Av. no. students per class	Av. no. students per teacher	Yearly Income
Dar As-Salam/Jebel Aulia Bahri	1,274	16	7	3	-	640	-	16	6	80	42	
Kizito-Dar As-Salam-Plot 9	309	18	1	-	4	1,316	-	10	5	7	5	
Kizito – Dar As-Salam – Plot 4	66	-	3	3	2	3,000	-	6	2	*	*	
Kizito – Dar As-Salam – Plot 8	185	8	4	3	2	4,425	4425	8	2	25	25	-
Al-Izba 3, Girls, St. Bakhita Parish, Jabarona	276	8	2	2	2	1,240	1240	7	2	40	40	
Comboni Basic Al-Gamayer-Embedda-51- Wady Ramly	841	28	0	4	3	500	500	18	2	50-60	60	350,000
Qaria 55-Masalma	375	14	2	2	3	-	-	8	4	18-30	-	150,430
Al-Harra 47- Masalma	294	10	0	2	2	1,460	2560	7	2	42	29.3	160,000
Shigla- Boys and Girls- Hag Yūsif	575	12	4	2	2	1,050	-	10	3	50-60	-	
Basic Integrated School-Girls- Hag Yūsif	192	6	1	1	2	-	-	11	4	*	*	
Comboni College Khartoum	348	12	0	5	4	-	-	12	4	-	-	-
Mayo-Boys-Model Learning Center	1,200	42	1	3	6	-	6,800	24	4	50	29	-
Our Lady of Hope –Mayo - Girls	510	16	2	1	3	1,620	1,620	12	8	50	-	
	556	-	1	-	3			12	4	-	-	

\*These schools presented the number of students of every class.

The table shows that some schools do not distinguish between the size of the building and the size of the plot in which the building of the school is located. Thus, those data cannot be considered fully reliable.

There are also some doubts about the reliability of the data related to the average number of students per class and per teacher.

When these data are compared with those collected directly from the Education Office of Khartoum Archdiocese which were updated to 25/10/2017, some small differences appear in the number of students. Nonetheless the data look coherent except for schools 7 and 13.

Table IV-2. Comparison of Students Numbers in Two Different Times and from Two Different Sources.

No.	School Name	No. of students according to Diocesan Office on 25/10/2017	No. of students collected by the researcher on 26/04/2018
1	Dar As-Salam - Jebel Aulia	1,279	1,274
2	Bahri	299	309
3	Kizito-Dar As-Salam - Plot 9	-	66
4	Kizito – Dar As-Salam – Plot 4	221	185
5	Kizito – Dar As-Salam – Plot 8	284	276
6	Al-Izba 3, Girls, St. Bakhita Parish, Jabarona	984 <sup>1</sup>	841
7	Comboni Basic Al-Gamayer-Embedda-51-Wady Ramly	222	375
8	Qaria 55-Masalma	313	294
9	Comboni Al-Harra 47- Masalma	653	575
10	Shigla- Boys and Girls- Hag Yūsif	191	192
11	Basic Integrated School-Girls- Hag Yūsif	348	348
12	Comboni College Khartoum	1,185	1,200
13	Mayo-Boys-Model Learning Centre	645 <sup>2</sup>	510
14	Our Lady of Hope – Mayo- Girls	563	556

Note 1. Boys and girls

Note 2. 614 boys and 31 girls.

It is worth mentioning that the school “Kizito-Dar As-Salam - Plot 9” did not appear in the data of the Diocesan Office even if the headmaster states that it was founded in 1995.

If we compare the data of the average number of students per class and the average number of students per teacher with the calculations done by the researcher, some divergences appear. The researcher has summed the number of full time and part time teachers to have the total number of teaching staff.

Table IV-3. Comparison between Averages of Students per Classroom and Teacher

School	Average of students per class		Average of students per teacher.	
	Data provided by		Data provided by	
	School	Researcher calculations	School	Researcher calculations
Dar As-Salam/Jebel Aulia	80	79.62	42	55.39
Bahri	7	30.9	5	16.26
Kizito-Dar As-Salam - Plot 9	*	11	*	-
Kizito – Dar As-Salam – Plot 4	25	23.12	25	15.42
Kizito – Dar As-Salam – Plot 8	40	39.43	40	27.6
Al-Izba 3, Girls, St. Bakhita Parish, Jabarona	50-60	46.72	60	30.03
Al-Gamayer-Embedda-51- Wady Ramly	18-30	46.87	-	23.44
Qaria 55-Masalma	42	42	29.3	29.4
Al-Harra 47- Masalma	50-60	57.5	-	35.94
Shigla- Boys and Girls- Hag Yūsif	*	17.45	*	27.43
Basic Integrated School-Girls- Hag Yūsif	-	29	-	29
Comboni College Khartoum	50	50	29	27.91
Mayo-Boys-Model Learning Center	50	42.5	-	28.33
Our Lady of Hope – Mayo - Girls	-	46,33	-	-

#### 4.2.2 Ownership and Administration of the School

In filling the questions about school ownership and administration there was some confusion among the headmasters. The results were corrected with the help of the Director of the Education Education. The headmasters were also asked to provide an organizational chart of the school.

Table IV-4. School Foundation and Organization

Name of the School	Foundation of the school	Owner of the school	Administration of the school	Administrative Chart
Dar As-Salam - Jebel Aulia	1994	Parish	Teachers	Scheme
Bahri	1970	Diocese	Congregation	Scheme
Kizito-Dar As-Salam - Plot 9	1995	Parish	Teachers	List
Kizito – Dar As-Salam – Plot 4	1995	Parish	Teachers	Simple scheme
Kizito – Dar As-Salam – Plot 8	1995	Parish	Teachers	List
Al-Izba 3, Girls, St. Bakhita Parish, Jabarona	1993	Parish	Teachers	List
Comboni Basic Al-Gamayer-Embedda-51-Wady Ramly	1992	Parish	Teachers	Scheme
Qaria 55-Masalma	2010	Parish	Congregation	Simple Scheme
Comboni Al-Harra-Masalma	1986	Parish	Congregation	Scheme
Shigla- Boys and Girls-Hag Yūsif	2016	Diocese	Congregation	Scheme
Basic Integrated School-Girls- Hag Yūsif	1985	Parish	Congregation	Scheme
Comboni College Khartoum	1929	Congregation	Congregation	Scheme
Mayo-Boys-Model Learning Center	1983	Parish	Teachers	Well-developed scheme
Our Lady of Hope – Mayo - Girls	1992	Parish	Teachers	Simple scheme

Even if every school is registered under the name of the Archbishop of Khartoum, some schools have an internal convention that defines its ownership. Comboni College Khartoum belongs to the Congregation of the Comboni Missionaries of the Heart of Jesus and some schools belong to the respective Parish in which they are located. Diocesan Schools are more directly linked to the Archbishop.

As for the school administration, some parishes or diocesan schools are entrusted to religious congregations that run them and others to teachers associations.

As for the ways of presenting the organizational chart, some schools administrators just presented the list of positions and some others a well-developed scheme with the hierarchical relations among the different positions.

Table IV-5. School Ownership and Organization

School Owned by	Parish	Congregation	Diocese	Total
Number	11	1	2	14
Administration of the School by	Teachers	Congregation		Total
Number	8	6		14

Table IV-6. Administrative Chart

	List	Simple Scheme	Scheme	Well-developed Scheme
Administrative Chart	3	2	8	1

#### 4.2.3 Readiness to Participate in the Research and Previous Way of Self-assessment

One of the questions of the questionnaire was about the desire to participate in this research project: “Knowing that to participate in this process of self-assessment will imply the commitment to take part in five workshops and the work of filling the questionnaires of self-assessment, would you like to have the school participating in this project?”

The researcher also asked about the ongoing way of self-assessment: “Describe the current way of self-assessment, if any” and about the previous knowledge about Total Quality Management or the EFQM: “Prior to undertaking this exercise, did you ever hear about Total Quality Management or the European Foundation for Quality Management? If yes, what did you hear about it?” The answers to these questions were summarized in the following table:

Table IV-7. Readiness to Participate in the Research and Previous Knowledge on TQM or EFQM.

Name of the School	Desire to participate	Description of current process of self- assessment	Previous knowledge on EFQM
Dar As-Salam/Jebel Aulia	Yes	-	No
Bahri	Yes	Students' exams	Yes
Kizito-Dar As-Salam - Plot 9	-	Periodical students' exams	No
Kizito – Dar As-Salam – Plot 4	Yes	Students' marks, the budget, positive and negative points, setting solutions	No
Kizito – Dar As-Salam – Plot 8	Yes	Periodical meetings	Yes
Al-Izba 3, Girls, St. Bakhita Parish, Jabarona	Not now	1.Collaboration with the Parish Priest and the Diocesan Education Office and the Parish Education Office; 2. Self-support in terms of maintenance and salaries of teachers (9 months); 3.Great number of students; 4. Percentage of success every year	Yes
Comboni Basic Al-Gamayer-Embedda-51- Wady Ramly	Yes	Good	No
Qaria 55-Masalma	Yes	There is no	No
Comboni Al-Harra 47- Masalma	-	1. Exams; 2. Analysis of the results; 3. Evaluation of the work the groups to know the extent of implementation of the planned programs	Yes
Shigla- Boys and Girls- Hag Yūsif	Yes	Good	No
Basic Integrated School-Girls- Hag Yūsif	Yes	Good	No
Comboni College Khartoum	Yes	Random and with conventional and outdated methods	No
Mayo-Boys-Model Learning Centre	Yes	There is no	Yes
Our Lady of Hope – Girls - Mayo	Yes	Good	No

Table IV-8. Desire to Participate and Previous Knowledge on TQM or EFQM. Summary.

	Yes	No	NR/DK	Total
Desire to participate	11	1	2	14
Previous knowledge on EFQM	5	9	2	14

The table shows that out of fourteen schools, one school is not available to be part of this project of self-assessment at the moment (Al-Izba 3, Girls, St. Bakhita Parish, Jabarona) and two schools did not express themselves: Saint Kizito-Dar As-Salam - Plot 9 and Comboni Al-Harra 47- Masalma.

As for the description of current process of self-assessment, the answers have been grouped around four different ways of understanding the question. Every way focuses on one different aspect of self-assessment.

Table IV-9. Description of Current Process of Self- assessment

Understanding of the self-assessment process carried out by the school	Answers	No.	Subtotal
Methodology	Periodical meetings	1	2
	Collaboration with the Parish Priest and the Diocesan Education Office and the Parish Education Office	1	
Object-Contents	Students Exams	4	12
	Budget	1	
	Positive and negative points	1	
	Setting solutions	1	
	Self-support in terms of maintenance and salaries of teachers (9 months);	1	
	Number of students	1	
	Percentage of success every year	2	
	Analysis of results	1	
Rating	Good	4	4
	NR/DK	1	
Frequency	There is no	1	3
	Random and with conventional and outdated methods	1	

As for the understanding of the description of the current process of self-assessment carried out by the school, four schools understood that they should assess themselves with a certain degree of performance: Our Lady of Hope – Girls - Mayo; Comboni Basic Al-Gamayer-Embedda-51-Wady Ramly; Shigla- Boys and Girls- Hag Yūsif; and Basic Integrated School-Girls-Hag Yūsif. They all qualified their performance as “good”.

Two schools openly recognized that do not have a system of self-assessment: Qaria 55-Masalma; and Mayo-Boys-Model Learning Center. One school did not answer this question: Dar As-Salam/Jebel Aulia.

Two schools understood that the self-assessment was meant just for students: Bahri; Kizito-Dar As-Salam - Plot 9.

One school, Comboni College Khartoum – Basic Section, recognized the lack of a method for self-assessment. The way their answer was formulated expresses a desire of finding and being introduced into a certain methodology of self-assessment.

Two schools that are not ready for the project (Al-Izba 3, Girls, St. Bakhita Parish, Jabarona; and Comboni Al-Harra 47- Masalma) showed a broad concept of self-assessment that would have made of them good candidates to apply the model of this research.

The two schools of Saint Kizito Parish – Dar As-Salam (Plot 4 and Plot 8) described a certain procedure for their self-assessment that could be a certain starting point for the application of the model of this research.

As for the previous knowledge on Total Quality Management or the EFQM Excellence Model, five schools affirm to have it (Kizito – Dar As-Salam – Plot 8; Al-Izba 3, Girls, St. Bakhita Parish, Jabarona; Comboni Al-Harra 47- Masalma; Mayo-Boys-Model Learning Centre; Bahri). The description of the current process of self-assessment of the first three schools looks a sign of this background. In fact, the answer of Comboni Al-Harra 47- Masalma to the question “What did you hear about it” is quite meaningful: “It is a process that aims at pursuing the excellence through a systematic

method and good administration”. The school of Mayo answered in a more simple way: “It works for improvement of the administrative work and for the organization and self-development”. The school of “Al-Izba 3” answered that “it optimizes the work and provides the proper ways to improve the work”. The school of Bahri states that they “just heard about Total Quality Management. But they do not have enough information about”. The school of “Saint Kizito Parish – Dar As-Salam – Plot 8” just wrote the following expression as answer to the question: “Total Quality and Positive”.

#### 4.2.4 The School Organizational Culture

The third part of the questionnaire had to do with the organizational culture of the school. The presentation of the findings is divided into two parts. The first one corresponds with questions 1 to 5:

- 1- How would you describe the management style of your school? Circle the number that better represents your management style according to its closeness to a collegial style (major decisions are always taken in groups, teams or boards) or a managerial style (major decisions are taken by the persons in charge).

1	2	3	4	5	6	7	
Collegial					Managerial		

- 2- Which characteristics would have a high quality school?
- 3- How would you describe your school?
- 4- Which are the values that are important for the staff of your school? Are they shared by all or just by the school administration?
- 5- What patterns of behaviour are employed routinely that might be indicative of the culture of your school?

The findings are summarized on the following table:

Table IV-10. The School Organizational Culture (I)

Name of the School	Characteristics of quality	School Description	Administrative Style (1 to 7)	Values (SHARED BY)	Attitudes that represent the school culture
<b>Dar As-Salam Jebel Aulia</b>	-	Located in a strategic place of the neighbourhood; in need of improving the educational environment	-	Christian education values (ALL)	-
<b>Bahri</b>	1. Good behaviour of students; 2. Students' marks; 3. Parents satisfaction	Relatively intermediate school as far as the number, the size and number of classes. Its administration facilitates its direction and organization in a good way	4	Commitment; Honesty	Honesty; Truthfulness; Commitment; Responsibility
<b>Kizito-Dar As-Salam, Plot 9</b>	It has mission, vision, strategy and implementation	Initial stage	1	Sharing; Collaboration	
<b>Kizito – Dar As-Salam – Plot 4</b>	Well defined mission, vision and strategy; ability to implement projects	Catholic church School with all the school years with diversity of religious communities (Christian and Muslim)	1	Religious and cultural values (ALL)	Honesty; Moral; Mutual respect
<b>Kizito – Dar As-Salam – Plot 8</b>	Mission, vision, strategy, deployment	Initial state	1	Collaboration, sharing, high moral standards. (ALL)	Training of new staff able to cope with modern developments

Name of the School	Characteristics of quality	School Description	Administrative Style (1 to 7)	Values (SHARED BY)	Attitudes that represent the school culture
<b>Al-Izba 3, Girls, St. Bakhita Parish, Jabarona</b>	Honesty; Internal collaboration; Commitment with contracts; Good provision of educational curricula and tools; Collaboration with educational entities at State and Archdiocesan levels; Ongoing formation of the teachers and the administrative staff; Periodical meetings with parents and students	Inspired by the Catholic vision of education and aiming at preparing persons able to stand by themselves	4	Honesty; Love; Respect. (ALL)	-
<b>Comboni Basic Al-Gamayer-Embedda-51 - Wady Ramly</b>	It is positive in its educational path; It moves towards improvement in spite of the challenges and difficulties	It includes all the languages and races	2	Union Collaboration	Religion; Local languages; Cultural heritage
<b>Chiara Luce-Qaria 55 - Masalma</b>	-	Mixed Christian Basic School	-	Believers; Educators; Cultivated; Responsibility. (ALL)	Love for the educational service; Creativity in cultural programs and activities; Development of the performance of the teachers and the students with continuity
<b>Comboni Al-Harra 47 Masalma</b>	Strong direction; Nice and civilized educational environment; Availability of technological tools; Continuous success; Discipline; Competence of the teachers	School in a context with few awareness of the importance of education founded by the Church to help the displaced	-	Respect for the work of the workers, honesty, collaboration (TEACHERS)	Discipline Presence of dustbins

Name of the School	Characteristics of quality	School Description	Administrative Style (1 to 7)	Values (SHARED BY)	Attitudes that represent the school culture
<b>Shigla- Boys and Girls-Hag Yūsif</b>	1.Continuous improvement in the educational outputs; 2. The collaboration among the workers; 3.Developoment of leadership and administrative skills in the direction of the school; 4.Upgrading of the skills of the workers	Very good school environment Solid premises Excellent academic achievement	1-2	Moral and Church values Social and cultural values	Collaboration and participation
<b>Basic Integrated School-Girls-Hag Yūsif</b>	Collaboration among all the workers; Development of the leadership skills of the administration	-	7	(ALL)	Educational treatment
<b>Comboni College Khartoum – Basic Section</b>	Well organized; Trained teachers; Disciplined students; Systematic evaluation of performance; Authentic reports; Clear policies and procedures; Good teaching and learning environment; Continuous updating of the school system	Stable system Moderate performance Difficulty to provide the level of English expected by parents	6	Dedication; Self-assessment and improvement; Motivating the students; Creative and renewing; Collaborative and sociable; Shared by part of the staff	Abiding to school regulations, punctuality, good conduct, friendliness, mutual respect, nationalism, participation in all religious and national occasions
<b>Mayo-Boys-Model Learning Center</b>	-	In need of quality and improvement but able to keep up	7	Good education values	Coherence with the policies of the Ministry, Educative attitude, good manners, virtues
<b>Our Lady of Hope – Gils Mayo</b>	Good administration; Discipline; Competence of teachers; Budget; Medium term strategy open to change	Place to get science and communicate ideas or the mission, the moral values and good reputation	3	Punctuality, follow up to the students and supervision by the administration	Spirit of competition

Concerning the understanding of quality, the three schools of Saint Kizito Parish focused their attention on the strategic planning of the school: mission, vision, strategy and implementation (criterion 2 of the EFQM Model).

The school of Bahri limited its vision of quality to customers results: “Good behaviour of students, students’ marks and parents satisfaction” (criterion 6).

Comboni-Al Gamayer focused in the educational processes (criterion 5) and the effort for continuous improvement.

Some schools presented a quite holistic vision of quality and look more suitable for the implementation of the project for this reason: Al-Izba 3, Our Lady of Hope – Girls – Mayo; Comboni Al-Harra 47; Shigla; and Comboni College Khartoum. The elements they present could be classified according to the criteria of the EFQM Excellence Model to assess the schools that already present a better soil for the implementation of the project.

As for the descriptions of the schools, it is worth mentioning that some of the characteristics that have been pointed in the theoretical framework for these schools appear here: the importance given to diversity (Kizito Plot 4; Al-Gamayer) and their Catholic identity (Kizito Plot 4; Al-Izba 3; Qaria 55; Al-Harra 47).

Another remarkable element is the awareness or wish of improving the current situation that expressions like “initial state” (Kizito Plot 9 and 8) or “in need of improving” (Jebel Aulia; Mayo) reveal.

As for the administrative style, there are five schools that identified themselves with the collegial style (Saint Kizito Plot 9, Plot 4 and Plot 8; Al-Gamayer; Shigla ), two schools placed themselves in an intermediate position (Bahri; Al-Izba 3; Our Lady of Hope) and three in a more managerial style (Integrated School-Hag Yūsif ; Comboni College Khartoum; Mayo Model Learning Centre).

Table IV-11. Administrative Style

	1	2	3	4	5	6	7	NR/DK
Administrative Style	3	1 2	1	2		1	2	3

As for the values considered as important by the school staff, they can be classified in this way:

Table IV-12. Meaningful Values for the School Staff

Values	Frequency
Collaboration	5
Moral standards and good manners	4
Honesty	3
Commitment, responsibility, dedication	3
Religious values	3
Cultural and social values, cultivated	2
Sharing	2
Respect	2
Love	1
Punctuality	1
Follow up and supervision	1
Union	1
Creativity	1
Self-assessment and improvement	1
Motivating the students	1

As for the attitudes that represent the school culture, they have been classified in this way:

Table IV-13. Attitudes that Represent the Culture of the Schools

<b>Attitudes that represent the culture of the schools</b>	<b>Frequency</b>
Honesty	2
Educative behaviour or attitude	2
Commitment and participation	2
Discipline, abiding to school regulations, punctuality	2
Mutual respect	2
Training of new staff able to cope with modern developments, development of the performance of teachers and students	2
Spirit of competitiveness	1
Religion	1
Local language and culture	1
Love for the educational service	1
Creativity	1
Truthfulness	1
Presence of dustbins	1
Collaboration	1
Responsibility	1
Good conduct	1
Friendliness	1
Nationalism	1
Participation in all religious and national occasions	1
Virtues	1

Concerning the concept of quality that emerges from the questionnaire classified according to the criteria of the 2013 EFQM Excellence Model:

Table IV-14. Concept of Quality and EFQM Excellence Model

<b>School Quality criterion</b>	<b>Al-Izba 3, Girls, Jabarona</b>	<b>Our Lady of Hope – Girls -Mayo</b>	<b>Comboni Al-Harra 47-Masalma</b>	<b>Shigla- Boys and Girls- Hag Yūsif</b>	<b>Basic Integrated School-Girls- Hag Yūsif</b>	<b>Comboni College Khartoum</b>
Leadership		Good administration	Strong direction	Development of leadership and administrative skills in the direction of the school	Development of leadership skills of the direction of the school	
Planning and strategy		Budget Medium term strategy open to change	Continuous success			Clear policies and strategies Continuous updating of the school system
People (workers)	Honesty Internal collaboration Commitment with contracts Ongoing formation of teachers and administrative staff	Competence of teachers	Discipline Competence of teachers	Collaboration among the workers; upgrading of the skills of the workers	Collaboration among the workers	Trained teachers
Partnerships and resources management	Collaboration with educational entities at State and Diocesan level Good provision of educational tools		Availability of technological tools			
Processes	Good provision of curricula	Good administration	Nice and civilized educational			Well organized Systematic

	Periodical meetings with parents and students		environment		evaluation of performance Good teaching and learning environment
Workers results		Discipline	Discipline		
Clients results		Discipline	Discipline	Continuous improvement in the educational outputs	Disciplined students
Society results					
Key results					Authentic reports

The following table instead corresponds with questions 6 to 9 of the questionnaire:

- How are students perceived by the school administration?
- Which celebrations do you make along the school year?
- Does your school have a written Strategic Planning?
- If yes, how was it done?

Table IV-15. The School Organizational Culture (2)

<b>Name of the School</b>	<b>How do students regard the schools administration?</b>	<b>Celebrations</b>	<b>Is there a strategic plan?</b>	<b>How was it formed</b>
Dar As-Salam - Jebel Aulia	-	World Mother Day; Christmas; Open Day- Cultural Day	No	0
Bahri	-	Christmas; St. Jeanne Antide; St. Daniel Comboni; Independence	Yes	There is a short- term strategic plan that consists of the choice of an Educational Project
Kizito-Dar As- Salam, Plot 9	Seriousness	St. Daniel Comboni; Christmas	-	-
Comboni – St. Kizito – Dar As- Salam – Plot 4	With appreciation and respect	Saint Daniel Comboni; Our Lady (15 <sup>th</sup> August); Christmas; Other national and church celebrations	No	
Comboni – St. Kizito – Dar As- Salam – Plot 8	Responsible administration	St. Daniel Comboni, Assumption of Mary	No	
Al-Izba 3, Girls, St. Bakhita Parish, Jabarona	As educators	Christmas; St. Bakhita; St. Daniel Comboni; Independence Day	Yes	Parish Education Office
Comboni Basic Al-Gamayer- Embedda-51	Strict management; Familiar with the students	Assumption of Our Lady (15 <sup>th</sup> August); Graduation; Christmas; Comboni	No	

<b>Name of the School</b>	<b>How do students regard the schools administration?</b>	<b>Celebrations</b>	<b>Is there a strategic plan?</b>	<b>How was it formed</b>
Chiara Luce-Qaria 55-Masalma	Direction successful, well-guided and efficient	Christmas, Easter, Independence Day, Saint Daniel Comboni	No	
Comboni Al-Harra 47 - Masalma	Excellent school in comparison with the other schools of the contexts	Christmas, graduation	Yes	Taken from the Ministry through the Municipality
Shigla- Boys and Girls-Hag Yūsif	With optimism	Church and civil feasts; Announcement of marks	Yes	Training and preparation of teachers; Improvement of the academic achievement of the students
Basic Integrated School-Girls-Hag Yūsif	Esteem and respect	Christmas, end of the academic year, official feasts	-	-
Comboni College Khartoum – Basic Section	Reliability, responsiveness, empathy, tangibility, assurance	St. Daniel Comboni, Christmas, national feasts	Yes	Scholastic calendar, terms, time table, lessons
Mayo-Boys-Model Learning Center	The school of the future	Religious (Christian and Muslim) and national feasts	No	
Our Lady of Hope – Girls - Mayo	They appreciate the activities proposed by the school, especially the sports week	The Assumption of Our Lady, Christmas	No	

Concerning the celebrations that take place in the school and characterize them, they can be classified as follows:

Table IV-16. School Celebrations

<b>Celebrations</b>	<b>Frequency</b>
Christmas	8
Saint Daniel Comboni-10 <sup>th</sup> October	6
Independence and national celebrations	5
Other Church celebrations	4
Graduation and distribution of marks	4
Our Lady-The Assumption-15 <sup>th</sup> August	3
World Mother Day	1
Saint Bakhita	1
Cultural Day	1
Saint Jeanne Antide	1
Islamic celebrations	1

As for the existence of strategic planning, five schools state to have it (Bahri; Al-Izba 3; Comboni Al-Harra 47; Shigla; Comboni College Khartoum); seven schools recognize not to have it (Jebel Aulia; Kizito Plot 4 and Plot 8; Our Lady of Hope; Al-Gamayer; Qaria 55; Mayo); two schools did not answer (Kizito Plot 9; Basic Integrated School-Hag Yūsif).

As for the way of elaborating the Strategic Planning, the answers reveal different understandings of the concept. In one case it is identified with the Educational Project (Bahri). In another case it is understood as the application of the directions of the Parish Education Office (Our Lady of Hope – Girls - Mayo). In the case of Al-Harra 47, it is understood as the application of the indications of the Ministry transmitted by the Municipality. For Comboni College Khartoum the strategic planning is elaborated through the preparation of the school calendar, time table, lessons and distribution into terms.

The understanding of Shigla looks to have to do with some priorities that the school wishes to develop: “training and preparation of teachers; improvement of the academic achievement of the students”.

#### 4.2.5 Reasons and Benefits of Participating in the Research

As for the reasons the different schools present to participate in this project, they have been summarized in the following table:

Table IV-17. Reason to Participate in the Assessment Process

<b>Reason</b>	<b>Frequency</b>
To improve and make school advance for the best	2
Need to cope up with changes and modern times	2
Improvement of the administrative total quality	2
For continuous improvement	2
Optimizing the school	1
Improve level of students	1
Quality change in the school	1
Gain extra good and upgrade the school	1
For a better and more qualified improvement	1
Development of capacities and skills	1
Development of the school	1
To meet students, parents and society expectations	1
Raise the quality of the performance of the school	1

As for the benefits that these schools expect to achieve from the self-assessment process, they can be classified as follows:

Table IV-18. Benefits from the Participation in this Research

<b>1. Related to improvement of quality and school development</b>	<b>Frequency</b>
Quality in the administration	2
To improve the quality of the school	2
Improvement of performance	2
Discovery of skills and abilities	2
Acquisition of skills, experiences and new ways for the educational process	1
Development and improvement of the educational environment	1
Development of the performance of the teachers	1
Increase in the percentage of turnout and success of the students	1
To be introduced in a modern concept of quality	1
Improvement	1
Quality in the educational process	1

To get additional experience and upgrade the school	1
2. Related to self-assessment	Frequency
Self-evaluation	2
To improve methods of self-assessment	1
To be scientific in doing assessment	1
3. Related to management of change	Frequency
To tackle the problems that arise	1
To create awareness among the teachers on the importance of being open to change	1
To meet the new students expectations	1
To acquire good experiences and successful instruments	1
Worthy ideas	1
To get new experiences and winning instruments	1

#### 4.2.6 Selection of Schools

After studying the questionnaires, the researcher has identified a series of indicators that may help to select the most suitable schools for the case studies.

It is necessary to recall that the school “Al-Izba 3, Girls, St. Bakhita Parish, Jabarona” explicitly stated that they were not ready to participate in the project.

The way of marking the suitability of the schools considered the following criteria:

1. The capacity to provide data (0 to 5).
  - The school that provides any information about its size gets one point.
  - Capacity to distinguish between the size of the building and the size of the plot: one point.
  - Average number of students per class well calculated (divergence minor than 10%): 1 point.
  - Average number of students per teacher well calculated (divergence minor than 10%): 1 point.
  - The school that provides any information about its size gets one point.
  - The school that provides yearly income gets 1 point.

2. Desire to participate in the project.

- The school that explicitly expressed its desire to participate gets one point.

3. Current way of self-assessment

The points are distributed in this way:

- Desire to learn a methodology: 1
- Basic understanding of self-assessment: 2
- Good understanding of self-assessment: 3

4. Previous knowledge on the EFQM Excellence Model and TQM

The school that showed a previous knowledge, not just because of answering positively, but because their answer is supported by a good explanation, gets one point.

5. Characteristics of quality

The definition of quality of the schools is qualified according to the level of comprehensivity from 0 to 3

Instead, the answers about the way of elaborating the Strategic Planning do not look a differential factor.

The marks of every school are presented in the following table with the schools ordered according to their qualification:

Table IV-19. Selection of Schools

Name of the School	Capacity to provide data	Desire to participate	Current way of self-assessment	Previous knowledge on EFQM-TQM	Characteristics of quality	Points	Position
Al-Izba 3, Girls, St. Bakhita Parish, Jabarona	3	0	3		3	9	1
Al-Harra 47- Masalma	2	0	3	1	3	9	1
Comboni College Khartoum	3	1	1		3	8	3
Qaria 55-Masalma	5	1			0	6	4
Kizito – Dar As-Salam – Plot 8	2	1	2		1	6	4
Kizito – Dar As-Salam – Plot 4	1	1	2		1	5	6
Shigla- Boys and Girls- Hag Yosuf	0	1			3	4	7
Our Lady of Hope –Girls - Mayo	0	1			3	4	8
Comboni Basic Al-Gamayer-Embedda-51- Wady Ramly	1	1			1	3	9
Dar As-Salam/Jebel Aulia	2	1			0	3	9
Bahri	1	1			1	3	9
Kizito-Dar As-Salam - Plot 9	2	0			1	3	9
Basic Integrated School-Girls- Hag Yūsif	0	1			2	3	9
Mayo-Boys-Model Learning Center	1	1		1	0	3	9

### 4.3 Self-Assessment Results

Three schools were selected for their introduction into the Self-Assessment Model proposed in this research. The researcher conducted four workshops with the three Quality Teams. The first three were attended by almost all the members of the three Quality Teams. The fourth one instead could not be attended by the School 3 Team and this is why a fifth workshop was organized specifically for them.

Table IV-20. Workshops

Workshop			No. of team members present in the Workshop		
No.	Date	Content	School 1	School 2	School 3
1	11-8-2018	General Introduction to EFQM and the Self-Assessment process + Criteria 1 and 2	4	5	4
2	25-8-2018	Criteria 3 and 4	5	5	4
3	8-9-2018	Criteria 5 to 8	4	5	5
4	27-10-2018	Criterion 9 + Identification of Improvement Areas + Classification of those areas according to importance, urgency and availability of resources + Improvement Plan + Meta-evaluation	5	5	0
5	5-1-2019	Criterion 9 + Identification of Strengths and Improvement Areas + Classification of those areas according to importance, urgency and availability of resources + Improvement Plan	-	-	5

The results of the questionnaires collected in every workshop are presented in the following sections along with the data from the interviews and the collection of documents.

### 4.3.1 Criterion 1: Leadership

Excellent schools have leaders who carry on and facilitate the realization of the mission and vision, acting as role models for its values and ethics and inspiring trust at all times.

#### 4.3.1.1 Sub-criterion 1a: Development of Mission and Vision

The school has developed and articulated the mission, vision and values which align with the vision and mission of the Catholic Church and guide the decision-making of the organization at all levels.

1. Has the school any document that defines its mission, vision and values?

Table IV-21. Document that Defines Mission and Vision

Document that defines mission and vision	School			Total
	School 1	School 2	School 3	
No	3	4	0	7
Yes	0	0	2	2
NR/DK	1	1	2	4
Total	4	5	4	13

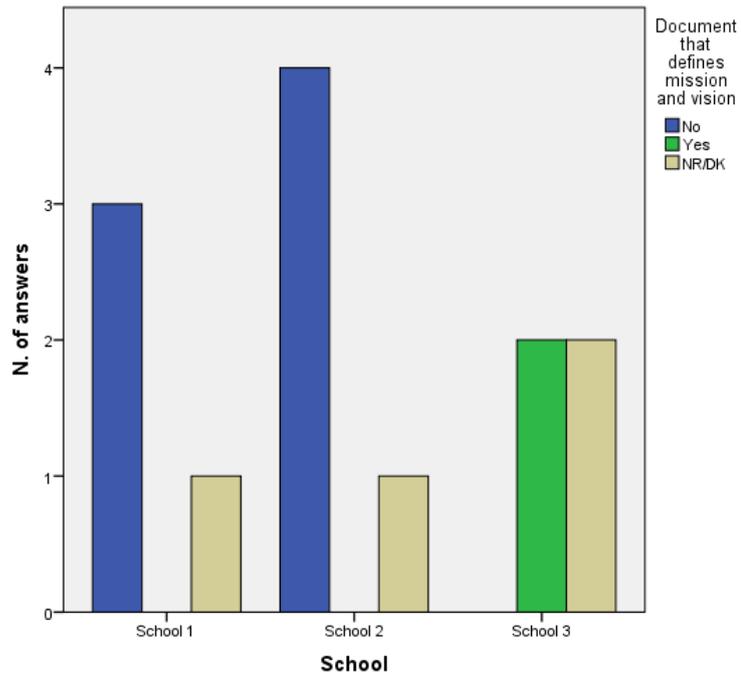


Figure IV-1. Document that Defines Mission

School 3 is the only one where two members of the Quality Team affirm to have a document that defines its mission and vision. Nonetheless, the school did not present any document. The results were triangulated with those collected during the seminar with fourteen school administrations previous to the selection of the schools.

Table IV-22. Presence of a Document that Defines Mission and Vision of the School

	Presentation of the Document		According to Seminar	
	Yes	No	Yes	No
School 1		√	√	
School 2		√		√
School 3		√	√	

2. If there is, is this document known by:

Table IV-23. Knowledge of Document that Defines Mission and Vision

Document that defines mission and vision known by:	School			Total
	School 1	School 2	School 3	
All the staff	0	0	0	0
Only the school administration	0	0	0	0
School administration and some teachers	0	0	2*	2
Just the headmaster	0	0	0	0
NR/DK	4	5	2	11
<b>Total</b>	<b>4</b>	<b>5</b>	<b>4</b>	<b>13</b>

Note \*: These two members of the Quality Team of School 3 look to be the only ones who answered the previous question in a positive way.

### 3. In which level does your school find itself?

Table IV-24. Development of Mission and Vision

Development of mission and vision	School			Total
	School 1	School 2	School 3	
No processes	0	0	0	0
Process awakening	0	4	2	6
Vision through processes	1	0	0	1
Systematic assessment and improvement	3	1	2	6
Excellent processes	0	0	0	0
NR/DK	0	0	0	0
<b>Total</b>	<b>4</b>	<b>5</b>	<b>4</b>	<b>13</b>

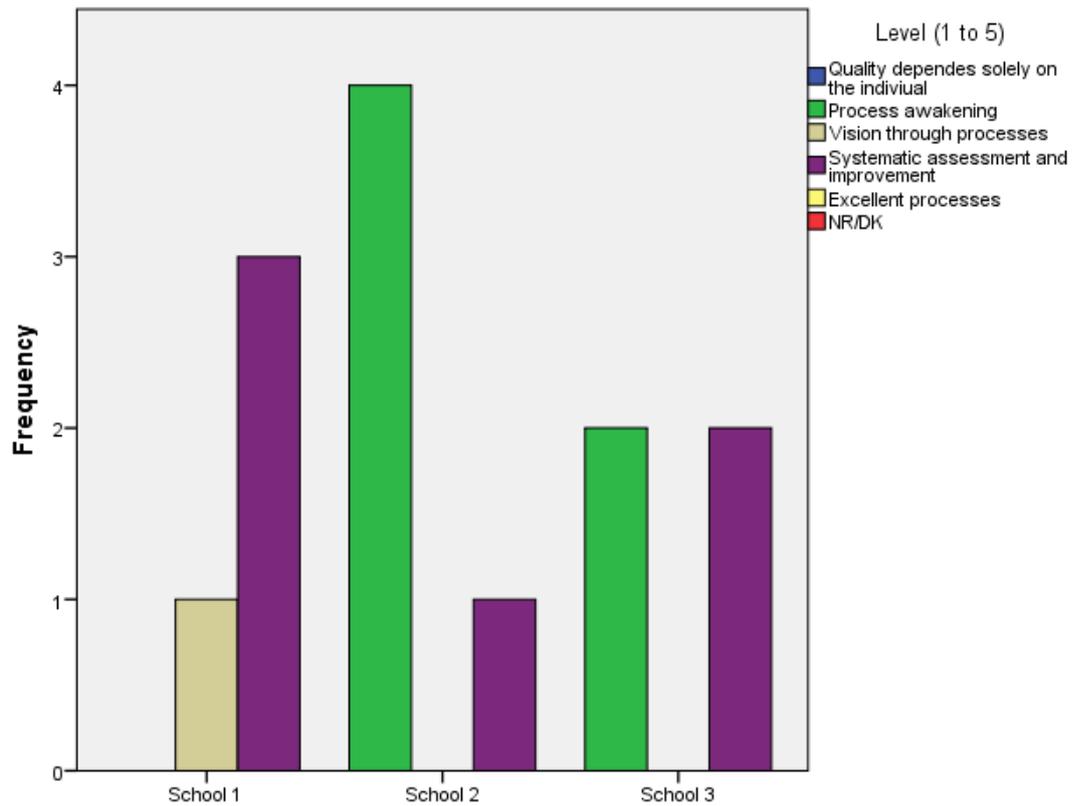


Figure IV-2. Development of Mission and Vision

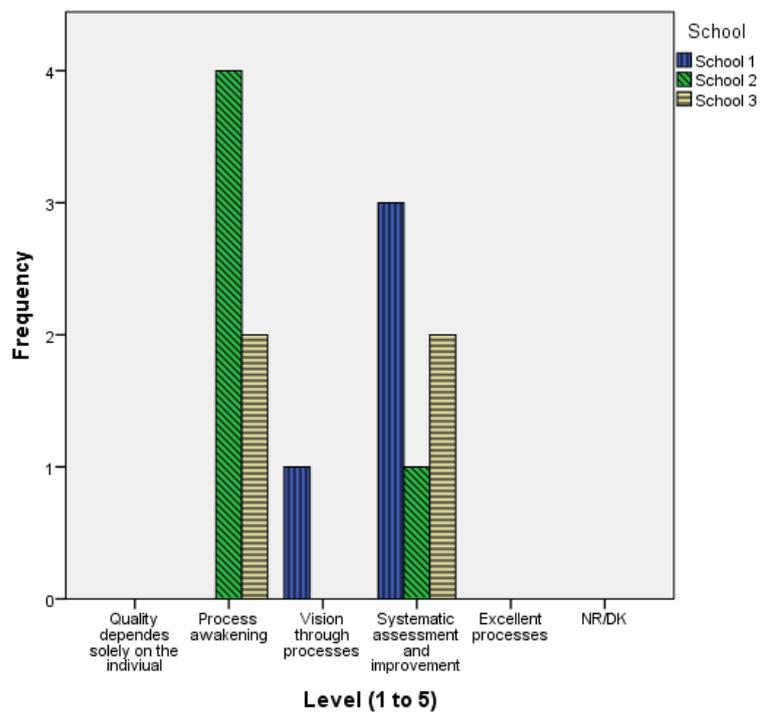


Figure IV-3. Development of Mission and Vision

The self-perception of School 2, that assesses its level of development of vision and mission as “process awakening – basic processes”, looks the most coherent with previous answers. The assessment of School 1 looks too optimistic while School 3 is coherent in its internal division: two members state that the school has a document that defines the vision and mission of the school and two members consider that the level of the school corresponds with level 4, while instead there is no such a document.

#### ***4.3.1.2 Sub-criterion 1b: Continuous Improvement of Management System***

The management of the school promotes and guarantees the development, implementation, and continuous improvement of the management system.

1. Has the school well determined periods and procedures for its self-evaluation?

Table IV-25. Quality Team Data on Determined Periods and Procedures for Self-evaluation

Periods and procedures for self- evaluation	School			Total
	School 1	School 2	School 3	
No	4	0	0	4
Yes	0	4	3	7
NR/DK	0	1	1	2
Total	4	5	4	13

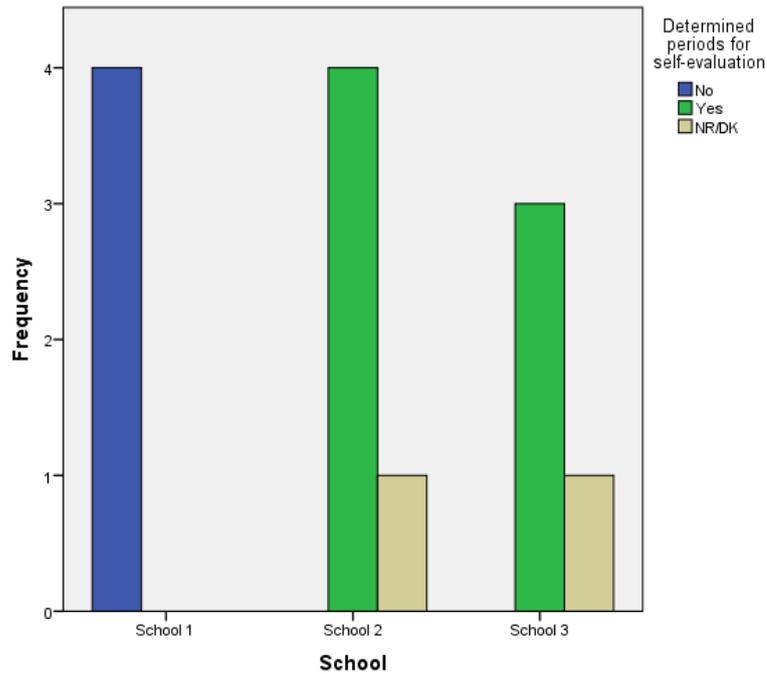


Figure IV-4. Determined Periods for Self-evaluation

School 2 and 3 state to have determined periods and procedures for self-evaluation while School 1 does not have them.

When asking about the date of the last self-assessment, the Parish Priest of School 3 states that no self-evaluation was ever done (Transcript C, par. 7). In fact, the Quality Team had not been able to state the date of the last self-assessment.

The Director of School 2 Quality Team instead presented the minutes of the meeting for the Assessment of Students 2017-2018 Results.

Being so, it is possible to draw a new table that contains the information about the effective presentation of a written self-assessment and the information coming from the seminar that took place before the selection of the three schools:

Table IV-26. Determined Periods and Procedures for Self-evaluation.

School Self-Assessment	Presentation of the document		According to seminar previous to EFQM self-assessment		
	Yes	No	Yes	No	Description
School 1		√	√		Random and with conventional and outdated methods
School 2	√		√		Exams, Analysis of the results, evaluation of the groups work to know the extent of implementation of the planned programs
School 3		√	√		Students' marks, the budget, positive and negative points, setting solutions

This discrepancy between factual data and declared information indicates that sometimes the members of the quality teams answer according to the way things should be instead of according to the way things really are.

2. Does the school produce an Improvement Plan as a consequence of the self-evaluation?

Table IV-27. Improvement Plan?

Improvement Plan?	School			Total
	School 1	School 2	School 3	
No	4	0	0	4
Yes	0	1	2	3
NR/DK	0	4	2	6
Total	4	1	4	13

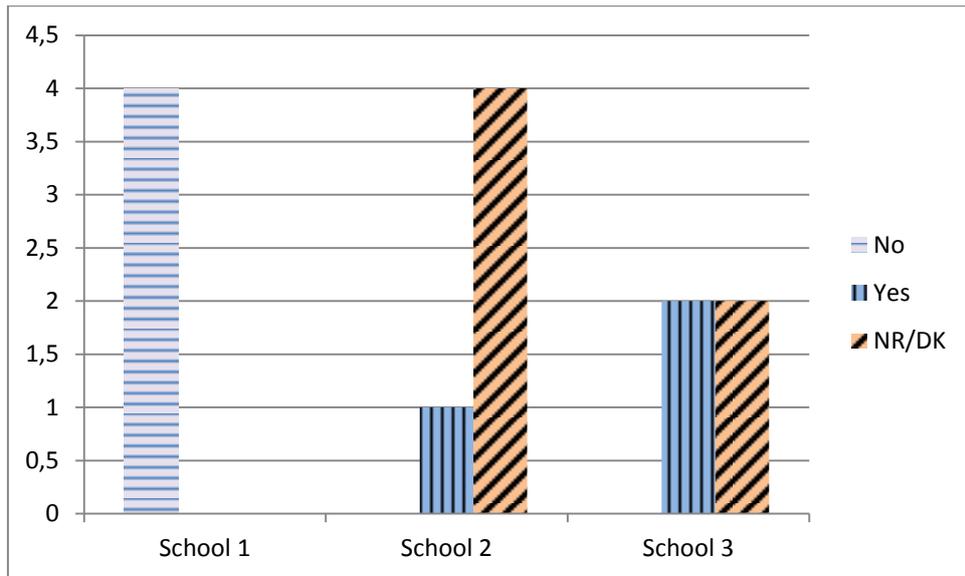


Figure IV-5. Does the School Produce an Improvement Plan?

School 1 openly recognizes not to have an Improvement Plan. As for Schools 2 and 3, there is a certain internal division. One and two members respectively affirm to have it while four and three did not answer the question. It is meaningful the great number of members of the different teams who did not answer the question (6).

The Parish Priest of School 3 instead recognizes that the school does not have an Improvement Plan (Transcript C, par. 8), which is coherent with the fact of not having determined periods for self-assessment. Therefore, another table based upon documented data could be drawn:

Table IV-28. Presence of an Improvement Plan

Improvement Plan?	Presentation of the document	
	Yes	No
School 1		√
School 2		√
School 3		√

3. In which level does your school find itself?

Table IV-29. Continuous Improvement of Management Systems

Continuous Improvement of management systems	School			Total
	School 1	School 2	School 3	
No processes	0	0	0	0
Process awakening	2	4	0	6
Vision through processes	0	0	4	4
Systematic assessment and improvement	2	1	0	3
Excellent processes	0	0	0	0
NR/DK	1	0	1	2
<b>Total</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>15</b>

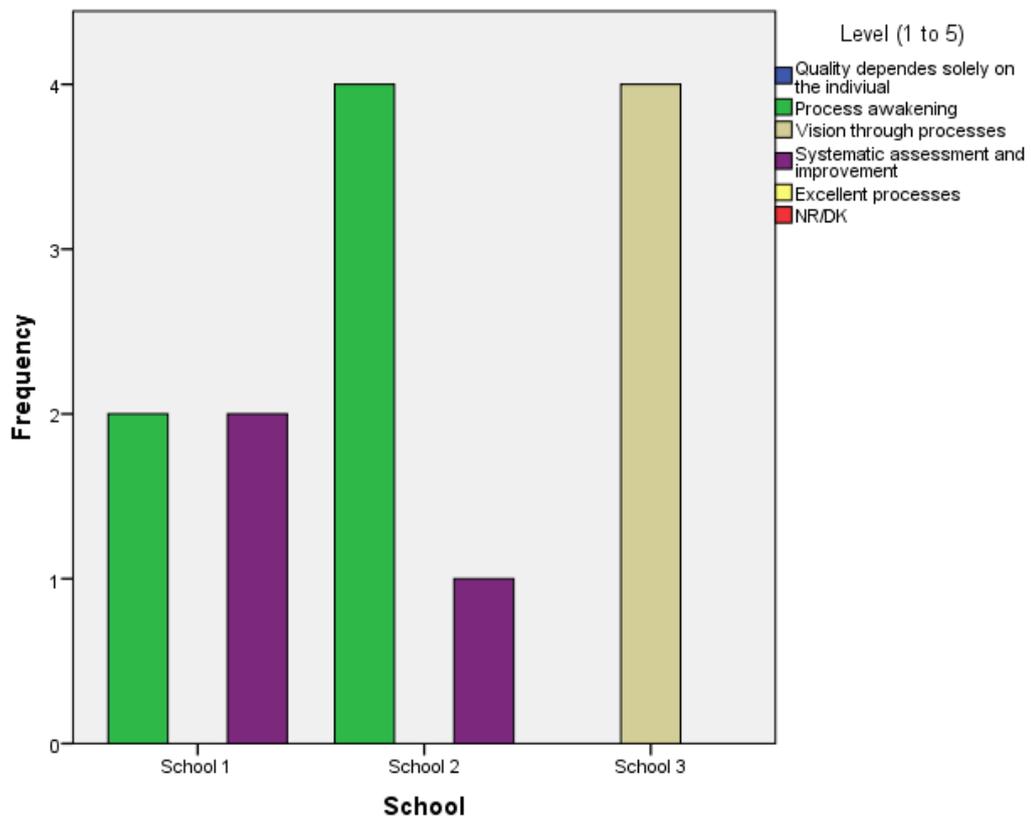


Figure IV-6. Continuous Improvement of Management Systems

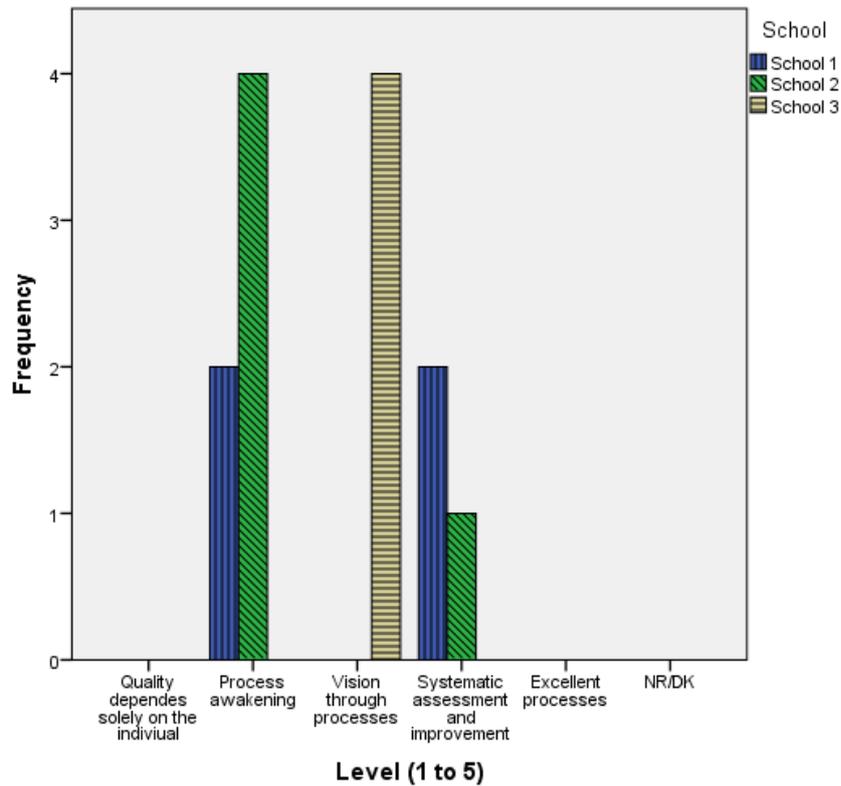


Figure IV-7. Continuous Improvement of Management Systems (2)

As for the self-perception on “Continuous Improvement of management systems”, School 2 defines itself at the level of “Process awakening” while School 3 at the level of “Vision through processes”. In School 1 there is an internal division and two members voted for “Process awakening” while two did it for “Systematic assessment and improvement”.

#### ***4.3.1.3 Sub-criterion 1c: Leadership and External Relations***

The school has systematic interaction with the parents of the students, the municipality, the Ministry, the providers of transport and other strategic partners and important stakeholder groups in order to operate for common interests and goals.

1. Is there an association for the parents of the students?

Table IV-30. Parents' Association?

Association of parents	School			Total
	School 1	School 2	School 3	
No	2	0	0	2
Yes	2	5	3	10
NR/DK	0	0	1	1
Total	4	5	4	13

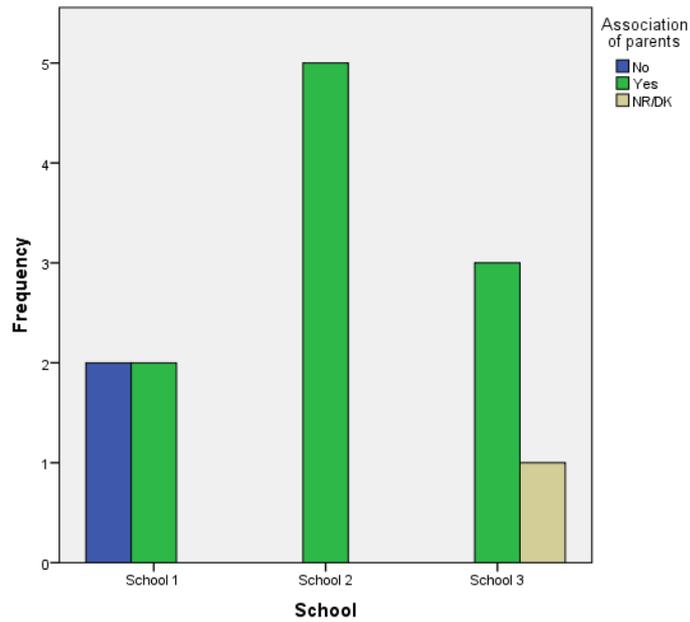


Figure IV-8. Is there an Association of Parents?

Schools 2 and 3 state that they have an Association of Parents while the members of School 1 are divided.

2. How often does the school administration meet with the parents association?

Table IV-31. Frequency of Meetings with Parents Association

Frequency of meetings with parents association	School			Total
	School 1	School 2	School 3	
Just when problems arise	3	0	1	4
Once a year	0	1	2	3
Twice a year	0	2	0	2
Three times a year or more	1	0	0	1
NR/DK	0	2	1	3
Total	4	5	4	13

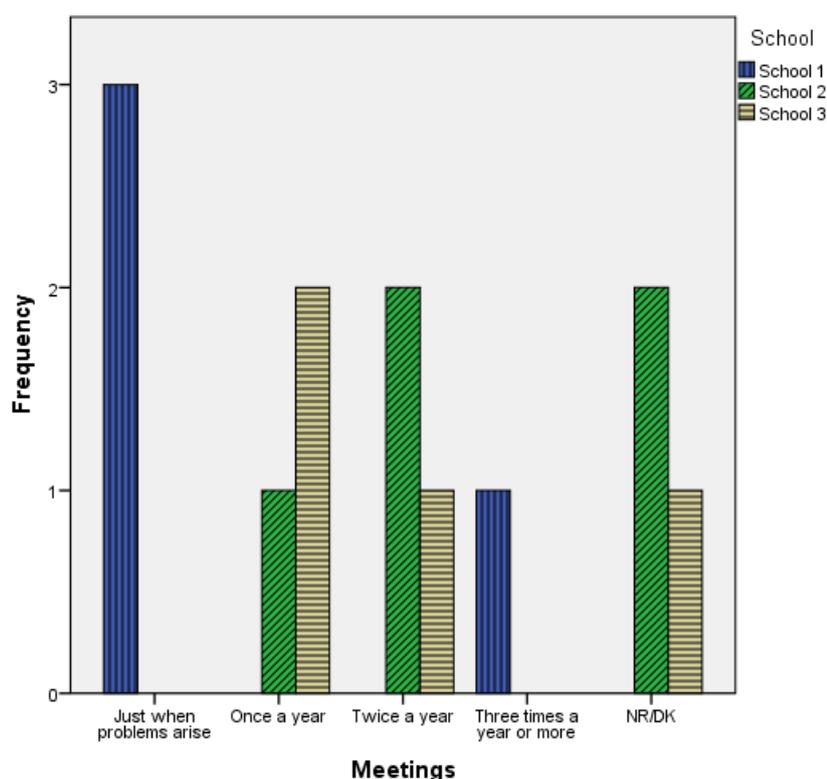


Figure IV-9. Frequency of Meetings with Parents Association.

“In 1992 the government of Sudan approved the so-called Parent Teacher Association (PTA) regulation which aimed at strengthening the relation between school, families and society and defined the rights and duties of the PTA” (EU et al., 2015, p. 307). Schools 2 and 3 meet the parents once or twice a year. School 1, where there is no PTA, just meet the parents when problems arise.

It is worth mentioning that a study on schools of South Kordofan and Gedarif showed that “most parents do not think they have a role to play in school governance. Some believe that it is not their responsibility to support schools but mostly they felt that they had little experience and skills to contribute” (EU et al., 2015, p. 326). Nonetheless, the same study states that:

local communities and parents in the communities visited are increasingly playing a role in educational finance especially with regard to operational cost for electricity, water, teacher support (breakfast and/or transport), for extra-curricular activities and for the support to voluntary teachers. In addition they make efforts to support the maintenance, rehabilitation and school construction (EU et al., 2015, p. 327).

As the general belief in relation to government schools is that they are “property of the government and not a community good worth the support including the protection of the community” (EU et al., 2015, p. 330), church schools are also often left to the care of the Church with little community involvement.

The study carried out in twelve locations of Red Sea and Blue Nile State concludes that “the learning environment is negatively affected by the weak cooperation of parents with the school. The failure to raise funds to provide school meals for poor pupils is another factor” (EU et al., 2015, p. 437).

The same report concluded that “the weakness of the relationship between the school and families on the one hand, and the educational council and the school on the other hand, in some visited schools, reduces the opportunities of support and school improvement” (EU et al., 2015, p. 447).

3. In which level does your school find itself?

Table IV-32. Leadership and External Relations

Leadership and External Relations	School			Total
	School 1	School 2	School 3	
No processes	0	0	0	0
Process awakening	0	3	0	3
Vision through processes	0	1	3	4
Systematic assessment and improvement	3	1	0	4
Excellent processes	0	0	0	0
NR/DK	1	0	1	2
Total	4	5	4	13

As for self-perception concerning Leadership and External Relations, School 1 is the most optimistic even if the relations with the parents look weak. School 2 assesses itself at the level of “Process Awakening” and School 3 at the level of “Vision through processes”.

Nonetheless, it is worth recalling that the report of Wani about the Save the Saveable Program already noticed that in the “majority of the schools there are no Parents and Teachers Councils. However, communities are very supportive in situations where their schools or centres are threatened by the government” (2002, p. 28).

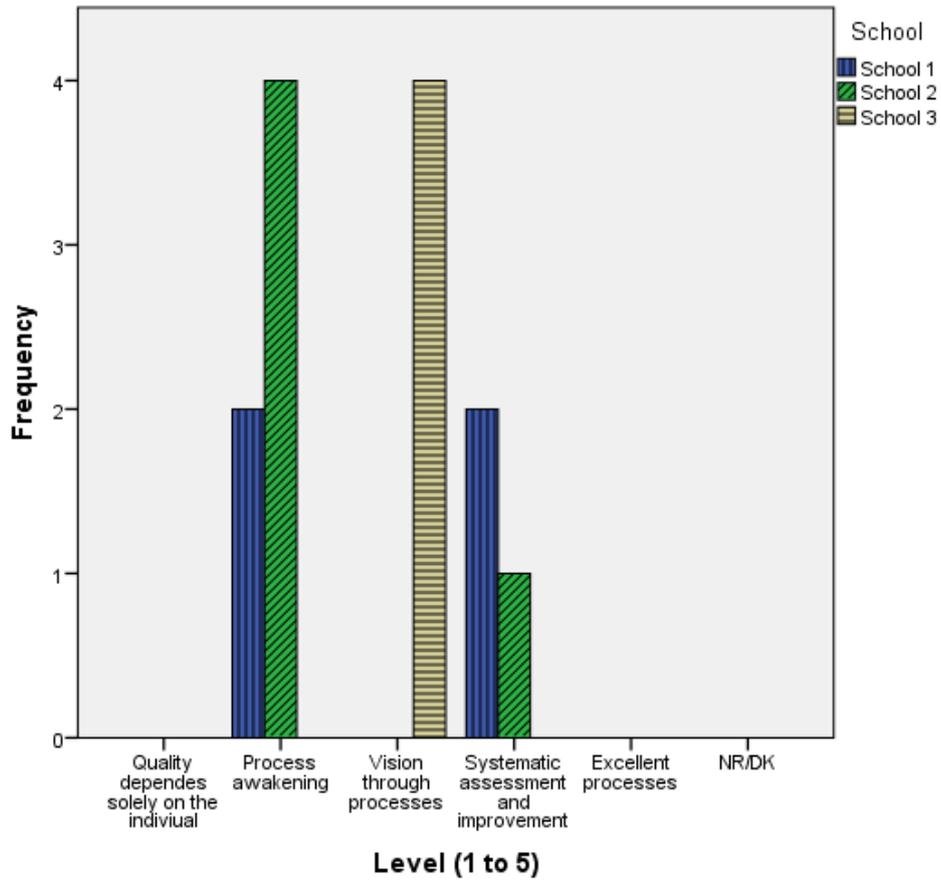


Figure IV-10. Leadership and External Relations

#### 4.3.1.4 Sub-criterion 1d: Leadership and Motivation

The school has processes for motivation and recognition of the staff.

1. How often does the school staff hold general meetings?

Table IV-33. Staff Meetings Frequency

Frequency of staff meetings	School			Total
	School 1	School 2	School 3	
Just when problems arise	1	0	1	2
Once a year	0	0	1	1
Twice a year	1	1	1	3
Three times a year or more	2	4	1	7
NR/DK	0	0	0	0
<b>Total</b>	<b>4</b>	<b>5</b>	<b>4</b>	<b>13</b>

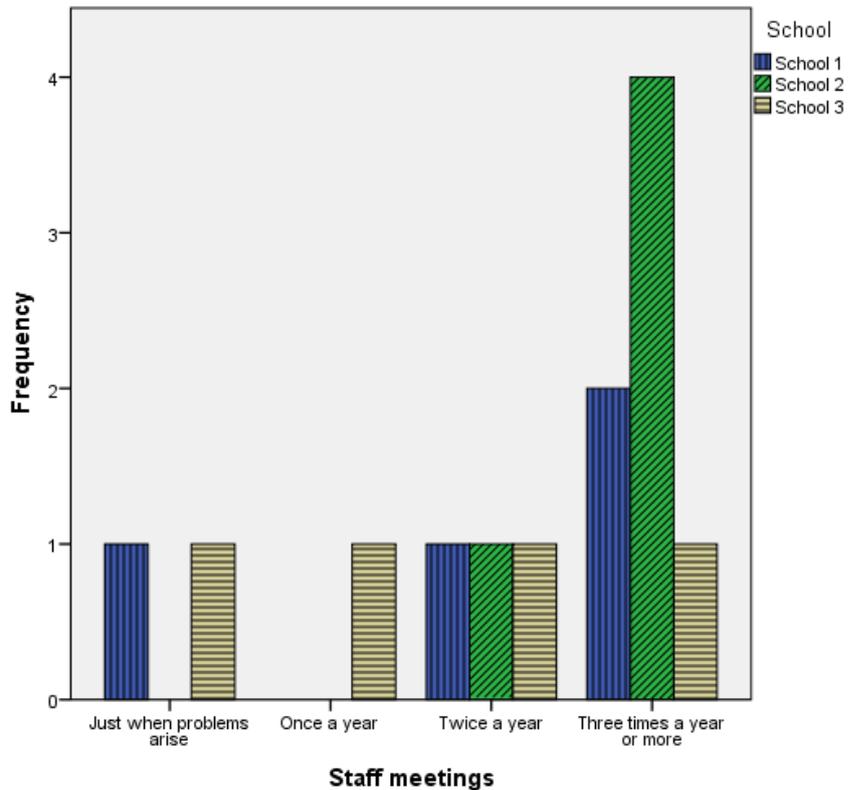


Figure IV-11. Frequency of Staff Meetings

The three schools hold regular meeting with the staff. There are discrepancies concerning the frequency at School 1: one member affirms that meetings are held just when problems arise, another one twice a year and two three times a year or more.

Instead the members of School 2 converge on three times a year or more (four out of five) while in School 3 every member answers in a different way.

2. Are the employees able to explain the vision and mission of their school?

Table IV-34. Employees able to Explain Vision and Mission

Employees able to explain vision and mission	School 1	School 2	School 3	Total
No	0	0	4	4
Yes	4	3	0	7
NR/DK	0	2	0	2
Total	4	5	4	13

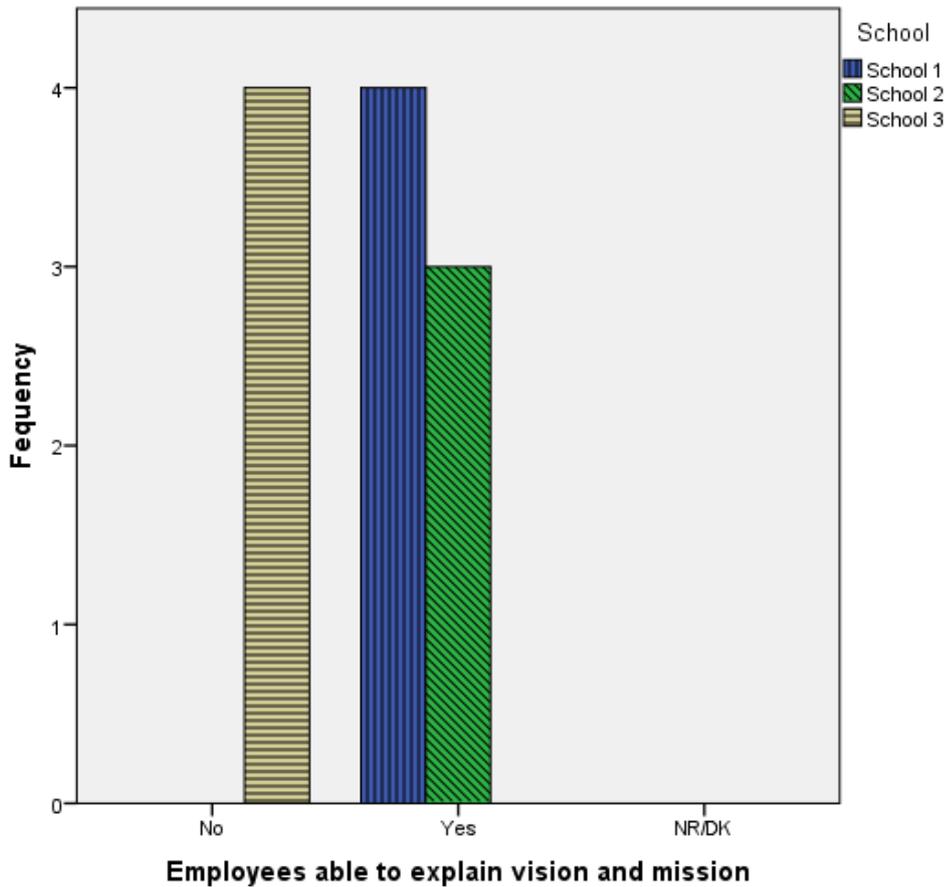


Figure IV-12. Are the Employees able to explain the Vision and Mission of the School?

School 1 states that the employees are able to explain the vision and mission of the institution. This statement looks contradictory with the fact of not having a written document that defines the vision and mission of the school. School 2 also states to have employees able to explain the vision and mission of the schools. School 3 instead recognizes not to have them. This is paradoxical as two members of the team of this school affirmed that the school had a document to define the vision and mission of the school.

3. In which level does your school find itself?

Table IV-35. Leadership and Motivation

Leadership and Motivation	School			Total
	School 1	School 2	School 3	
No processes	0	0	0	0
Process awakening	0	1	0	1
Vision through processes	1	0	4	5
Systematic assessment and improvement	3	4	0	7
Excellent processes	0	0	0	0
NR/DK	0	0	0	0
<b>Total</b>	<b>4</b>	<b>5</b>	<b>4</b>	<b>13</b>

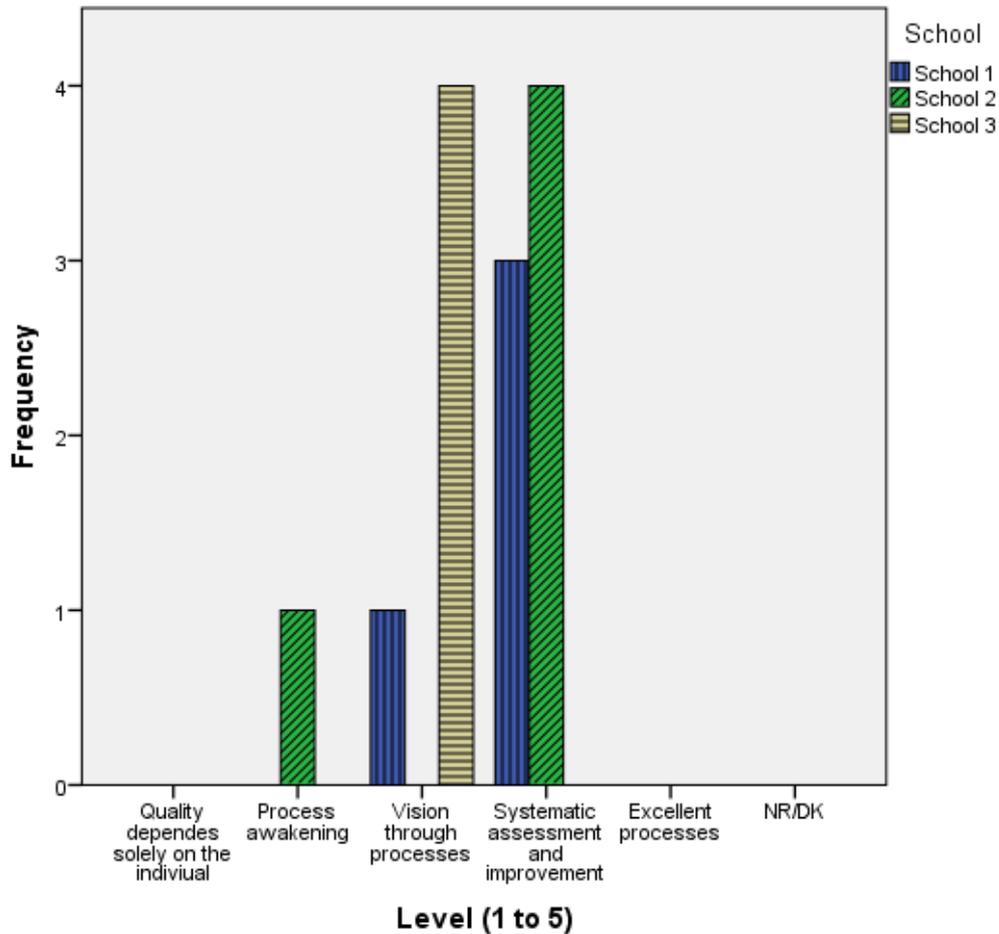


Figure IV-13. Leadership and Motivation

As for the self-perception, Schools 1 and 2 have a positive one (Level 4: Systematic assessment and improvement) while School 3 identifies itself with level 3 (Vision through processes).

#### *4.3.1.5 Results Summary and Identification of Strengths and Areas for Improvement*

The results for the self-perception on this criterion can be calculated with the Self-Assessment Matrix (Appendix 6) and summarized as follows:

Table IV-36. Summary of Results on Leadership

Criterion	Sub-criterion	Question	School 1	School 2	School 3
1. LEADERSHIP	Development of mission and vision	1	0	0	5
		2	0	0	2
		3	9	4.4	6.5
	Continuous improvement of management systems	1	0	5	5
		2	0	5	5
		3	6.5	4.4	6
	Leadership and external relations	1	2.5	5	5
		2	0.75	1.66	0.66
		3	10	5	6
	Leadership and motivation	1	2	2.8	1.5
		2	5	5	0
		3	9	8.6	6
Maximum Total = 82. 10% of the total score. Maximum Score = 100		TOTAL	44.75	46.86	48.66
		SCORE = TOTAL × 1.22	54.595	57.17	59.36

These results could be compared with those obtained through the results based upon data. The boxes in grey report a divergence with the previous results:

Table IV-37. Summary of Results on Leadership Based upon Data

Criterion	Sub-criterion	Question	School 1	School 2	School 3
1. LEADERSHIP	Development of mission and vision	1	0	0	5
		2	0	0	2
		3	9	4.4	6.5
	Continuous improvement of management systems	1	0	0	0
		2	0	0	0
		3	6.5	4.4	6
	Leadership and external relations	1	0	5	5
		2	0.75	1.66	0.66
		3	10	5	6
	Leadership and motivation	1	2	2.8	1.5
		2	5	5	0
		3	9	8.6	6
Maximum Total = 82. 10% of the total score. Maximum Score = 100		TOTAL	42.25	36.86	38.66
		SCORE = TOTAL × 1.22	51.55	44.97	47.16

Then we can compare both results: those based upon the internal discussion of the Quality Team with those confronted with data:

Table IV-38. Comparison of Results for Leadership

	School 1		School 2		School 3	
Criterion	Self-Perception	Based on Data	Self-Perception	Based on Data	Self-Perception	Based on Data
Leadership	54.595	51.55	57.17	44.97	59.36	47.16

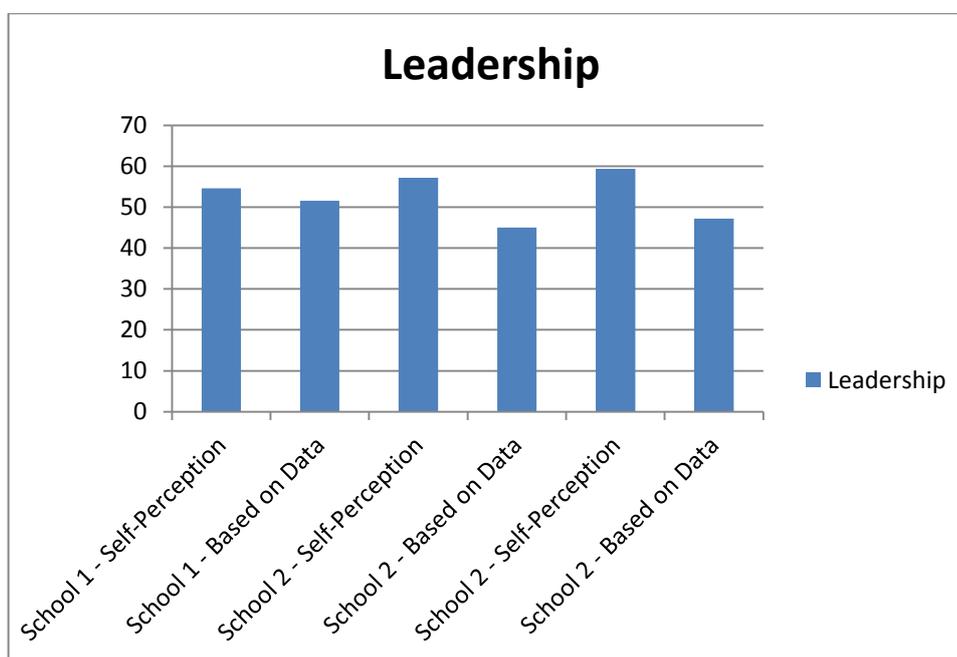


Figure IV-14. Comparison of Results for Leadership

Considering all this data, the researcher summarized like this the strengths and areas for improvement of these schools:

Table IV-39. Leadership: Strengths and Areas for Improvement according to Data.

School	Strengths	Areas for improvement
1	Employees are able to explain the vision and mission	Communication of a written document with statement of mission, vision and values Definition of self-assessment periods and procedures in view of producing an improvement plan
2	Definition of self-assessment periods and procedures in view of producing an improvement plan Employees are able to explain the vision and mission	Communication of a written document with statement of mission, vision and values
3	Promotion of continuous improvement	Employees not able to explain the vision and mission

#### 4.3.2 Criterion 2: Planning and Strategy

Excellent schools implement their mission, vision and values by developing a strategy focused on students, staff, parents and all stakeholders that leads to continuous improvement. Policies and strategies are based upon current and future needs and expectations and upon the data of performance indicators. These policies and strategies are developed, revised and refined and are coherent with the Catholic identity of the school.

##### 4.3.2.1 Sub-criterion 2a: Stakeholder Input into Strategic Planning

The needs and expectations of stakeholders (teachers, students, parents, municipality, Ministry, staff and society) are taken into account in the process of strategic planning.

1. In which level does your school find itself?

Table IV-40. Stakeholder Input into Strategic Planning

Stakeholder Input into Strategic Planning	School			Total
	School 1	School 2	School 3	
No processes	0	0	0	0
Process awakening	1	1	0	2
Vision through processes	0	3	3	6
Systematic assessment and improvement	3	1	0	4
Excellent processes	0	0	0	0
NR/DK	0	0	1	1
<b>Total</b>	<b>4</b>	<b>5</b>	<b>4</b>	<b>13</b>

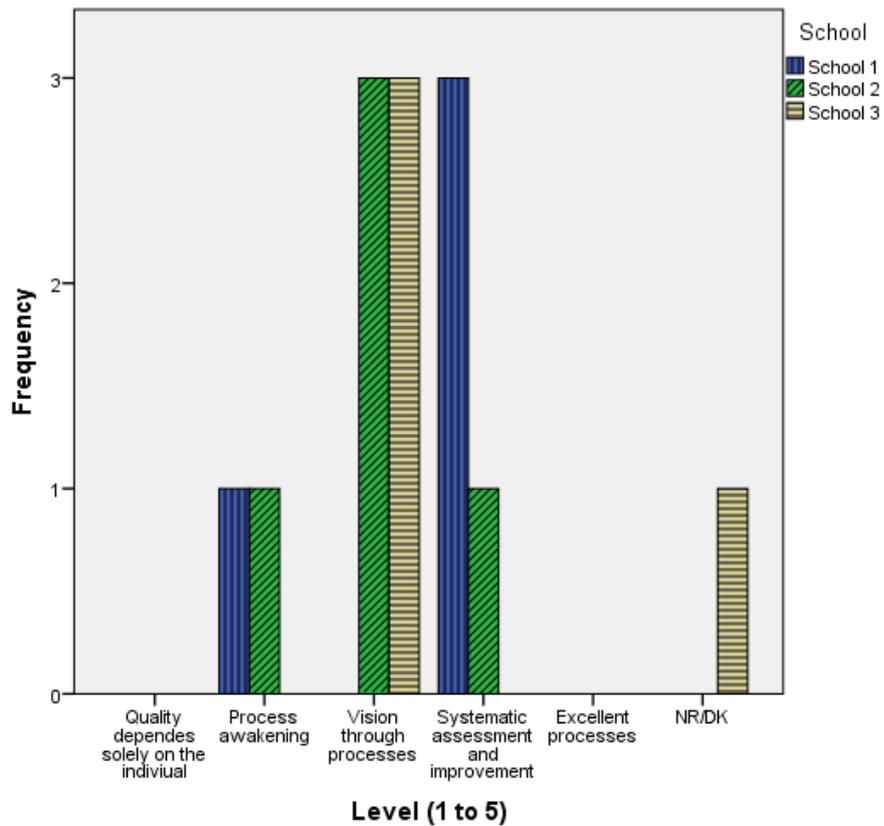


Figure IV-15. Stakeholder Input into Strategic Planning

School 1 states to take into account the needs and expectations of stakeholders (teachers, students, parents, municipality, etc.) as they mainly define themselves at level 4 (Systematic assessment and improvement), while Schools 2 and 3 are more modest in their self-assessment and consider themselves to be at level 3 (Vision through processes).

#### **4.3.2.2 Sub-criterion 2b: Performance Indicator Input to Strategic Planning**

The assessment of performance and satisfaction indicators regarding student and parents' satisfaction, staff, society and other core stakeholders serves as a key input to strategic planning.

1. How does your school measure the satisfaction of the students and parents with the school?

Table IV-41. Measure of Satisfaction of Parents and Students

Measure of satisfaction of parents and students	School			Total
	School 1	School 1	School 1	
Never thought about it	1	1	0	2
Through informal exchange of opinions	3	1	1	5
Through periodical meetings	0	0	1	1
Through questionnaires	0	1	1	2
NR/DK	0	2	1	3
<b>Total</b>	<b>4</b>	<b>5</b>	<b>4</b>	<b>13</b>

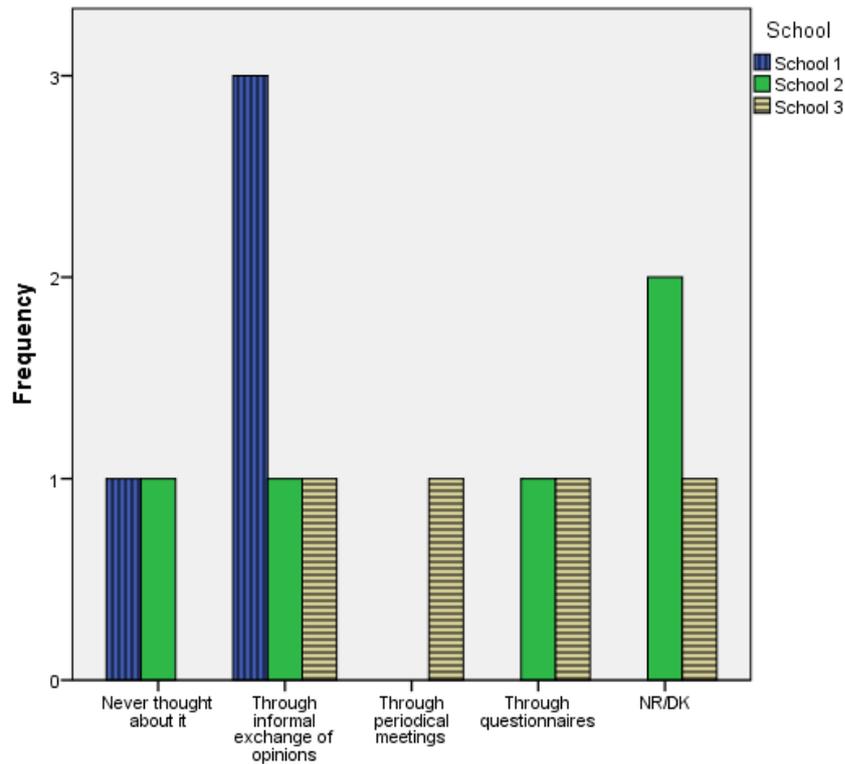


Figure IV-16. Measure of Satisfaction of the Students and Parents

School 1 measures the satisfaction of students and parents with the school through informal exchange of opinions. As for Schools 2 and 3, the answers of the members of their Quality Teams are much dispersed and therefore not conclusive.

2. In addition to the marks of the students, which indicators does the school use to assess its performance? List them.

No answers were given to this question. In the same line, a study carried out in twelve locations of Blue Nile and Red Sea State states that “evaluation of school performance is limited to the outcomes of the final grade, to the neglect of the results of promotion between grades” (EU et al., 2015, p. 446).

3. In which level does your school find itself?

Table IV-42. Performance Indicator Input to Strategic Planning

Performance Indicator Input to Strategic Planning	School			Total
	School 1	School 2	School 3	
No processes	0	0	0	0
Process awakening	1	0	0	1
Vision through processes	2	4	1	7
Systematic assessment and improvement	1	0	0	1
Excellent processes	0	0	0	0
NR/DK	0	1	3	4
<b>Total</b>	<b>4</b>	<b>5</b>	<b>4</b>	<b>13</b>

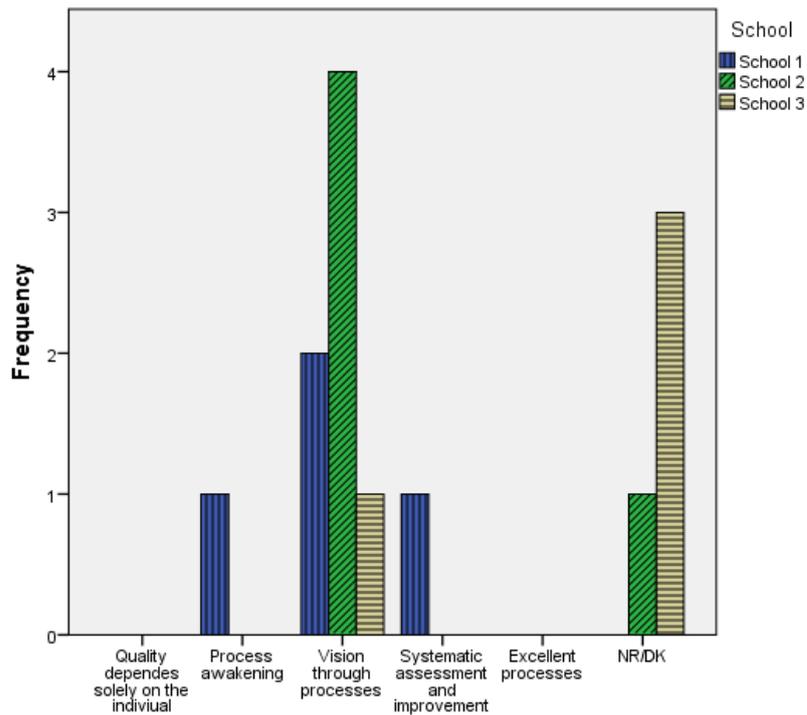


Figure IV-17. Performance Indicator Input to Strategic Planning

As for the use of assessment of performance and satisfaction indicators regarding students, parents and others stakeholders satisfaction in view of strategic

planning, Schools 1 and 2 mainly consider themselves at level 3 (Vision through processes) while the majority of the members of the Quality Team of School 3 do not express themselves on this regard.

**4.3.2.3 Sub-criterion 2c: Designing, Communicating and Validating the Strategic Plan**

The strategic plan is defined, shared, implemented, assessed, and validated to ensure its effective implementation and follow-up.

1. Has the school a Strategic Plan that, in addition to its mission, vision and values, defines some priorities or goals to be realized in the coming years and the strategies to achieve them?

Table IV-43. School Strategic Plan

School strategic plan	School			Total
	School 1	School 2	School 3	
No	0	2	2	4
Yes	0	0	1	1
NR/DK	4	3	1	8
<b>Total</b>	<b>4</b>	<b>5</b>	<b>4</b>	<b>13</b>

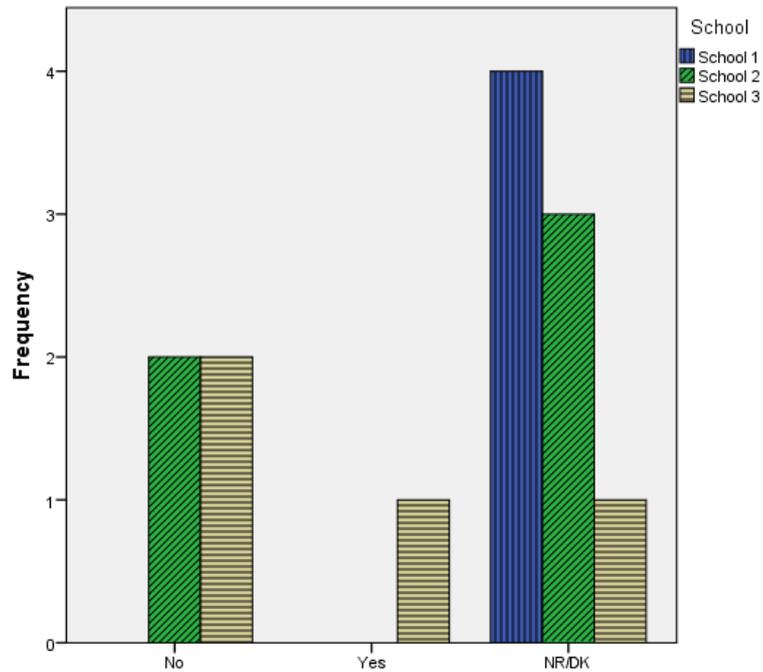


Figure IV-18. Does the School Have a Strategic Planning?

The four members of School 1 did not express themselves concerning the existence of a Strategic Plan of the School. As for Schools 2 and 3 they are divided between those who affirm that there is no such a plan (2 members in every team) and those who do not express themselves. Certainly this fact indicates a weak point of these schools.

The answers to this question are more coherent with the reality in relation to previous questions on the existence of a document that defines mission, vision and values (sub-criterion 1a) and of an improvement plan produced as a consequence of the self-evaluation (sub-criterion 1b).

A UNESCO report mentions the “absence of forward-looking resource planning” at the level of general education in Sudan. This absence is a great problem in Sudan as this planning “is essential for an organization to meet its mission, operational objectives and strategic targets. It involves anticipating future resource requirements and developing plans and strategies to meet them” (Unesco, 2018, p. 128).

2. In which level does your school find itself?

Table IV-44. Designing, Communicating and Validating the Strategic Plan

Designing, Communicating and Validating the Strategic Plan	School			Total
	School 1	School 2	School 3	
No processes	0	0	0	0
Process awakening	0	3	0	3
Vision through processes	0	0	0	0
Systematic assessment and improvement	0	2	0	2
Excellent processes	0	0	0	0
NR/DK	4	0	4	8
Total	4	5	4	13

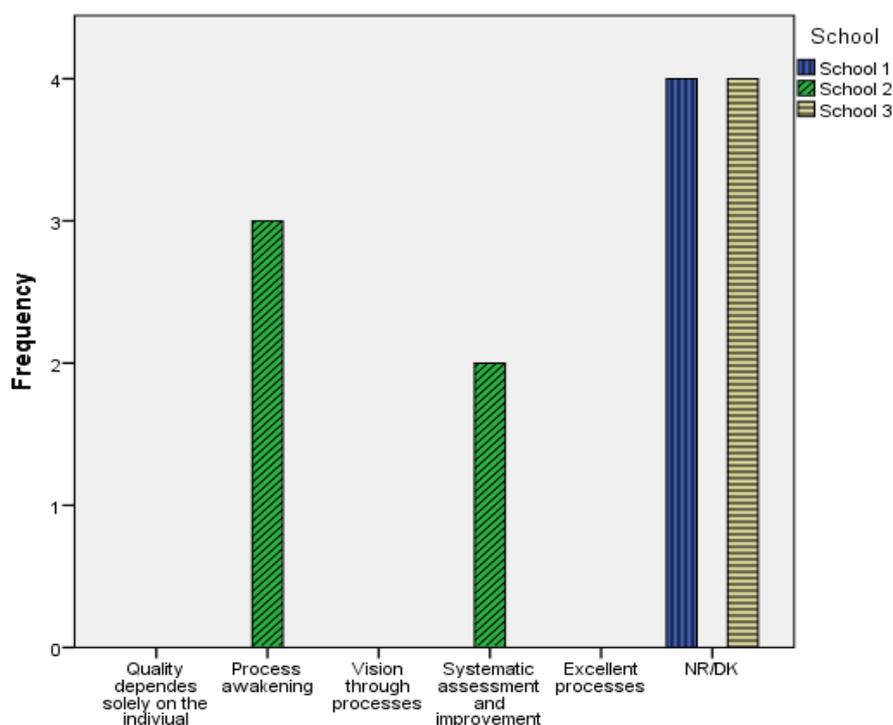


Figure IV-19. Designing, Communicating and Validating the Strategic Plan

Consequently with the high number of missing answers on question one (10), the members of Schools 1 and 3 did not express themselves in this second question. Three members of School 2 instead consider themselves to be at level 2 (Process awakening),

while 2 look too optimistic as they consider the school to be at level 4 (Systematic assessment and improvement).

#### *4.3.2.4 Sub-criterion 2d: Implementation of Policies and Strategy and Updating the Strategic Plan*

The administration of the school communicates and executes defined strategies and policies, as well as provides continuous updates to the plan.

1. In which level does your school find itself?

Table IV-45. Implementation of Policies and Strategy and Updating the Strategic Plan

Implementation of Policies and Strategy and Updating the Strategic Plan	School			Total
	School 1	School 2	School 3	
Quality depends solely on the individual	0	1	0	1
Process awakening	0	0	0	3
Vision through processes	2	0	0	2
Systematic assessment and improvement	0	3	1	4
Excellent processes	0	0	0	0
NR/DK	2	1	3	6
<b>Total</b>	<b>4</b>	<b>5</b>	<b>4</b>	<b>13</b>

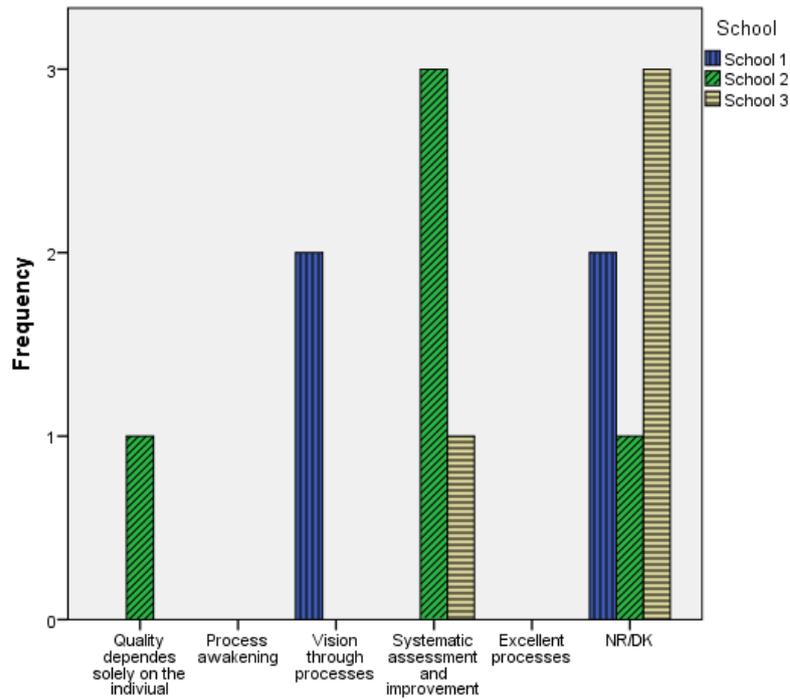


Figure IV-20. Implementation of Policies and Strategy and Updating the Strategic Plan

Since the schools look not to have proper strategic plans, the self-assessment in this question would be expected to be low or to remain in suspension. It happens like this with School 3 where just one member answered (level 3). In the same line, one member of School 1 assesses the school at the lowest level (Quality depends solely on the individual), but three members speak of “Systematic assessment and improvement”. As for School 1, two members take an intermediate position (Vision through processes) while the majority (3) prefer not to respond.

#### ***4.3.2.5 Sub-criterion 2e: School Catholic Identity***

This sub-criterion assesses if the school expresses its Catholic identity in a clear way.

1. Is there a census of the Catholic students who have not received the Sacraments of initiation?

Table IV-46. Census of Catholic Students who Have not Received the Sacraments of Initiation

Census of Catholic students who have not received the Sacraments of Initiation	School			Total
	School 1	School 2	School 3	
Yes	0	0	0	0
No	3	5	4	12
NR/DK	1	0	0	1
<b>Total</b>	<b>4</b>	<b>5</b>	<b>4</b>	<b>13</b>

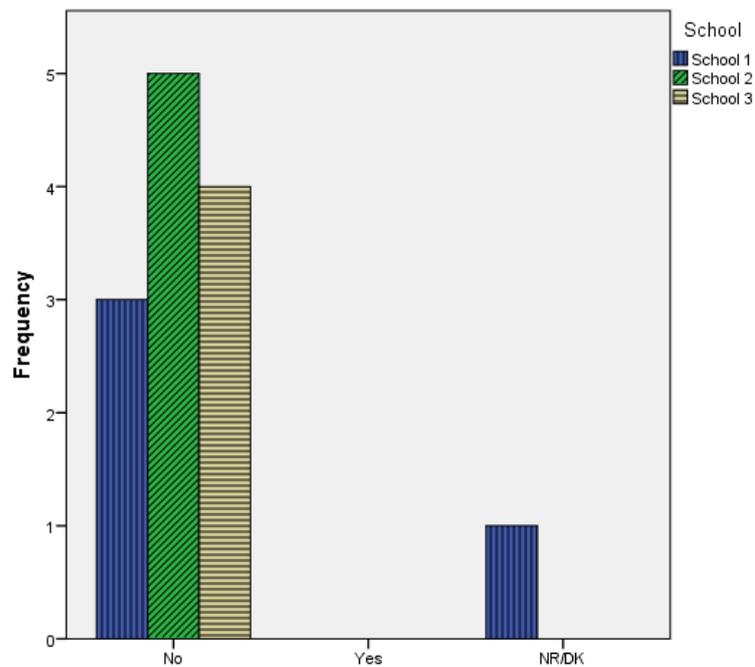


Figure IV-21. Census of Catholic Students who have not Received the Sacraments of Initiation

The schools affirm not to have a census of Catholic students who did not receive the Sacraments of Initiation. The Sacraments of Initiation in the Catholic Church are Baptism, Eucharist and Confirmation. They represent the foundation of Christian life

(CCC, n. 1212) and therefore, care for this aspect looks fundamental in relation to the identity, mission and quality of these schools.

2. Are there catechism classes for children of Catholic families who have not received the sacraments of initiation?

Table IV-47. Catechism to Prepare Catholic Children for Sacraments of Initiation

	School			Total
	School 1	School 2	School 3	
No	3	5	3	11
Yes	0	0	1	1
NR/DK	1	0	0	1
Total	4	5	4	13

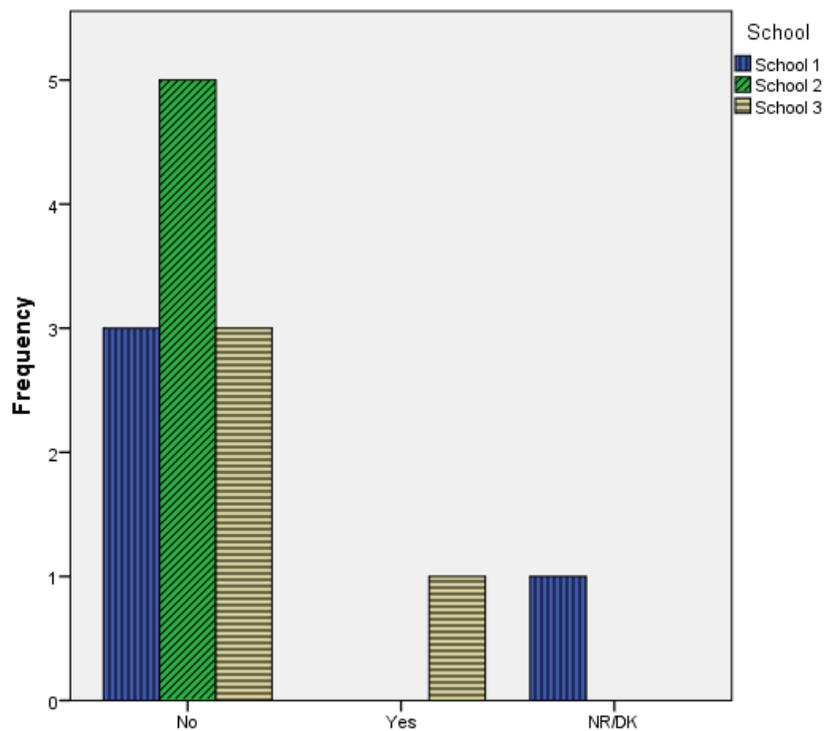


Figure IV-22. Catechism to Prepare Catholic Children for Sacraments of Initiation

The three schools do not have catechism lessons for the children of Catholic families who have not received the Sacraments of Initiation.

3. Are there pastoral activities for Catholic students of the school (Eucharistic celebrations, retreats, catechesis...)?

Table IV-48. Pastoral Activities at the School

Pastoral activities at the School	School			Total
	School 1	School 2	School 3	
No	0	4	0	4
Yes	4	0	4	8
NR/DK	0	1	0	1
Total	4	5	4	13

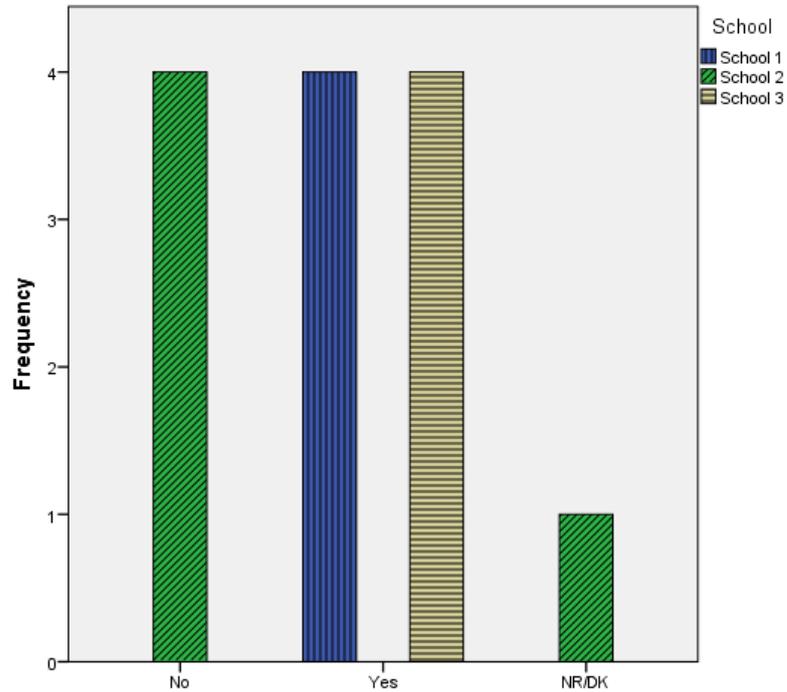


Figure IV-23. Pastoral Activities at the School

Schools 1 and 3 organize pastoral activities for the Catholic students (Eucharistic celebrations, retreats, catechesis...). School 2 instead affirms not to have them.

4. Are Catholic symbols visible in the school?

Table IV-49. Catholic Symbols Visible in the School

Catholic symbols visible in the school	Schools			Total
	School 1	School 2	School 3	
No	0	3	2	5
Yes	4	1	2	7
NR/DK	0	1	0	1
<b>Total</b>	<b>4</b>	<b>5</b>	<b>4</b>	<b>13</b>

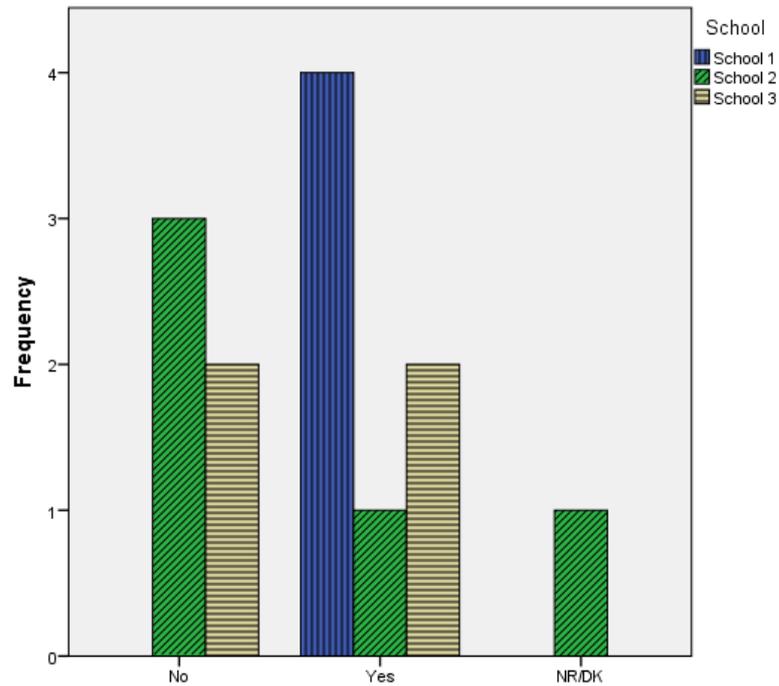


Figure IV-24. Catholic Symbols Visible in the School

All the members of School 1 that answered agreed on the presence of Catholic symbols visible in the school. At School 2 instead they mainly affirm that there are not

while at School 3 there is division of opinions and therefore the answer cannot be considered determining.

5. Does the school prepare appropriate Christmas decoration?

Table IV-50. Preparation of Christmas Decoration

Preparation of Christmas Decoration	School			Total
	School 1	School 2	School 3	
No	0	3	1	4
Yes	4	1	3	8
NR/DK	0	1	0	1
Total	4	5	4	13

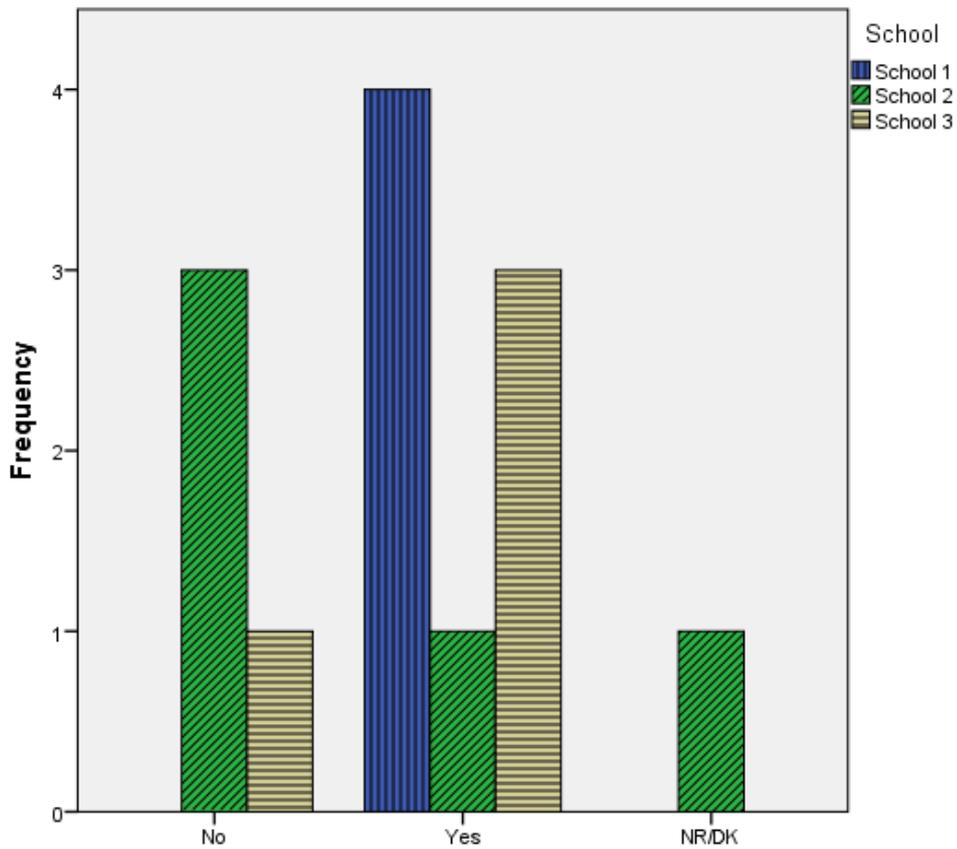


Figure IV-25. Christmas Decoration

In tune with the third question that referred to the organization of pastoral activities, School 1 and 3 are the ones preparing Christmas decoration while School 2 does not do it.

6. There is an strategic planning that includes the care for the Catholic identity:

Table IV-51. Strategic Planning that Includes the Care for Catholic Identity

	School			Total
	School 1	School 2	School 3	
No	0	1	0	1
Yes	2	4	3	9
NR/DK	2	0	1	3
Total	4	5	4	13

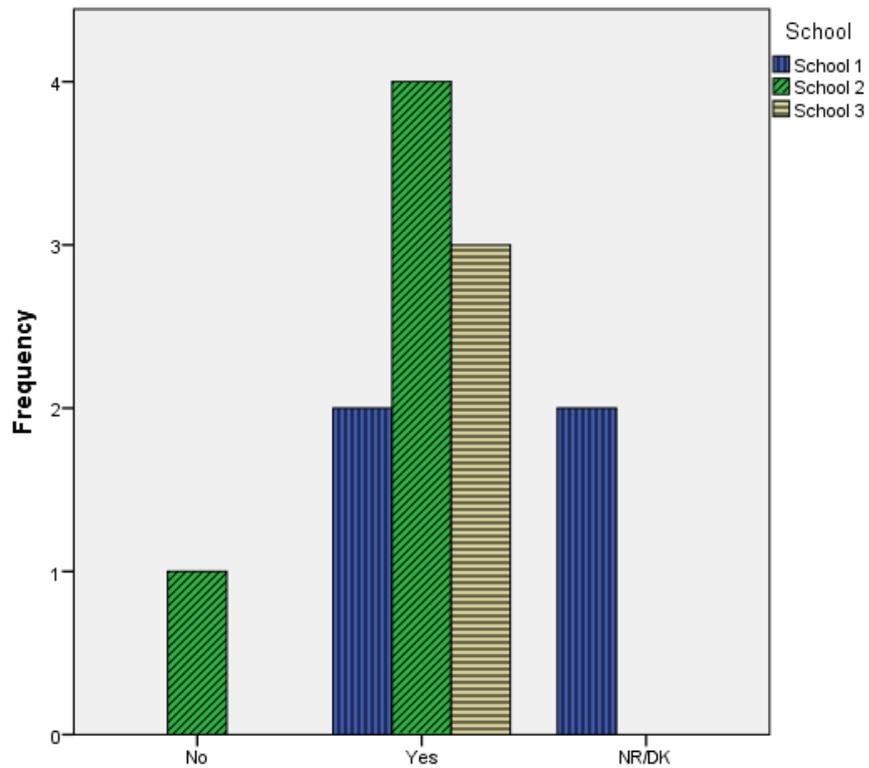


Figure IV-26. Strategic Planning that Includes the Care for Catholic Identity

The majority of the members of the Quality Teams of Schools 2 (4 members) and 3 (3 members) affirm that their school have a strategic plan that includes the care for the Catholic identity of the school. The members of School 1 are more doubtful about as three members do not answer. Notwithstanding, it is convenient to recall that previously the three schools have affirmed not to have any strategic plan.

7. Does the academic calendar include Christian celebrations?

Table IV-52. Christian Celebrations in the School Calendar

Christian Celebrations in the School Calendar	School			Total
	School 1	School 2	School 3	
No	0	1	0	1
Yes	4	4	4	12
NR/DK	0	0	0	0
Total	4	5	4	13

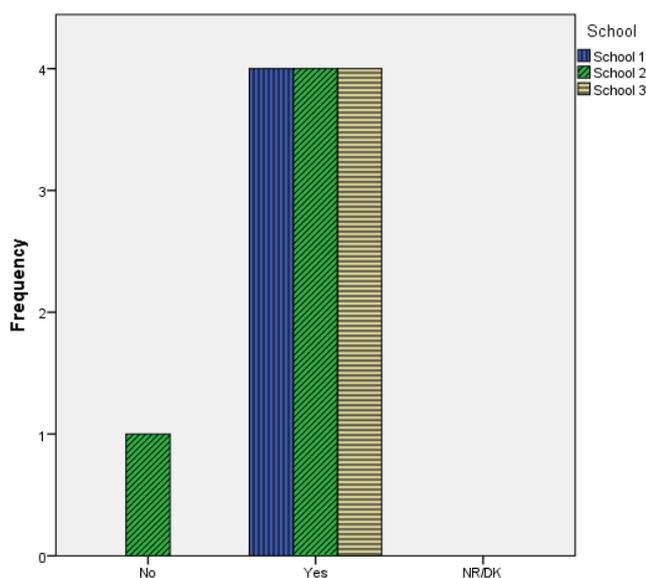


Figure IV-27. Christian Celebrations in the School Calendar

All the three schools include Christian celebrations (Christmas, Easter, and Assumption) in the school calendar.

It is worth bringing here the list of celebrations presented by the school administrations during the seminar previous to this study:

Table IV-53. List of Celebrations Presented Previously to this Study

School	Celebrations
School 1	Saint Daniel Comboni, Christmas, national feasts
School 2	Christmas, graduation
School 3	Saint Daniel Comboni; Our Lady (15 <sup>th</sup> August); Christmas; Other national and church celebrations

8. Does the Parish priest or the competent ecclesiastical authority regularly visit the school?

Table IV-54. Visits of Ecclesiastical Authorities to the School

Visits of ecclesiastical authorities to the school	School			Total
	School 1	School 2	School 3	
Yes	4	5	4	13
No	0	0	0	0
NR/DK	0	0	0	0
Total	4	5	4	13

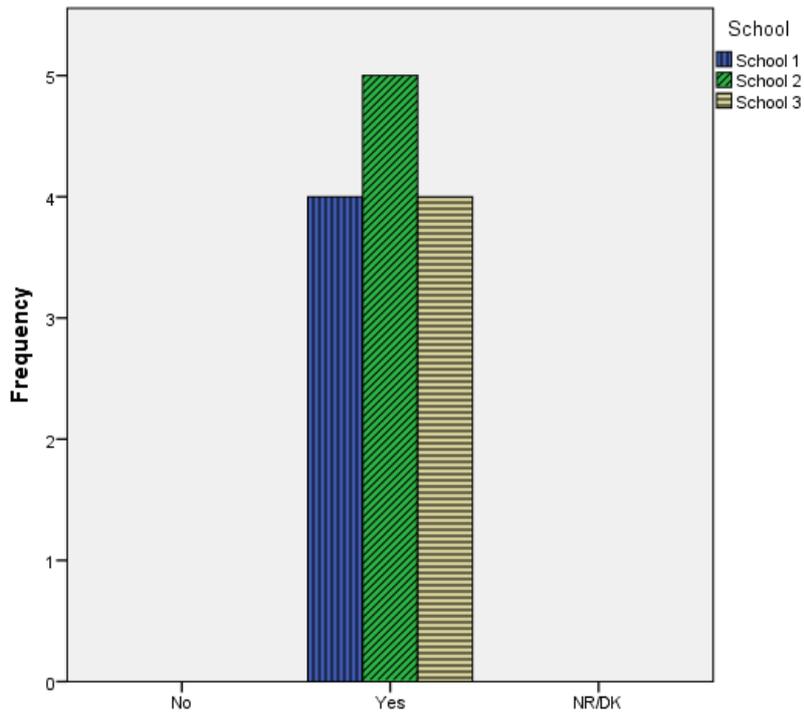


Figure IV-28. Visits of Ecclesiastical Authorities to the School

In the three schools the Parish Priest or the competent ecclesiastical authority regularly visit them.

9. Does the school day start with prayer?

Table IV-55. The School Day Starts with Prayer

The School Day Starts with Prayer	School			Total
	School 1	School 2	School 3	
Yes	4	5	4	13
No	0	0	0	0
NR/DK	0	0	0	0
<b>Total</b>	<b>4</b>	<b>5</b>	<b>4</b>	<b>13</b>

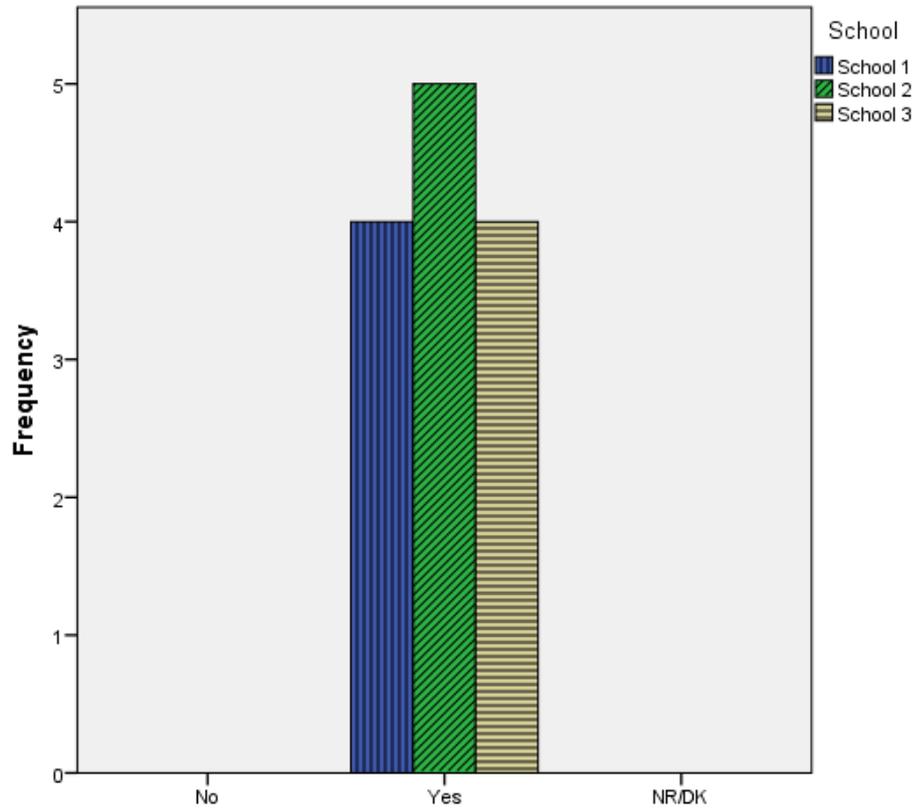


Figure IV-29. The School Day Starts with Prayer

At the three schools, the day starts with a prayer during the school assembly (*tabūr*).

10. Are pictures of the current Pope and Archbishop displayed and visible?

Table IV-56. Pictures of Current Pope or Archbishop

Picture of the current Pope or Archbishop	School			Total
	School 1	School 2	School 3	
No	1	4	0	5
Yes	3	1	4	8
NR/DK	0	0	0	0
Total	4	5	4	13

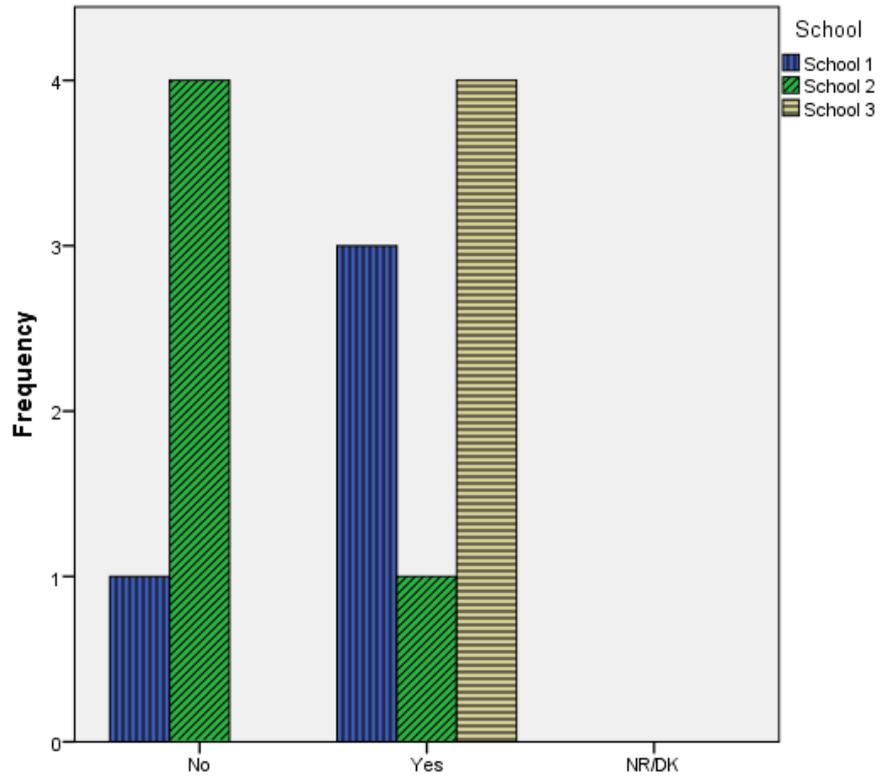


Figure IV-30. Picture of Current Pope or Archbishop

Schools 1 and 3 look to have a picture of the current Pope or the Archbishop of Khartoum displayed in a visible place. School 2 instead looks not to have it.

11. Is the staff ethnically diverse?

Table IV-57. Ethnically Diverse Staff

Ethnically diverse staff	School			Total
	School 1	School 2	School 3	
No	0	1	0	1
Yes	4	3	4	11
NR/DK	0	1	0	1
Total	4	5	4	13

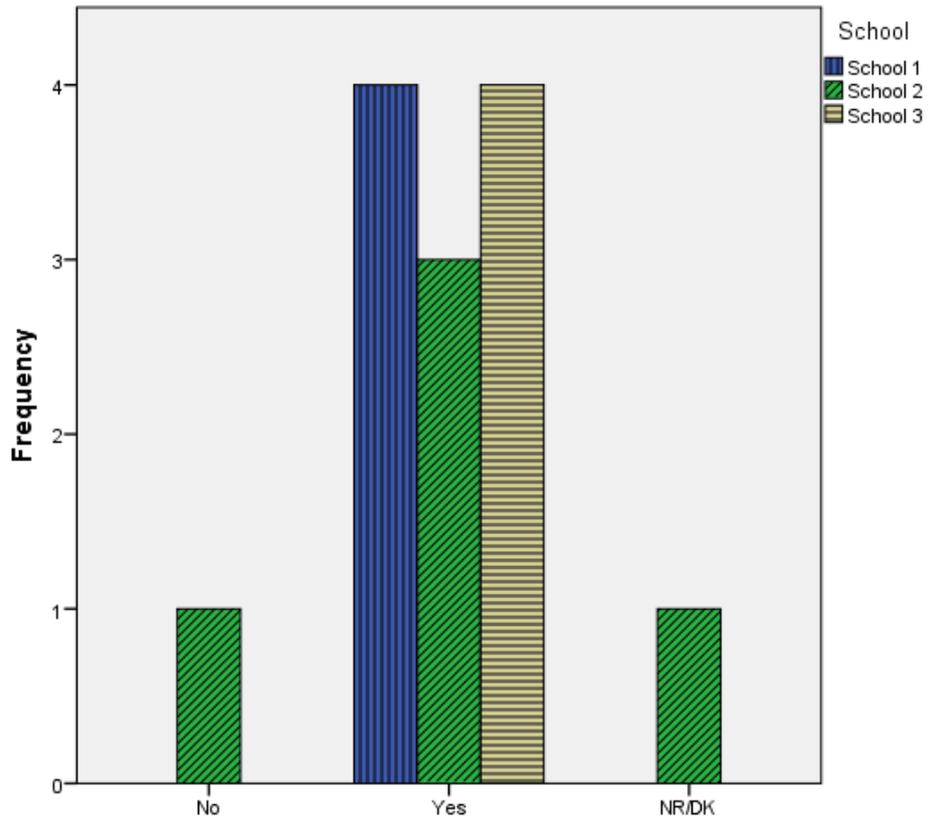


Figure IV-31. Ethnically Diverse Staff

From these results, it can be concluded that all the three schools have ethnically diverse staff members.

12. Is the student body socio-economically and ethnically diverse?

Table IV-58. Socio-economic and Ethnic Diversity among the Students

Socio-economic and ethnic diversity among the students	School			Total
	School 1	School 2	School 3	
No	0	0	0	0
Yes	4	5	4	13
NR/DK	0	0	0	0
Total	4	5	4	13

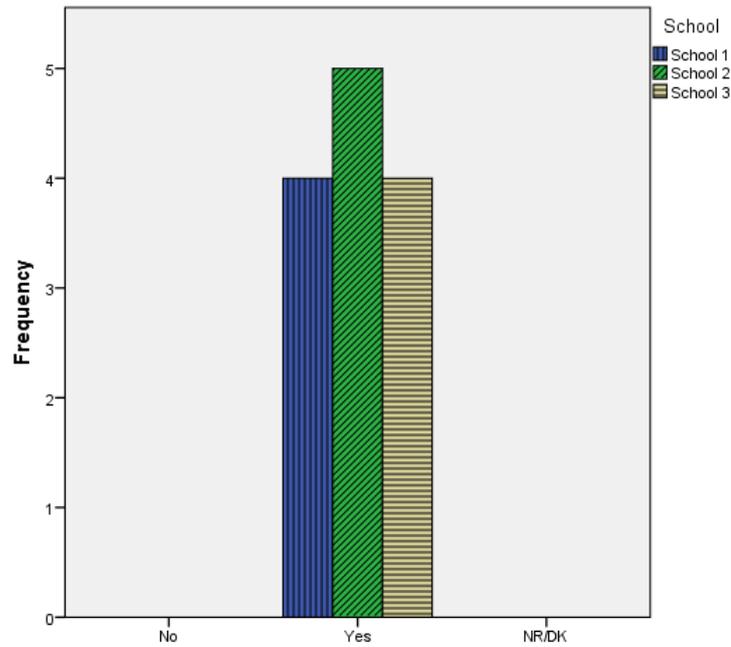


Figure IV-32. Socio-economic and Ethnic Diversity among the Students

From the results, it can be concluded that all the three schools have socio-economic and ethnical diverse students.

13. In which level does your school find itself as for Catholic identity is concerned?

Table IV-59. Catholic Identity

Catholic identity	School			Total
	School 1	School 2	School 3	
Quality depends solely on the individual	0	4	0	4
Process awakening	0	0	2	2
Vision through processes	4	0	1	5
Systematic assessment and improvement	0	0	1	1
Excellent processes	0	0	0	0
NR/DK	0	1	0	1
<b>Total</b>	<b>4</b>	<b>5</b>	<b>4</b>	<b>13</b>

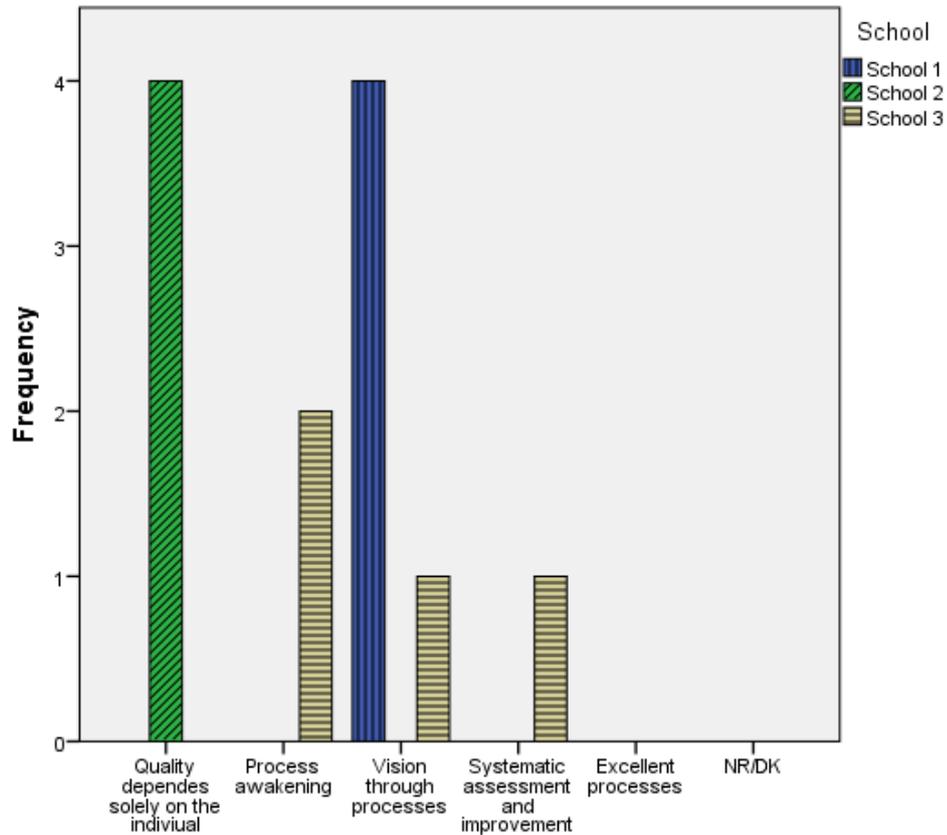


Figure IV-33. Catholic Identity

As for the expression of the Catholic identity of the school, School 1 considers itself to be at level 3 (Vision through processes), while School 2 considers itself at level 1 (Quality depends solely on the individual). The members of the Quality Team of School 3 disagree between level 2 (two members), 3 (one member) and 4 (one member). It calls the attention that the self-perception is lower than for other sub-criteria where the objective facts look to indicate a lower status.

#### *4.3.2.6 Results Summary and Identification of Strengths and Areas for Improvement*

The results for the self-perception on this criterion can be calculated with the Self-Assessment Matrix (Appendix 6) and summarized as follows:

Table IV-60. Summary of Results on Planning and Strategy

Criterion	Sub-criterion	Question	School 1	School 2	School 3
2. PLANNING AND STRATEGY	Stakeholder input into strategic planning	1	8	6	6
	Performance indicator input to strategic planning	1	0.75	1.3	2
		2	0	0	0
		3	6	6	6
	Designing, communicating and validating the strategic plan	1	0	0	1.7
		2	0	2.4	0
	Implementation of policies and strategy and updating the strategic plan	1	6	10	10
	School Catholic identity	1	0	0	0
		2	0	0	0
		3	4.6	0	4.6
		4	4.6	0	2.3
		5	4.6	0	4.6
		6	4.6	4.6	4.6
		7	4.6	4.6	4.6
		8	4.6	4.6	4.6
		9	4.6	4.6	4.6
10		4.6	0	4.6	
11		4.6	4.6	4.6	
12		4.6	4.6	4.6	
13		9.2	0.92	5.06	
Maximum Total = 128. 10% of the total Score. Maximum Score = 100		TOTAL	75.95	54.22	74.46
		SCORE = TOTAL × 0.78	59.24	42.29	58.08

In this case, there are not different results based upon data additional to the internal discussion of the quality teams:



Figure IV-34. Comparison of Results for Planning and Strategy

Considering all this data, the researcher summarized like this the strengths and areas for improvement of these schools:

Table IV-61. Strengths and Areas for Improvement.

School	Strengths	Areas for improvement
1	Catholic identity	Measurement of the parents and students satisfaction Lack of a strategic plan
2	Implementation of policies and strategy and updating the strategic plan	Lack of a strategic plan
3	Catholic identity	Lack of a strategic plan

There is a contradiction between the high self-perception concerning the implementation of policies and strategy and updating the strategic plan on the one hand, and the lack of as strategic plan on the other hand.

### 4.3.3 Criterion 3: People

Excellent schools value their people and create a culture that allows the mutually beneficial achievement of organizational and personal goals. They develop the capabilities of their people and promote fairness and equality. They care for, communicate, reward and recognize, in a way that motivates people, builds commitment and enables them to use their skills and knowledge for the benefit of the school. This criterion includes: planning, management and development of human resources; implication and assumption of responsibilities; importance of dialogue; appreciation and attention to the persons.

#### 4.3.3.1 Sub-criterion 3a: Human Resources Management

The school has processes to recruit and manage its human resources.

1. Does the school have a written procedure for the recruitment of new staff?

Table IV-62. Written Procedure for Staff Recruitment

Written procedure for staff recruitment	School			Total
	School 1	School 2	School 3	
No	0	0	0	0
Yes	5	4	4	13
NR/DK	0	1	0	1
Total	5	5	4	14

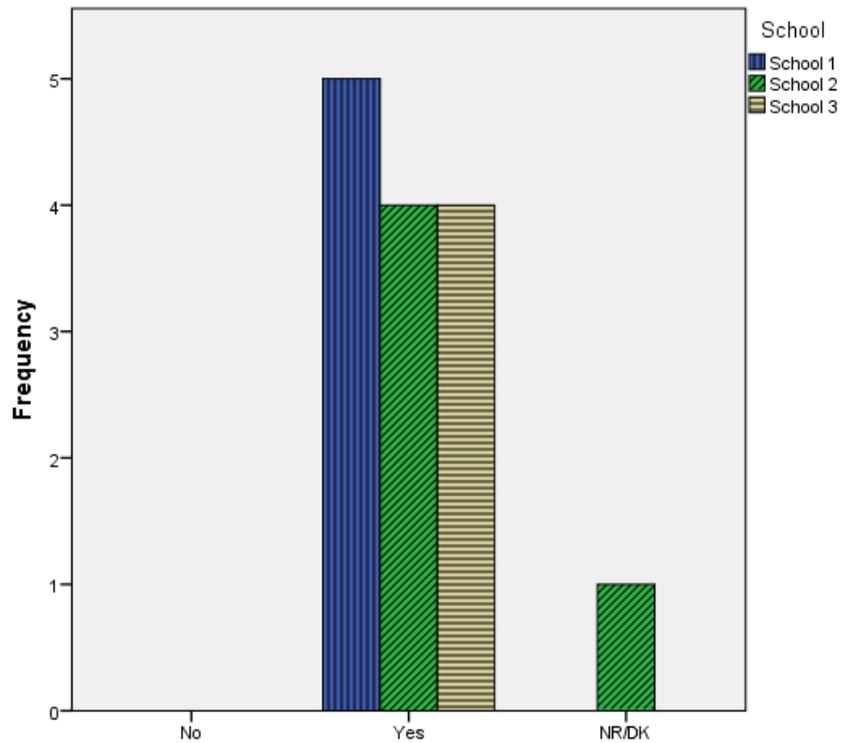


Figure IV-35. Written Procedure for Staff Recruitment?

The three schools state to have written procedures for the recruitment of staff. Schools 1 and 3 attached an “Interview for new teachers” form. As for School 2, the Team Director affirmed that their form is in the Education Office of the Parish as the appointments of teaching staff are centralized for the two Parish Schools. Therefore a new table could be drawn based upon the presence of a written document:

Table IV-63. Presentation of a Written Procedure for the Recruitment of Personnel.

Results based upon Data	School		
	School 1	School 2	School 3
Yes/No	Yes	No	Yes

2. In which level does your school find itself?

Table IV-64. Human Resources Management

	School			Total
	School 1	School 2	School 3	
Quality depends solely on the individual	0	0	0	0
Process awakening	0	1	0	1
Vision through processes	0	0	2	2
Systematic assessment and improvement	5	3	2	10
Excellent processes	0	0	0	0
NR/DK	0	1	0	1
<b>Total</b>	<b>5</b>	<b>5</b>	<b>4</b>	<b>14</b>

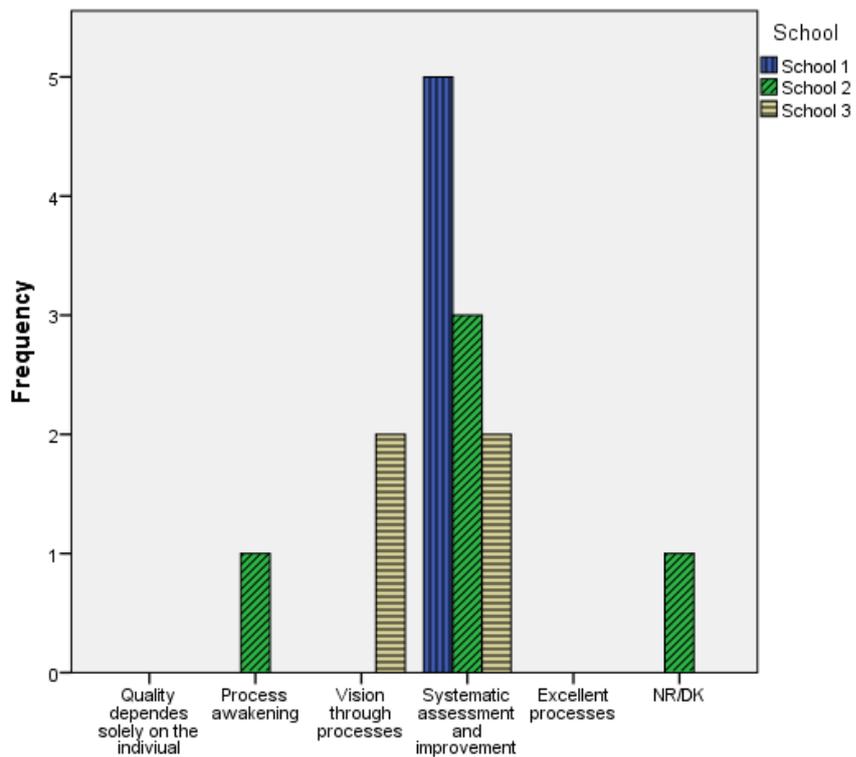


Figure IV-36. Human Resources Management

Schools 1 and 2 have a high self-perception on their human resources management. This is coherent with the fact of having written procedures for the

recruitment of personnel. As for school 3, the opinion is divided between an intermediate and a high perception.

#### 4.3.3.2 Sub-criterion 3b: Competence Development of the Staff

The school has policies and processes to improve its intellectual capital and its individual and organisational competencies.

1. What is the academic degree of the teaching staff:

Table IV-65. Teachers Academic Qualifications

% Teachers Qualifications	School		
	School 1	School 2	School 3
Secondary School	5.5 %	18.75%	
Intermediate Diploma	5.5 %	18.75%	29,2%
Bachelor's Degree	89%	56.25%	41,7%
Post graduate Diploma	0	0	0
Master's Degree	0	6.25%	0
PhD	0	0	0

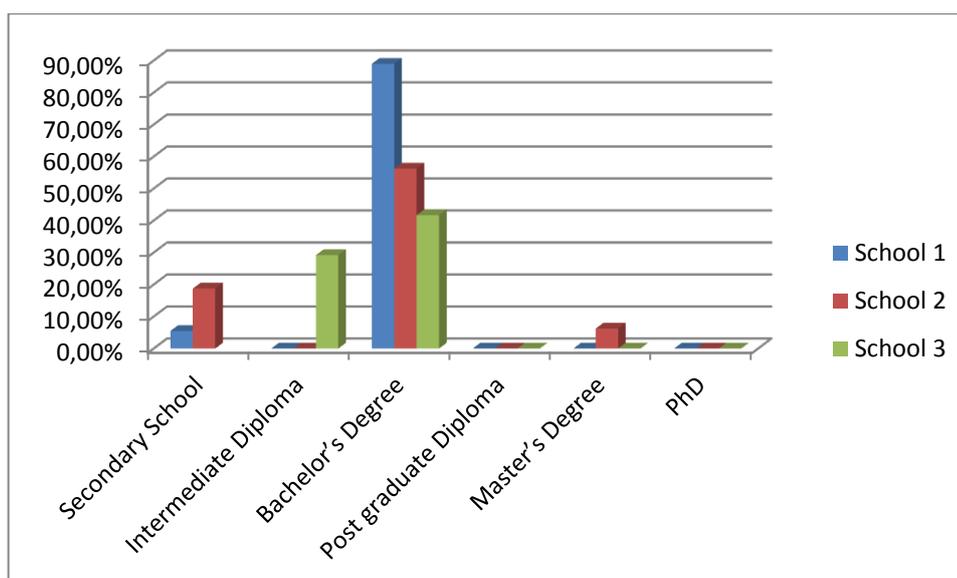


Figure IV-37. % of Teachers who are Holders of a University Degree

School 1 has 35 out of 39 teachers (89%) who are Bachelor’s Degree holders. As for the remaining four teachers, two are elder teachers who just hold the Secondary School Leaving certificate.

School 2 has 16 teachers: 3 just completed Secondary School, three got an Intermediate Diploma, nine a Bachelor’s Degree Holders and one, the Headmaster, is a Master’s Degree holder.

In order to contextualize these results it is convenient to recall that in 1993, the preservice qualification for basic education teachers was revised from a two-year teaching diploma to a four-year bachelor of education degree (B.Ed.). Nonetheless, reality is still far from having every teacher holder of a Bachelor Degree. “Around 50% of basic-education teachers are considered untrained” (Unesco, 2018, p. 46, quoting Unesco, 2008). In an older survey:

conducted in three states (Kassala, North Kordofan and River Nile), the most common teacher qualifications range as follows: 7–38% have completed secondary education, 11–26% have a Bachelor of Arts (B.A.) or Bachelor of Science (B.Sc.) degree, and 9–37% have a B.A. or B.Sc. degree and a B.Ed. degree (World Bank, 2012; quoted by Unesco, 2018, p. 47).

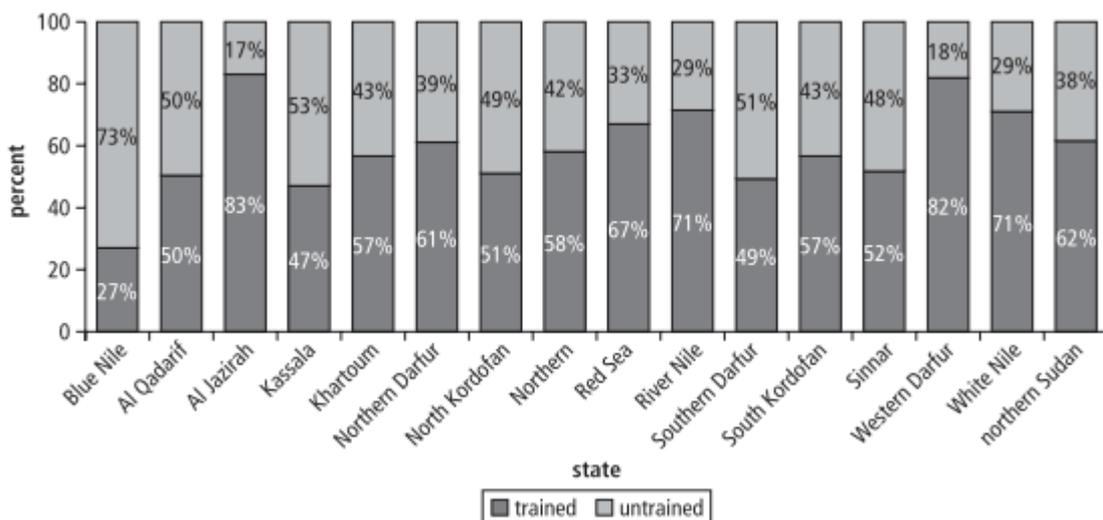


Figure IV-38. Percentage of Trained and Untrained Teachers in Northern Sudan, by State, 2009 (World Bank, 2012, p. 139; quoting FMOGE 2008-2009 Statistical Yearbook)

It is also useful to present these data from three states even if they are different to Khartoum State, to have a picture of the different pre-service qualifications of teachers in Sudan:

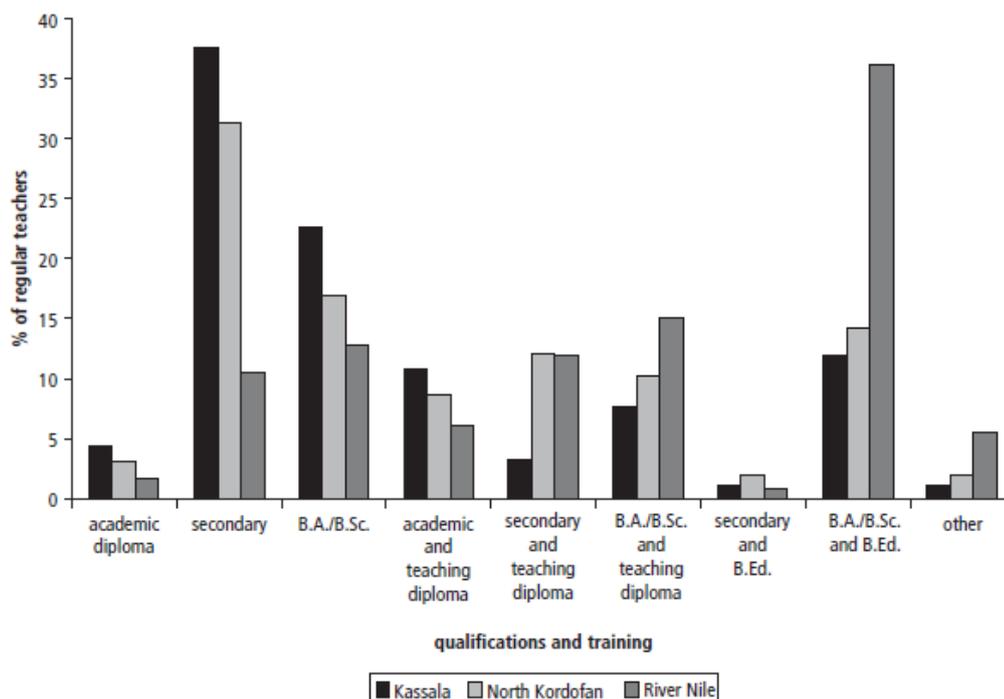


Figure IV-39. Full-Time Government Teachers’ Academic Qualifications and Preservice Training in Kassala, North Kordofan, and River Nile States (World Bank, 2012, p. 139).

Note: Service Delivery Survey carried out in 2009 with 819 teachers.

Certainly the above mentioned data are not updated and the passing of time has improved the situation. Nonetheless, it looks clear that in this point School 1 has better qualified teaching staff while Schools 2 and 3 look similar to the average situation of the country.

It is also worth mentioning that “after teacher education sector reform in 1993, few students were enrolling in the B.Ed. degree programme, and even fewer were successfully graduating and eventually teaching” (Unesco, 2018, p. 83). The reason

behind this fact may have to do with the fact that “teachers were still being hired regardless of whether they had a B.Ed.” (Unesco, 2018, p. 83).

In order to face this challenge, the Federal Ministry of Higher Education funded teachers who wished to study the Bachelor’s Degree in Education at the Sudan Open University. But the UNESCO report, even if expressing appreciation for the initiative, questions “the ability of distance education to train in a highly practical profession” (Unesco, 2018, p. 83).

The statistics of Figure IV-38 are not very recent. But the Unesco report, based upon a more updated information provided by the Federal Ministry of General Education in 2017 (Sudan Education Sector Analysis Draft Outlines), states that the “current teaching body in basic education is characterized by a predominance of female teachers (73.2%) and by a majority of teachers who do not have a university degree” (2018, p. 84).

2. What is the percentage of teachers who, in the subject they teach, are no holders of any university diploma in that specific field of knowledge?

Table IV-66. Specific Education in the Respective Subject

% of teachers who, in the subject they teach, are NO holders of any university diploma in that specific field of knowledge	% based upon Quality Team Estimation	% based upon data
School 1	70,00%	70,00%
School 2	22%	50,00%
School 3	NR/DK	29,20%

At School 1, most of the teachers (70%) do not hold a university diploma in the specific field they teach. At School 2, the percentage is smaller (22%) according to the members of the Quality Team. Nevertheless from the list of teaching staff brought by the headmaster, this percentage comes to be 50%.

At School 3 instead the percentage is 29.2%. This information was brought by the Parish Priest (PP).

Therefore results can be presented as follows:

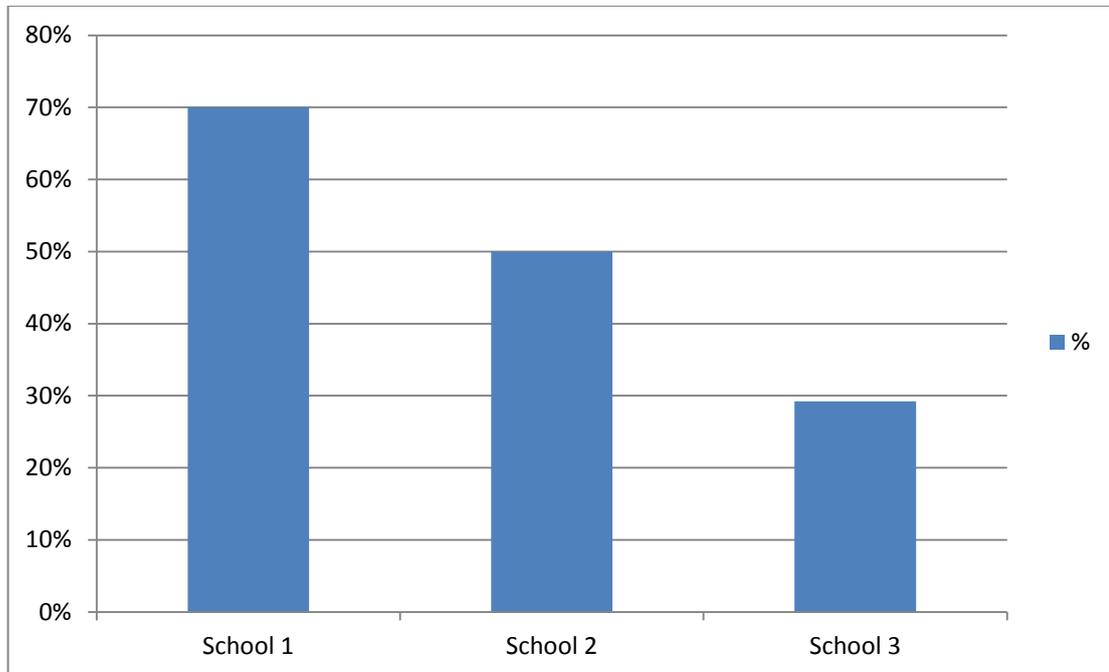


Figure IV-40. % of Teachers Who Do NOT hold a University Diploma in their Respective Subject

It is worth recalling that the studies of Fuller & Clarke (1994) state that “teacher subject knowledge” is one of the input variables that showed significant association with achievement in four out of four studies carried out in primary schools of developing countries.

It is important to recall that in “Sudan, basic-education teachers for Grade 4 and above are required to be subject teachers” (Unesco, 2018, p. 90). The problem is that high qualified teachers may easily find better remunerated jobs. Thus, it remains a challenge to keep well trained teaching staff.

3. What is the average of years of experience of the full time teachers of the school?

Table IV-67. Experience of Full Time Teachers

Years	School			Total
	School 1	School 2	School 3	
$\leq 5$	0	0	0	0
$\geq 6 \leq 10$	0	4	1	5
$\geq 11 \leq 20$	5	0	0	5
$\geq 20$	0	0	0	0
NR/DK	0	1	3	4
Total	5	4	4	14

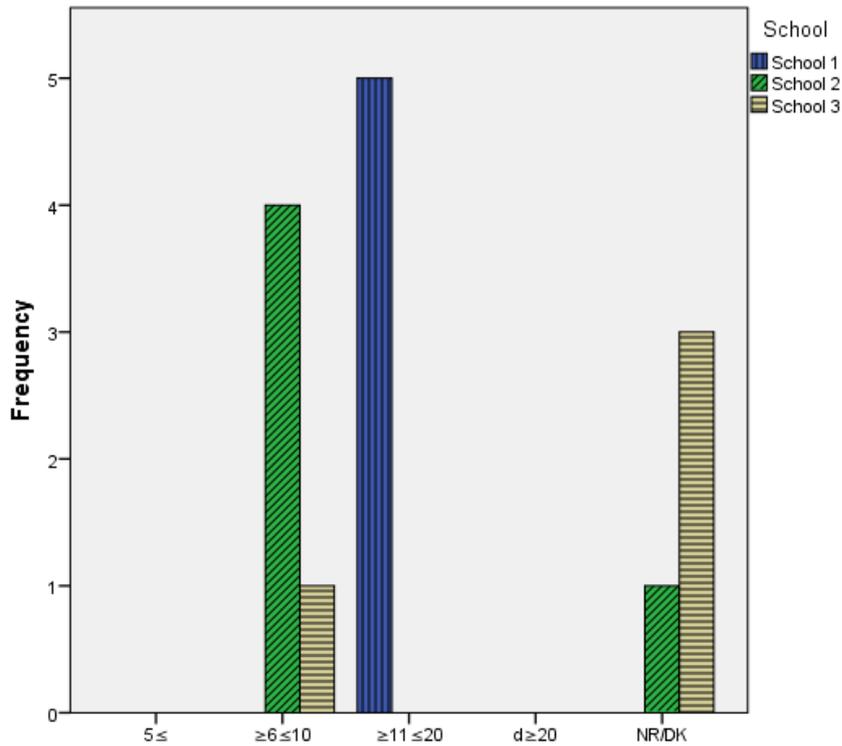


Figure IV-41. Experience of Full Time Teachers

School 1 has the most experienced teachers (average of  $\geq 11 \leq 20$ ). The average of School 2 teachers goes from 6 to 10 years. A member of the School 3 team stated that

the average of experience of their teachers goes from 6 to 10 years. But the Parish Priest of School 3 brought the data for every age group:

Table IV-68. Years of Experience of the Full Time Teachers of School 3

Years of experience of the full time teachers of the school	No. of teachers
$\leq 5$	4
$\geq 6 \leq 10$	2
$\geq 11 \leq 20$	4
$\geq 20$	8
<b>Total</b>	<b>18</b>

With these data, the average number of years of experience at School 3 would be 15.5 years.

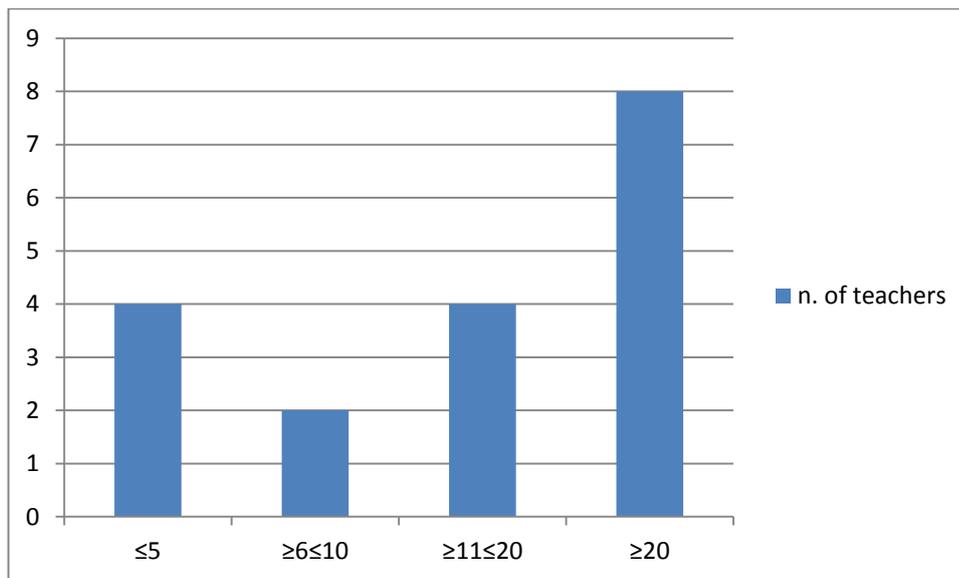


Figure IV-42. Years of Experience of the Full time Teachers of School 3

The studies of Fuller & Clarke (1994, quoted by Scheerens, p. 22) state that the input variable “teacher experience” showed significant association with achievement in thirteen out of twenty three studies carried out in primary schools of developing countries.

It is also worth mentioning that in Sudan:

senior teachers spend less time teaching compared with junior teachers. Teachers at the highest salary scales are expected to teach about 5 hours per week, whereas teachers at the lowest salary scales are expected to teach about 25 hours per week. Senior teachers are expected to do administrative and managerial work so as to balance their time. Given that teachers on higher salary scales are presumably more experienced and that more experienced teachers teach fewer hours, it follows that less experienced teachers tend to teach the lower basic-education grades (Grades 1–3) because there is one teacher per class for the entire day (World Bank, 2012, quoted by Unesco, 2018, p. 92).

#### 4. In which level does your school find itself?

Table IV-69. Competence Development of Staff

Level	School			Total
	School 1	School 2	School 3	
Quality depends solely on the individual	0	0	0	0
Process awakening	0	0	0	0
Vision through processes	0	4	4	8
Systematic assessment and improvement	5	0	0	5
Excellent processes	0	0	0	0
NR/DK	0	1	0	1
<b>Total</b>	<b>5</b>	<b>5</b>	<b>4</b>	<b>14</b>

School 1 again has a high self-perception while School 2 and 3 set themselves at an intermediate level.

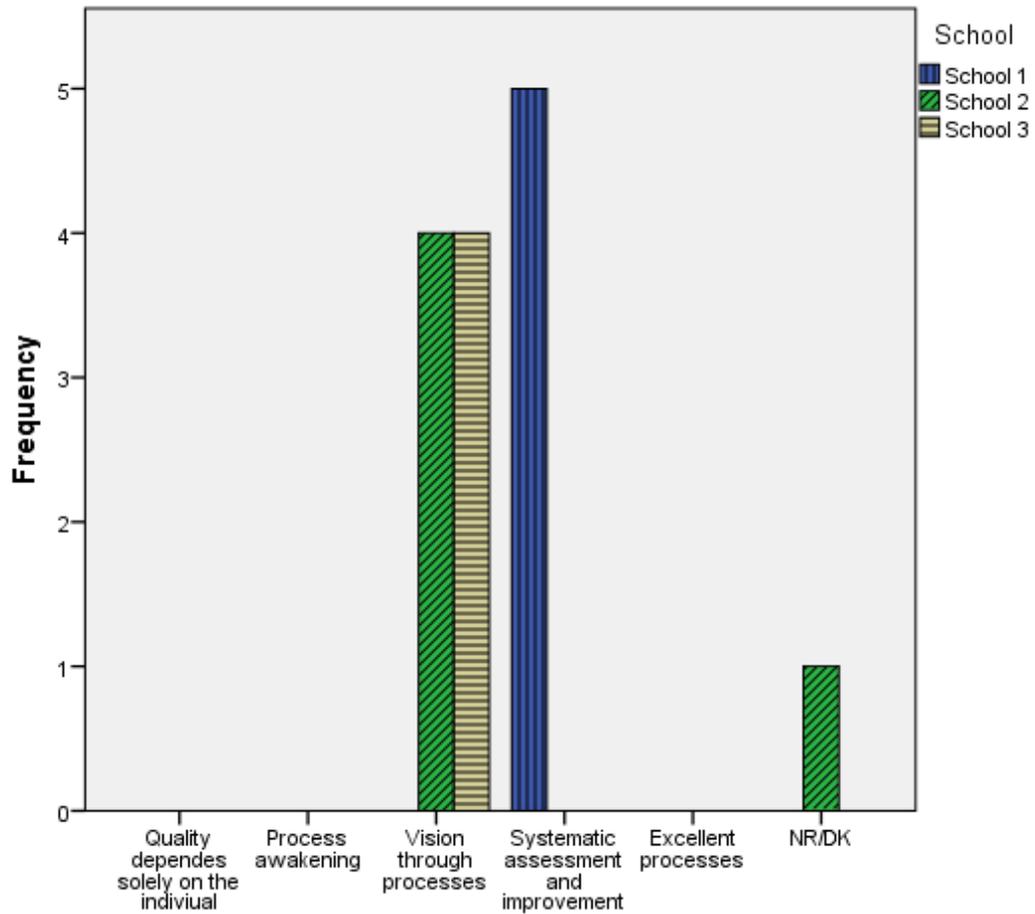


Figure IV-43. Competence Development of Staff

In order to confront the self-perception of the Quality Teams, the following two questions were presented:

- What was the number of internal workshops organized by the school for the professional development of the staff during the year 2017-2018?

Table IV-70. Number of Internal Workshops or Courses

School	Internal Workshops
School 1	2
School 2	0
School 3	0

- What was the number of formative activities to which the school sent its staff during the 2017-2018 academic year:

- a. Workshops:
- b. Courses:
- c. University degree (no. of staff members):

Table IV-71. Staff Formative Activities Outside the School

School	Workshops	Courses	University Degree
School 1	2 ( one at Municipality level and one at the level of the Education Office)	1 for 5 teachers organized by Education Office	1 teacher for MA
School 2	1 for headmasters organized by the Education Office of the Archdiocese	1 for 5 teachers organized by Education Office	
School 3	1 for headmasters organized by the Education Office of the Archdiocese	1 for 5 teachers organized by Education Office 1 for 3 teachers (Diploma in Teaching Techniques and Methods)	

According to the studies of Fuller & Clarke (1994, quoted by Scheerens, p. 22), the input variable “in-service teacher training” showed significant association with achievement in eight out of thirteen studies carried out in primary schools of developing countries.

A report of the World Bank (2009) quoted by Unesco states that:

the curriculum followed in the pre-service degree programme in the faculties of education is strong on theory and content but weak at providing practical teaching skills for instruction in primary schools. A similar conclusion has repeatedly been made by state and federal officials responsible for managing basic education at the state and central levels (Unesco, 2018, p. 86).

This fact recalls the need of rethinking the practical dimension of pre-service education and brings forth the importance of the in-service continuous education of those teachers.

The importance of this in-service continuous training is also stressed by the fact that “candidates with low marks are assigned to the educational sciences and faculties of education in Sudan” (Unesco, 2018, p. 87).

#### ***4.3.3.3 Sub-criterion 3c: Staff Commitment and Involvement***

The school has material and moral incentives and processes to boost employee commitment, involvement and responsibility.

1. What are the salaries?

Table IV-72. Salaries

Salary	School		
	School 1	School 2	School 3
Lower	1,400	1,116	1,121
Higher	2,009	1,500	1,644
Average	1,600	1,166	1,248

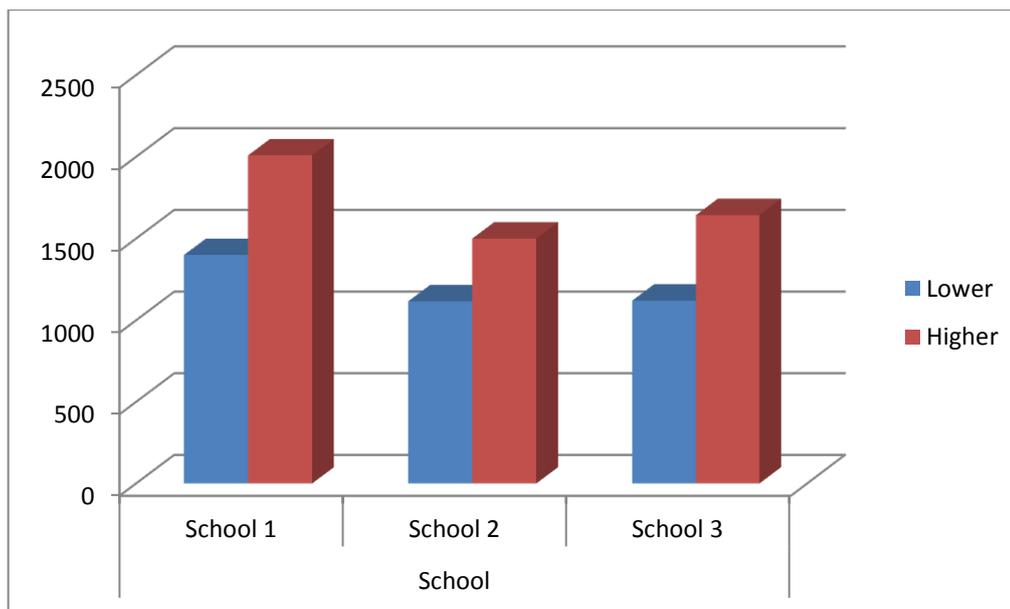


Figure IV-44. Salaries

The studies of Fuller & Clarke (1994, quoted by Scheerens, 2004, p. 22) state that “teacher salary level” is one of the input variables that showed significant association with achievement in four out of eleven studies carried out in primary schools of developing countries.

It is also worth mentioning that in Sudan “between 6% and 20% of regular teachers have other jobs or provide private tutoring to students, indicating a need for supplementary income” (Unesco, 2019, p. 92). In May 2020, the new Transitional Government raised the salaries of the teachers of government schools in a very meaningful way.

This measure tackled the situation that the study carried out in schools of twelve locations of Blue Nile and Red Sea States reflected very well:

teachers are not motivated financially and morally, thus weakening their desire to work in hardship areas and to promote the spirit of teamwork.

Frustration of teachers due to the pressures of living and low salaries makes them indifferent and resort to different methods to improve their incomes (EU et al., 2015, pp. 446-447).

2. In which level does your school find itself?

Table IV-73. Staff Commitment and Involvement

Level	School			Total
	School 1	School 2	School 3	
Quality depends solely on the individual	0	0	2	2
Process awakening	0	4	0	4
Vision through processes	5	0	0	5
Systematic assessment and improvement	0	0	0	0
Excellent processes	0	0	0	0
NR/DK	0	1	2	3
<b>Total</b>	<b>5</b>	<b>5</b>	<b>4</b>	<b>14</b>

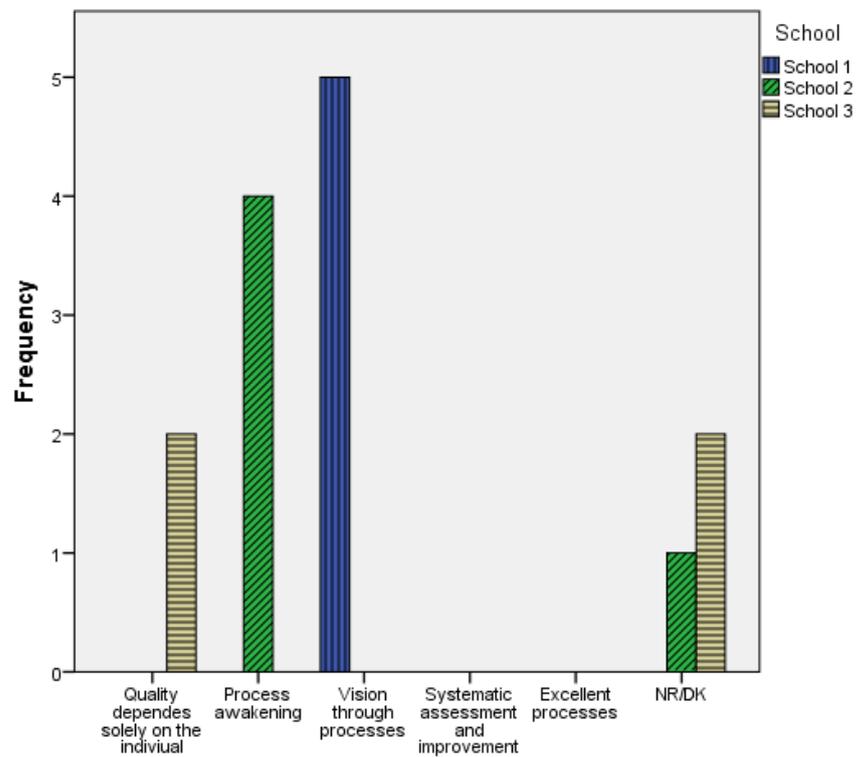


Figure IV-45. Staff Commitment and Involvement

As usual, School 1 has a higher self-perception. But this time it considers itself at the intermediate level while Schools 2 and 3 have a lower self-perception (level 2 and 1 respectively).

#### **4.3.3.4 Sub-criterion 3d: Internal Communication**

The school has effective processes for staff communication.

1. How does the school administration usually communicate decisions or information to the staff? (Here you can tick more than once).

Table IV-74. Internal Communication Instruments

Internal communication	School		
	School 1	School 2	School 3
By phone	3	4	2
Through meetings	5	4	4
Through letters	1	1	3
Through written announcements on a board	4	0	3
Through personal encounters	0	4	3
NR/DK	0	1	1

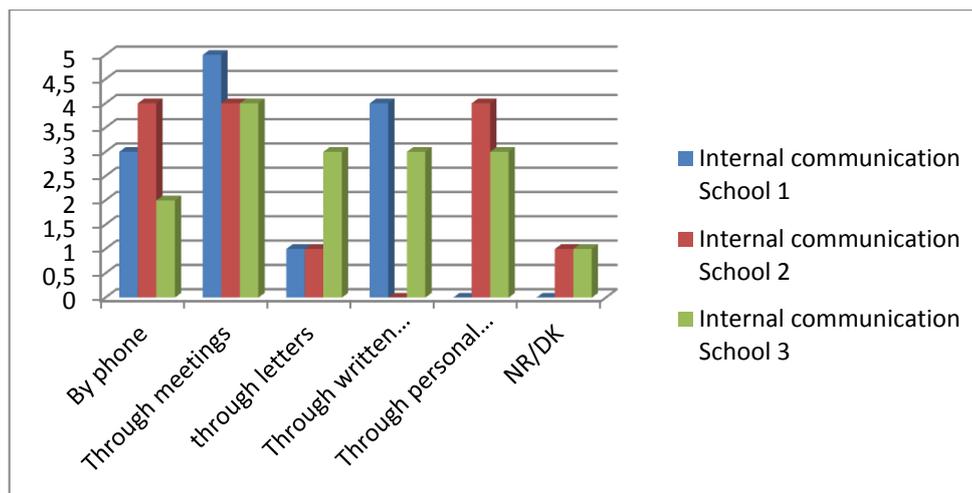


Figure IV-46. Internal Communication

In the three schools the main way of internal communication are meetings. School 1 also uses written announcements on a board (4 members) and the phone (3 members). School 2 uses the phone (as much as the meetings and the personal encounters 4 members). School 3 also uses equally letters, personal encounters and announcements in the board (3 members).

It is worth mentioning that most members of the staff of these schools do not have a personal computer and therefore it was out of place to ask about e-mail or other digital communication. *WhatsApp* instead is becoming a very used tool of communication among the Sudanese people.

## 2. In which level does your school find itself?

Table IV-75. Internal communication Level

Level	School			Total
	School 1	School 2	School 3	
Quality depends solely on the individual	0	0	0	0
Process awakening	1	0	0	1
Vision through processes	0	0	0	0
Systematic assessment and improvement	4	4	4	12

Excellent processes	0	0	0	0
NR/DK	0	1	0	1
Total	5	5	4	14

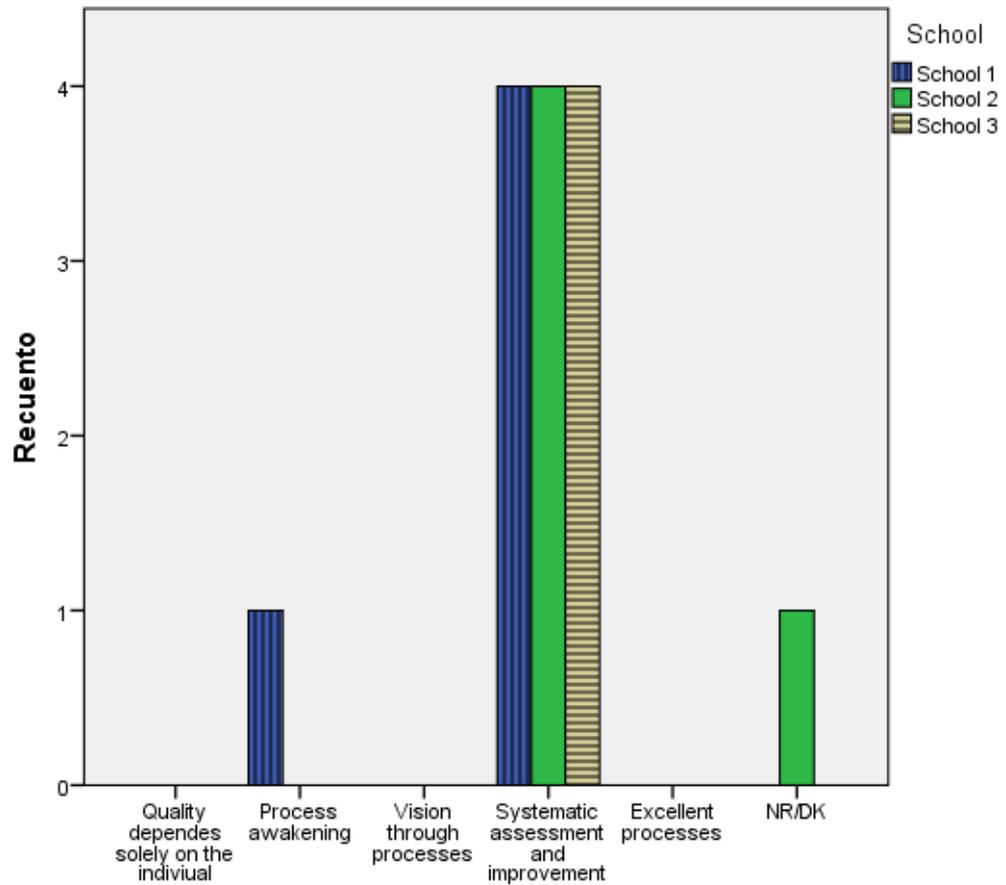


Figure IV-47. Internal Communication

The three schools coincide in their self-assessment as they define themselves at the level of “systematic assessment and improvement” as far as internal communication is concerned.

### 4.3.3.5 Summary of Criterion Results and Identification of Strengths and Areas for Improvement

The results for the self-perception on this criterion can be calculated with the Self-Assessment Matrix (Appendix 6) and summarized as follows:

Table IV-76. Summary of Results on People

Criterion	Sub-criterion	Question	School 1	School 2	School 3	
PEOPLE	Human resource management	1	5	5	5	
		2	10	8.25	8	
	Competence development of the staff	1	0	0	0	
		2	1	3	0	
		3	3	2	2	
		4	10	6	6	
	Staff commitment and involvement	1				
		2				
	Internal communications	1				
		2	6	3	1	
	Maximum Total = 72. 10% of the total Score. Maximum Score = 100		TOTAL =	35	27.25	22
			SCORE = TOTAL × 1.39	48.65	37.88	30.58

These results could be compared with those obtained through the results based upon data. Grey boxes indicate divergence with the results of the previous table:

Table IV-77. Summary of results on People based upon Data

Criterion	Sub-criterion	Question	School 1	School 2	School 3
PEOPLE	Human resource management	1	5	0	5
		2	10	8.25	8
	Competence development of the staff	1	2.78	0	1.126
		2	1	3	3
		3	3	2	3

		4	10	6	6
Staff commitment and involvement	1				
	2				
Internal communications	1				
	2	6	3	1	
Maximum Total = 72. 10% of the total Score. Maximum Score = 100	TOTAL =	37.38	22.25	27.126	
	SCORE = TOTAL × 1.39	52.51	30.93	37.71	

Then we can compare both results: those mainly based upon the internal discussion of the Quality Team with those confronted with data:

Table IV-78. Comparison of Results for People

	School 1		School 2		School 3	
Criterion	Self-Perception	Based on Data	Self-Perception	Based on Data	Self-Perception	Based on Data
People	48.65	52.51	37.88	30.93	30.58	37.71

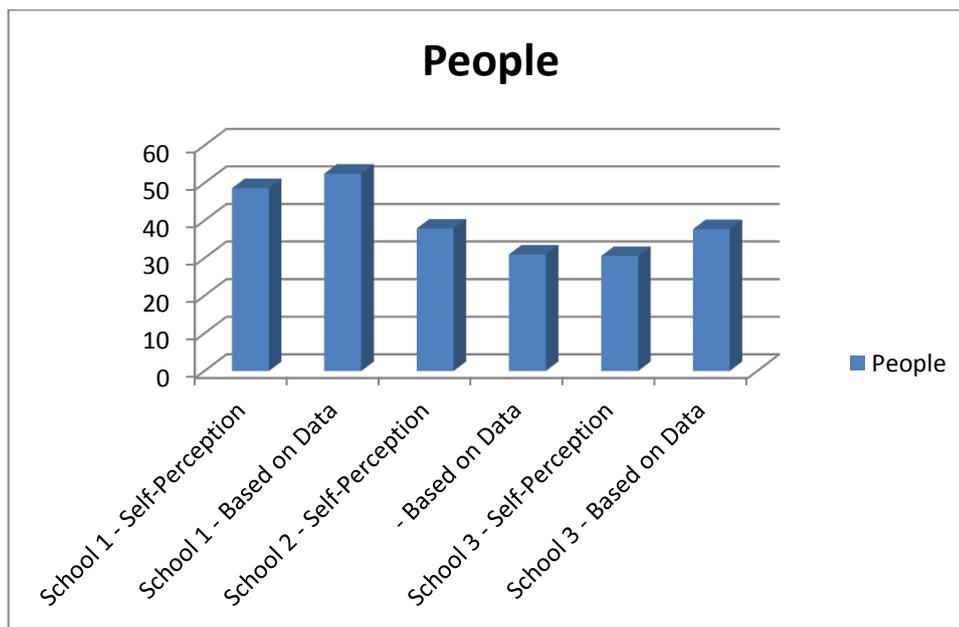


Figure IV-48. Comparison of Results for People

Considering all these data, the researcher summarized like this the strengths and areas for improvement of these schools:

Table IV-79. People: Strengths and Areas for Improvement

School	Strengths	Areas for improvement
1	Human resource management Written procedure for the recruitment of personnel	Competence development of staff
2	Human resource management Written procedure for the recruitment of personnel	Competence development of staff
3		Competence development of staff

The three schools present similar strengths and areas that need improvement.

#### 4.3.4 Criterion 4: Partnerships and Resources

Excellent schools plan and manage external partnerships, suppliers and internal resources in order to support their strategy, policies and the effective operation of processes. External partners may be the Educational Inspection of the municipality, the State Ministry of Education, etc. Excellent schools ensure that they effectively manage their environmental and societal impact. This criterion includes these elements: management of partnerships; management of financial resources; management of premises, equipment and material resources; management of technology; management of information and knowledge.

#### 4.3.4.1 Sub-criterion 4a: External Partnerships Management

The school develops and manages its external partnerships (with other schools, universities, municipality, Ministry, public and private institutions, cooperation networks, NGO's, language institutes, etc.) to strengthen its activities.

##### 1. Mention external partners of your school:

Table IV-80. External Partnerships

External partners	School			Total
	School 1	School 2	School 3	
Ministry	1	0	0	1
Ministry and municipality	4	3	1	8
Municipality	0	1	0	1
NR/DK	0	1	3	4
Total	5	5	4	14

For Schools 1 and 2 the main partners are the Municipality and the Ministry. The members of School 3 team did not express themselves on this regard.

From the interviews with the Parish Schools Supervisor of School 3 and with the Parish Priest, it can be drawn that the school has partnerships with a transport company (Transcript B, par. 3) and with the Italian Agency for Development Cooperation (Transcript C, par. 3).

##### 2. In which level does your school find itself?

Table IV-81. External Partnership Management

External Partnership Management Level	School			Total
	School 1	School 2	School 3	

Quality depends solely on the individual	0	5	0	5
Process awakening	4	0	0	4
Vision through processes	0	0	2	2
Systematic assessment and improvement	1	0	2	3
Excellent processes	0	0	0	0
NR/DK	0	0	0	0
Total	5	5	4	14

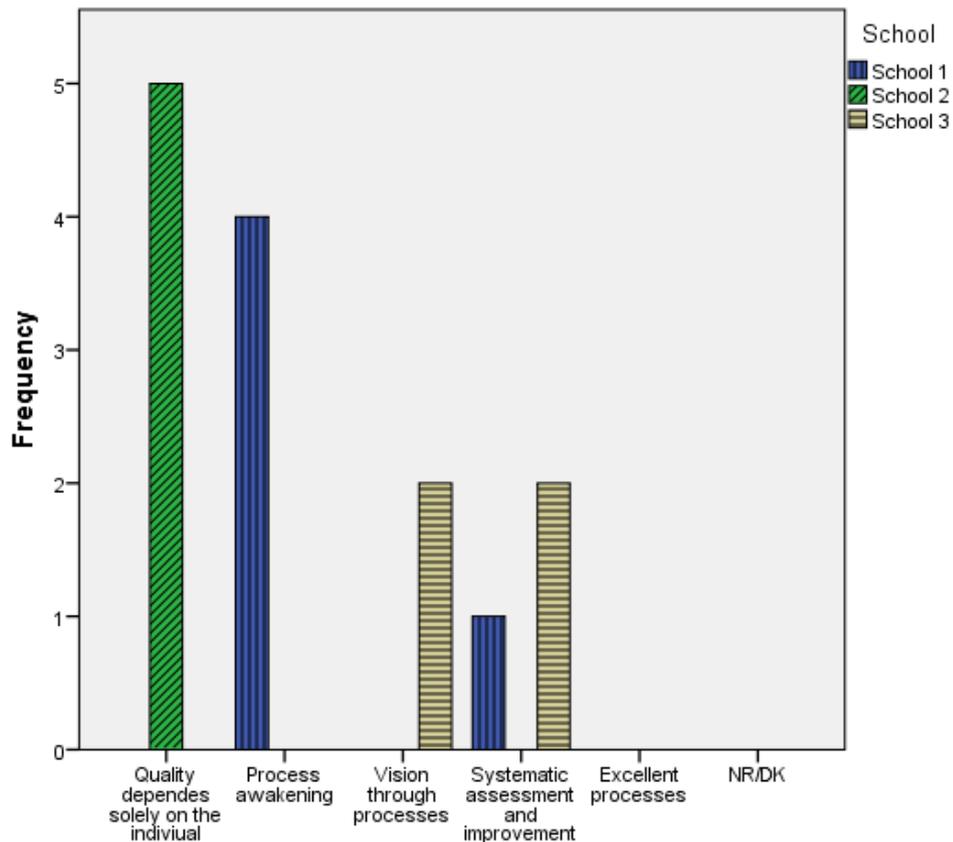


Figure IV-49. External Partnership Management

School 1 and 2 have a low self-perception on this issue. School 1 considers being at the level of “process awakening” and School 2 at the lowest level: “Quality depends solely on the individual”. Instead at School 3 the internal discussion places the level either at the level of “vision through processes” or “systematic assessment and improvement”.

#### 4.3.4.2 Sub-criterion 4b: Economic and Financial Management

The school has developed its management of economic and financial resources, and processes to strive for growth and sustainability.

##### 1. Does the school have a budget?

Table IV-82. School Budget?

Does the school have a budget?	School			Total
	School 1	School 2	School 3	
Yes	4	5	3	12
No	0	0	0	0
NR/DK	1	0	1	2
Total	5	5	4	14

The three schools affirm to have a budget. Schools 1 and 3 attached their budget. The Headmaster of School 2 stated in the interview that the school budget was in the Education Office of the Parish (Transcript A, par. 7).

##### 2. Who is involved in the preparation of the budget?

Table IV-83. Budget Preparation

Who is involved in the preparation of the budget?	School			Total
	School 1	School 2	School 3	
Financial Administration	0	0	1	1
Financial Administration and Fin. Secretary	0	0	1	1
Financial Administration, Fin. Secretary and Parish Priest	0	0	2	2
Owner and administrations	1	0	0	1
Parish Education Office	0	5	0	5
School Admin	2	0	0	2
The owner	1	0	0	1
NR/DK	1	0	0	1
Total	5	5	4	14

The members of School 1 team do not converge in one answer what can be interpreted as lack of clarity on this issue. For School 2 instead the parties that are involved in the preparation of the budget are clear. It is responsibility of the Parish Education Office. This information is confirmed by the interview with the Headmaster (Transcript A, par. 7).

3. When and how is the budget compared with the financial situation?

Table IV-84. Times the Budget is Compared with the Financial Situation

Frequency	School			Total
	School 1	School 2	School 3	
Once a year	3	0	0	3
Twice a year	0	5	0	5
Three or more times a year	0	0	4	4
NR/DK	2	0	0	2
<b>Total</b>	<b>3</b>	<b>5</b>	<b>4</b>	<b>14</b>

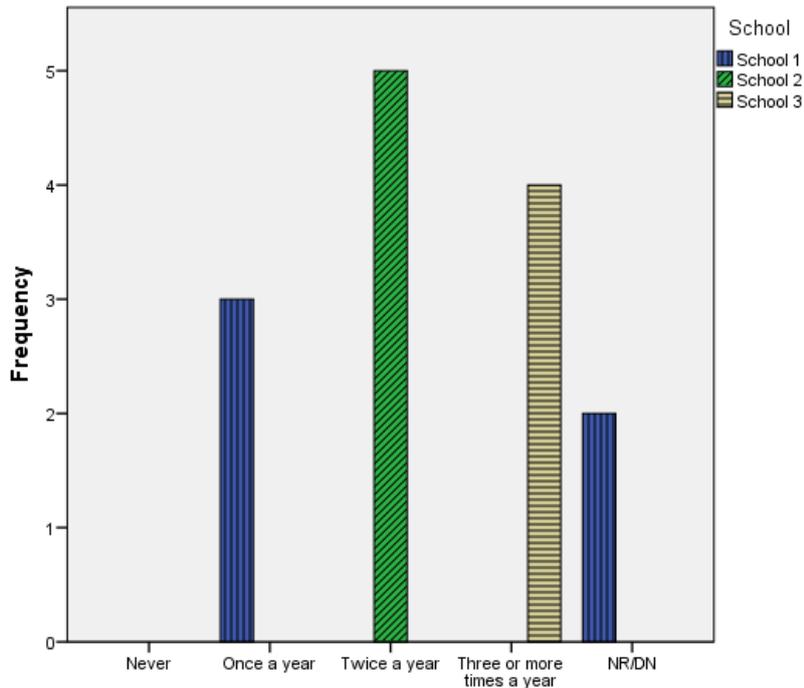


Figure IV-50. Times the Budget is Compared with the Financial Situation

School 1 compares the budget with the financial situation once a year, School 2 does it twice a year and School 3 three or more times a year.

4. In which level does your school find itself?

Table IV-85. Economic and Financial Management

Economic and Financial Management Level	School			Total
	School 1	School 2	School 3	
Quality depends solely on the individual	0	0	0	0
Process awakening	0	0	0	0
Vision through processes	3	5	4	12
Systematic assessment and improvement	1	0	0	1
Excellent processes	0	0	0	0
NR/DK	1	0	0	1
<b>Total</b>	<b>5</b>	<b>5</b>	<b>4</b>	<b>14</b>

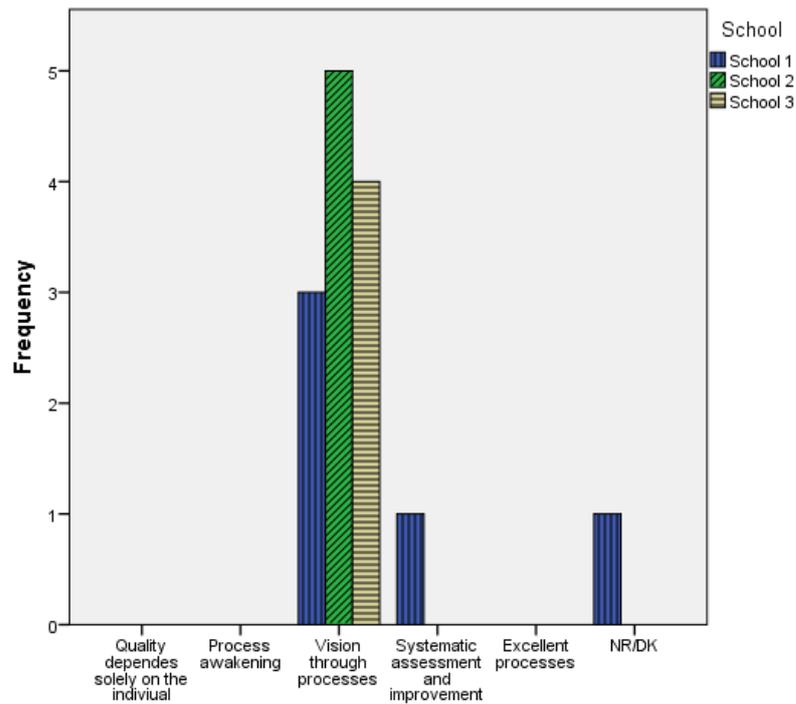


Figure IV-51. Economic and Financial Management

The three schools locate themselves at the level of vision through processes (level 3).

#### 4.3.4.3 Sub-criterion 4c: Material Resources, Premises and Equipment Management

Material resources are inventoried, renewed, cared for, etc.

1. Does the school have a written inventory of the furniture and equipment?

Table IV-86. Written Inventory of Furniture and Equipment?

Does the school have a written inventory of furniture and equipment?	School			Total
	School 1	School 2	School 3	
No	1	0	4	5
Yes	2	4	0	6
NR/DK	2	1	0	4
Total	5	5	4	14

Schools 1 and 2 affirm to have a written inventory of furniture and equipment while the members of the School 3 team affirm not to have it. Nonetheless, the Parish Priest (PP) brings the inventory of the school material. The Headmaster of School 2 also brought a copy of the inventory.

Table IV-87. School Inventory Presented

School	School Inventory Presented
School 1	No
School 2	Yes
School 3	Yes

2. Is there a full time responsible for the maintenance of the building?

Table IV-88. Full Time Responsible for Building Maintenance

Is there a full time responsible for the maintenance of the building?	School			Total
	School 1	School 2	School 3	
No	0	3	4	7
Yes	5	1	0	6
NR/DK	0	1	0	1
Total	5	5	4	14

School 1 has a full time responsible for maintenance while Schools 2 and 3 do not have it.

3. In which level does your school find itself?

Table IV-89. Material Resources, Premises and Equipment Management

Material Resources, premises and equipment management	School			Total
	School 1	School 2	School 3	
Quality depends solely on the individual	0	0	0	0
Process awakening	0	0	4	4
Vision through processes	5	3	0	8
Systematic assessment and improvement	0	0	0	0
Excellent processes	0	0	0	0
NR/DK	0	2	0	2
Total	5	5	4	14

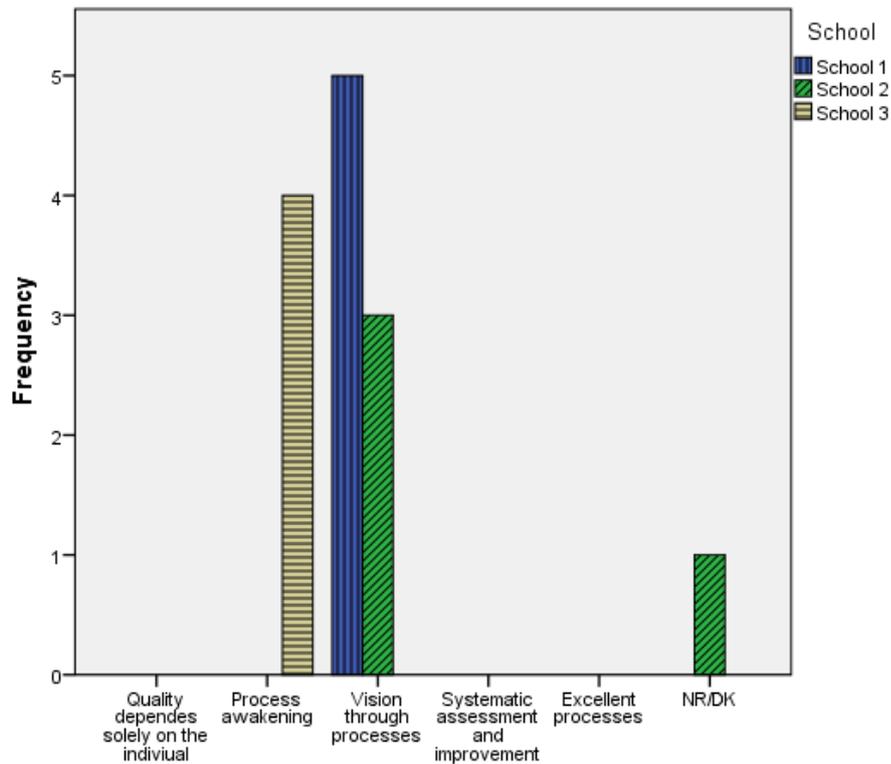


Figure IV-52. Material Resources, Premises and Equipment Management

Schools 1 and 2 have an intermediate self-perception (Vision through processes) while School 3 has a low self-perception (Process awakening) as for the management of material resources, premises and equipment is concerned.

It is worth noticing that the researcher could verify that the standard of the premises of the three schools is good considering the context in which you easily find Government schools without toilets or “toilets that could not be used due to lack of doors, water or technical problems” (EU et al., 2015, p. 120). The three schools are connected to the electrical net, - School 1 even has a generator-, and have running water.

A study carried out in twelve locations of Red Sea and Blue Nile States concludes that the visited schools have “poor learning environment – shortage of school buildings, and existing ones not maintained (no school wall, furniture, drinking water, latrines etc...)” (EU et al., 2015, p. 437).

Similarly a survey carried out by UNICEF also found wide variation in the quality of school infrastructure between Khartoum State and other states: “29 percent of classrooms in Khartoum State needed to be renovated or replaced, whereas the figure rose to 66 percent for classrooms in South Kordofan” (World Bank, 2012, p. 6).

The research of Fawzia Taha Mahdi (2006) at Khartoum State mentions that local inspectors and headmasters underline problems related to the school environment like the lack of furniture for instance among the main factors that have a negative impact on the results of the students.

#### ***4.3.4.4 Sub-criterion 4d: Technology Management***

The integration of ICT serves the management, staff, operations, products, and learners of the school.

1. How many computers does the school have?

Table IV-90. Number of Computers

How many computers does the school have?	School			Total
	School 1	School 2	School 3	
0	0	0	0	0
$\geq 1 \leq 2$	5	5	4	14
$\geq 3 \leq 7$	0	0	0	0
$\geq 8 \leq 12$	0	0	0	0
$\geq 13$	0	0	0	0
NR/DK	0	0	0	0
<b>Total</b>	<b>5</b>	<b>5</b>	<b>4</b>	<b>14</b>

The three schools just have between one or two computers, which is indicative of the low level of digitalization of the different operations (administration, teaching, and learning).

2. How many multimedia projectors does the school have?

Table IV-91. No. of Multimedia Projectors

No. of projectors	School			Total
	School 1	School 2	School 3	
0	5	5	4	14
$\geq 1 \leq 2$	0	0	0	0
$\geq 3 \leq 4$	0	0	0	0
$\geq 5 \leq 7$	0	0	0	0
$\geq 8$	0	0	0	0
NR/DK	0	0	0	0
Total	5	5	4	14

No school has a multimedia projector.

3. In which level does your school find itself?

Table IV-92. Technology Management

Technology Management Level	School			Total
	School 1	School 2	School 3	
Quality depends solely on the individual	0	0	0	0
Process awakening	0	0	4	4
Vision through processes	5	5	0	10
Systematic assessment and improvement	0	0	0	0
Excellent processes	0	0	0	0
NR/DK	0	0	0	0
Total	5	5	4	14

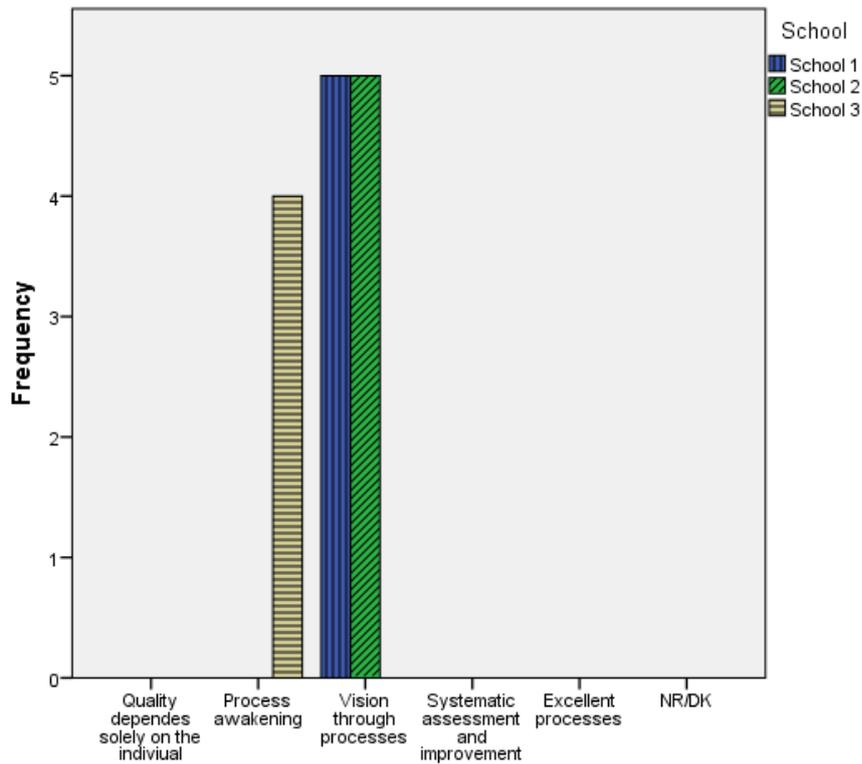


Figure IV-53. Technology Management

In spite of the absence of a meaningful number of computers and multimedia projectors, the three schools consider themselves to be at an intermediate level as far as technology management is concerned, which looks a bit contradictory with reality.

#### 4.3.4.5 *Sub-criterion 4e: Information and Knowledge Management*

The school collects, keeps and manages information and knowledge to support its policies and strategy.

1. List the kind of files contained in the school archives (bills, payment sheets, students' records....)?

Table IV-93. Kind of Files Contained in School Archives

List the kind of files contained in the school archives	Shool			Total
	School 1	School 2	School 3	
Bills (electricity, water), School records, payment sheets	0	1	0	1
Bills (electricity, water), Stationeries, receipts	0	1	0	1
Bills, payment sheets and students records	4	0	0	4
Invoices, receipts of payments, payment sheets	0	3	0	3
Students records	0	0	4	4
Students records, payment sheets	1	0	0	1
NR/DK	0	0	0	0
<b>Total</b>	<b>5</b>	<b>5</b>	<b>4</b>	<b>14</b>

The list of documents of School 1 includes bills, payment sheets and students records. Three members of School 2 limit their list of documents contained in the archives to invoices, receipts of payments and payment sheets. Just one member mentions the students' records. School 3 instead especially mentions the students' records and neglects the others.

There is no mention instead of documents related to staff attendance or teachers management. "Real accountability hinges on having well-defined standards and adequate information about performance" (Lewis and Pettersson, 2009; quoted by World Bank, 2012, p. 150).

## 2. Are these files updated?

Table IV-94. Updated Files?

Are the files updated?	School			Total
	School 1	School 2	School 3	
No	0	0	4	4
Yes	5	5	0	10
NR/DK	0	0	0	0
<b>Total</b>	<b>5</b>	<b>5</b>	<b>4</b>	<b>14</b>

While Schools 1 and 2 state to have their files updated, School 3 recognizes not to have them.

It is interesting to compare these data with those coming from the study on twenty one schools of Blue Nile and Red Sea States where:

almost all of the schools have records for pupils, teachers and workers; but they are incomprehensive. There is no cumulative pupil's record about his family background (rich or poor and parents' jobs), or health status to supplement the available performance and attendance records. Teachers' profiles are incomplete to varying degrees between schools in terms of professional training (EU et al., 2015, p. 446).

### 3. In which level does your school find itself?

Table IV-95. Information and Knowledge Management

Information and Knowledge Management Level	School			Total
	School 1	School 2	School 3	
Quality depends solely on the individual	0	0	4	4
Process awakening	0	5	0	5
Vision through processes	4	0	0	4
Systematic assessment and improvement	0	0	0	0
Excellent processes	0	0	0	0
NR/DK	1	0	0	0
<b>Total</b>	<b>5</b>	<b>5</b>	<b>4</b>	<b>14</b>

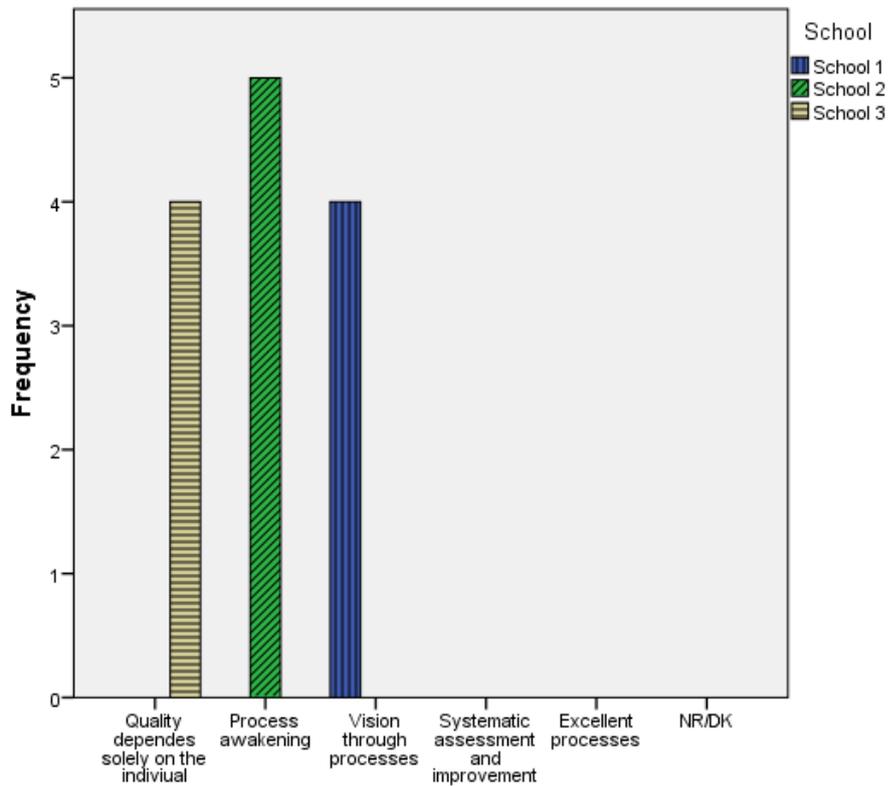


Figure IV-54. Information and Knowledge Management

The highest self-perception is for School 1 that locates itself at an intermediate level (Vision through processes). The other two schools qualify themselves at a low level: “Process awakening” for School 2 and “Quality depends solely on the individual” for School 1.

#### 4.3.4.6 Summary of Criterion Results and Identification of Strengths and Areas for Improvement

The results for the self-perception on this criterion can be calculated with the Self-Assessment Matrix (Appendix 6) and summarized as follows:

Table IV-96. Summary of Results on Partnerships and Resource Management

Criterion	Sub-criterion	Question	School 1	School 2	School 3	
PARTNERSHIPS AND RESOURCES	External partnership management	1				
		2	4.4	1	8	
	Economic and financial management	1	5	5	5	
		2				
		3	1	2	4	
		4	7	6	6	
	Material resources. premises and equipment management	1	5	5	0	
		2	5	0	0	
		3	6	6	3	
	Technology management	1	1	1	1	
		1	0	0	0	
		3	6	6	3	
	Information and knowledge management	1			0	
		2	5	5	0	
		3	6	3	1	
	Maximum Total = 91. 10% of the total Score. Maximum Score = 100		TOTAL =	51.4	40	31
			SCORE = TOTAL × 1.1	56.54	44	34.1

These results could be compared with those obtained with the support of external evidence. As other times, the box in grey shows an item where there is a divergence with the previous results:

Table IV-97. Summary of Results on Partnerships and Resource Management based upon Data

Criterion	Sub-criterion	Question	School 1	School 2	School 3
PARTNERSHIPS AND RESOURCES	External partnership management	1			
		2	4.4	1	8
	Economic and financial management	1	5	5	5
		2			
		3	1	2	4
		4	7	6	6
	Material resources. premises and equipment management	1	5	5	5
		2	5	0	0
		3	6	6	3
	Technology management	1	1	1	1
		1	0	0	0
		3	6	6	3
	Information and knowledge management	1			0

		2	5	5	0
		3	6	3	1
Maximum Total = 91. 10% of the total Score. Maximum Score = 100	TOTAL =	51.4	40	36	
	SCORE = TOTAL × 1.1	56.54	44	39.6	

Then we can compare both results: those mainly based upon the internal discussion of the Quality Team with those confronted with data. This time they are quite similar:

Table IV-98. Comparison of Results for Partnerships and Resources

	School 1		School 2		School 3	
Criterion	Self-Perception	Based on Data	Self-Perception	Based on Data	Self-Perception	Based on Data
Partnerships and Resources	56.54	56.54	44	44	34.1	39.6

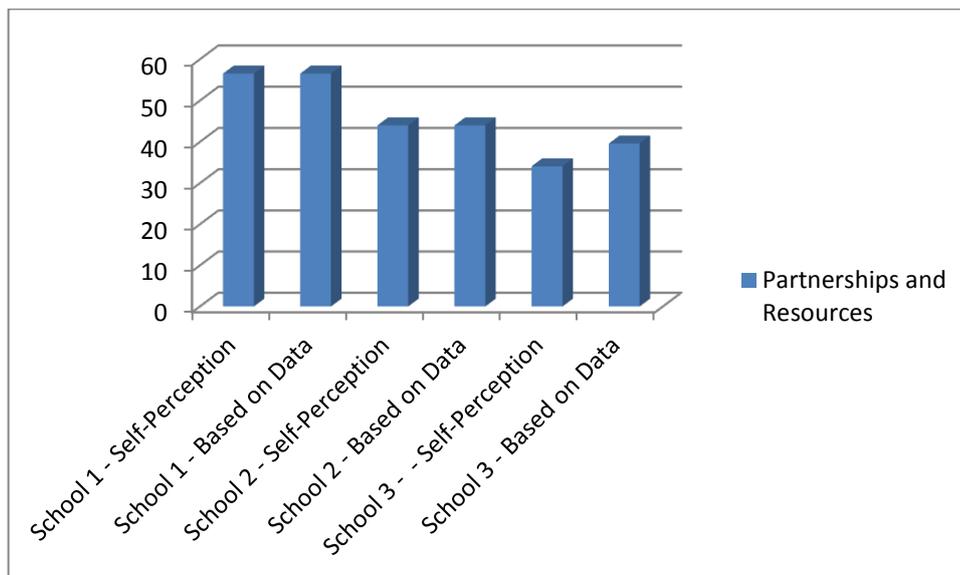


Figure IV-55. Comparison of Results for Partnerships and Resources

Considering all this data, the researcher summarized like this the strengths and areas for improvement of these schools:

Table IV-99. Strengths and Areas for Improvement

School	Strengths	Areas for improvement
1	Material resources, premises and equipment management	Technology management
2		Technology management
3	Budget preparation and revision	Information, material resources and Technology management

#### 4.3.5 Criterion 5: Processes, Products and Services

Excellent schools design, manage and improve processes and services to generate increasing value for students, parents and other stakeholders. In a school there are some processes that should be designed and followed up with care like:

- The organization of the school (time table, appointment of personnel, grouping of students, transport management...);
- School climate (relations, insertion of new students, control of attendance, school entrance and exit of students...);
- Teaching and learning (application of strategies and plans...);
- Students evaluation (design and execution of evaluation);
- Orientation and coaching (application of objectives defined for the coaching of students and their families).

Therefore this criterion includes: identification of the needs of different stakeholders, design of the school educational project, plan for the evaluation of students and teaching-learning process, management of new students, follow-up of the evolution of results, definition of indicators to assess the results of processes and objectives for improvement; management and support to the implementation of changes, revision of key processes to ensure their progress and success (EFQM, 2017; Martinez Median and Rioperez, 2005; Aragón Marin, 2001).

#### **4.3.5.1 Sub-criterion 5a: Well-designed Processes**

The school identifies the processes that take place within it and defines their persons in charge, the procedures for their management and assessment.

1. How would you define the teaching-learning method at your school?

Table IV-100. School Teaching-Learning Method

How would you define the teaching-learning method at your school?	School			Total
	School 1	School 2	School 3	
Memorization and repetition	1	0	0	1
Critical thinking	1	0	0	1
Participation and interaction	2	5	5	12
Discovery learning	0	0	0	0
NR/DK	0	0	0	0
<b>Total</b>	<b>4</b>	<b>5</b>	<b>5</b>	<b>14</b>

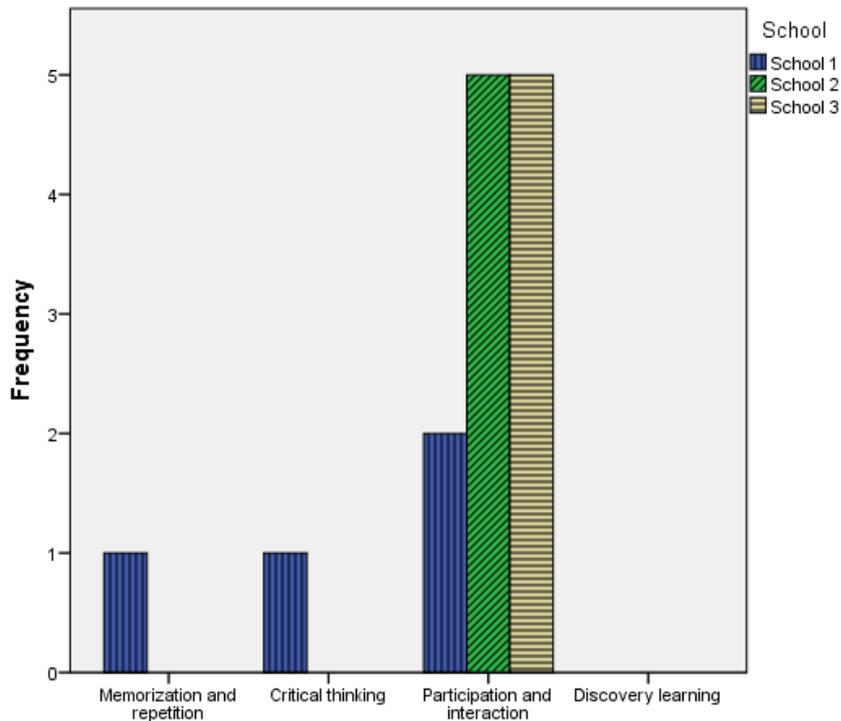


Figure IV-56. School Teaching-Learning Method

The three schools state to practice a teaching-learning method based upon participation and interaction. Just in School 1 there are discrepancies among the members of the team. One of them affirms that their method is based upon memorization and repetition and another one on critical thinking.

The report of Unesco mentions a significant challenge to be overcome by the Sudanese education system: its “reliance on memorization as a primary learning method even when it comes to subjects like mathematics or sciences, where analytical skills and competencies are required” (2018, p. 99). In front of this problem, the same report underlines the importance of “shifting from a teaching/curriculum-centred approach to a learning/student-centred approach” (2018, p. 99). The report considers this shift feasible because of the reasonable number of students per classroom in comparison to other African countries.

In the same line, a study consisting in the observation of 25 lessons in 15 schools of Gedarif and South Kordofan noticed that:

in the majority of lessons observed, children spent more time listening to, or waiting for, the teacher than they spent doing things themselves. Group work was not used in any of the lessons seen. Most teachers directed questions to individual students during whole class teaching but in most of the lessons observed children only answered through chorusing (EU et al., 2015, p. 218).

It would have helped triangulate the data the conduction of some direct observations of complete lessons in the three schools of the sample or provision of a list of indicators of a child-centred lesson to some members of the quality team for a better founded self-assessment.

The same report continues:

The teacher acts as the main source of knowledge. The students' knowledge is only valued where it involves recall of information delivered by the teacher in that lesson or from previous lessons. Students are not asked to talk about their own experiences and ideas and in the majority of the lessons observed they were not given an opportunity to ask the teacher questions. There is also a lack of variety in the activities presented. Generally teachers use only a narrow range of activities (mainly whole class questioning, oral drilling and board work) and there is limited use of learning resources other than the black board (EU et al., 2015, p. 219).

The same report, after the observation of 21 lessons concluded that “classroom activities that foster learning through discovery, questioning, curiosity, self-expression, creativity and communication skills are strikingly absent in the current model” (EU et al., 2015, p. 270).

The study of Lako in Secondary Schools of South Sudan concluded that the factors related to the teaching staff that affected quality positively were the diversity of teaching methods and aids that can be used according to the topic being covered and the application of “continuous assessment exams to test students' progress in studies” (2010, p. 60).

2. How does the school evaluate the progress of its students?

Table IV-101. Students' Progress Evaluation

How does the school evaluate the progress of its students?	School			Total
	School 1	School 2	School 3	
Just with the final exams	0	0	0	0
It depends on the teacher	0	0	0	0
With periodical assignments and tests in addition to the final exams	4	5	5	14
NR/DK	0	0	0	0
Total	4	5	5	14

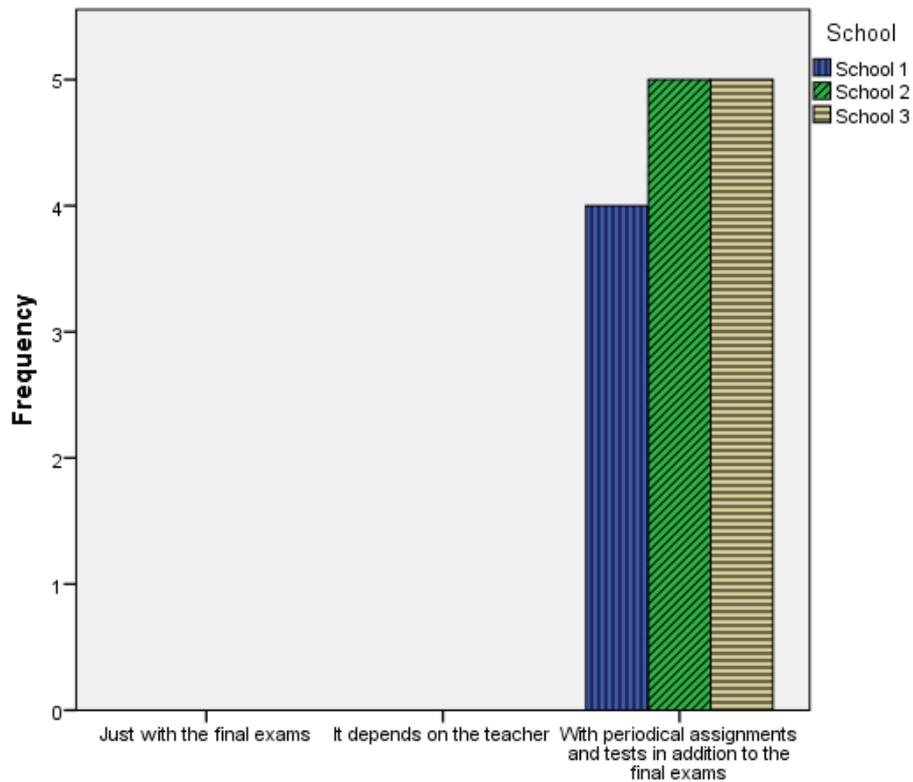


Figure IV-57. Students' Progress Evaluation

In the three schools the progress of the students is evaluated with periodical assignments and tests in addition to the final exams. In fact, this is one of the characteristics of these schools more appreciated by families.

3. In which level does your school find itself?

Table IV-102. Well-designed Processes

Well-designed Processes Level	School			Total
	School 1	School 2	School 3	
Quality depends solely on the individual	0	0	0	0
Process awakening	0	0	0	0
Vision through processes	0	5	5	10
Systematic assessment and improvement	4	0	0	4
Excellent processes	0	0	0	0
NR/DK	0	0	0	0
<b>Total</b>	<b>4</b>	<b>5</b>	<b>5</b>	<b>14</b>

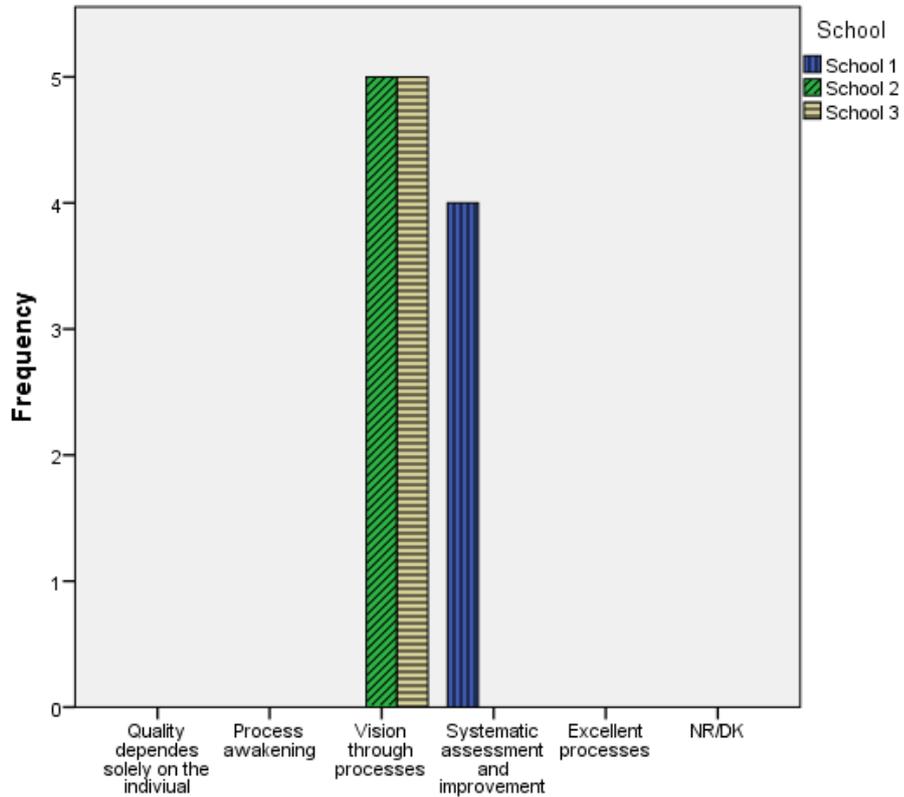


Figure IV-58. Well-designed Processes

As for well-designed processes, School 1 sets itself at a high level (Systematic assessment and improvement) while Schools 2 and 3 consider themselves to be at an intermediate level (Vision through processes).

#### ***4.3.5.2 Sub-criterion 5b: The Management of Processes Leads to Continuous Improvement***

Processes are improved, as needed, using innovation and development of certain priorities in order to fully satisfy and generate increasing value for students and their families.

1. How much impact do workshops on teaching methods have on the teachers of your school?

Table IV-103. Workshops Impact on Teaching Staff

How much impact do workshops on teaching methods have on the teachers of your school?	School			Total
	School 1	School 2	School 3	
No impact at all	0	0	0	0
Just for a short time after the workshop. Then every teacher continues doing as he/she was doing before	2	1	0	3
Some teachers have really changed after the workshops. Others continue teaching in the same way	2	2	5	9
The workshops caused a real and lasting renewal in the methods of the teaching staff	0	2	0	2
NR/DK	0	0	0	0
<b>Total</b>	<b>4</b>	<b>5</b>	<b>5</b>	<b>14</b>

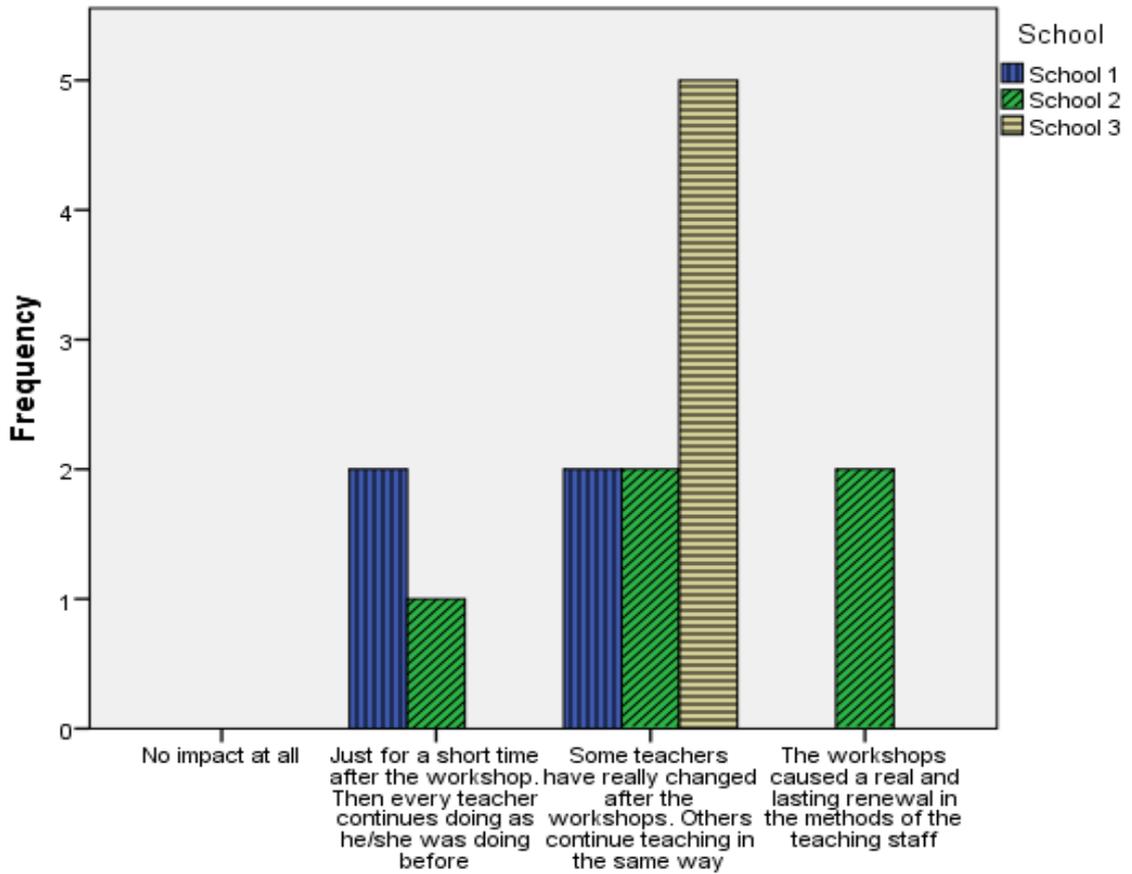


Figure IV-59. Workshops Impact on Teaching Staff

The members of School 1 and 2 teams do not agree about the impact that workshops have on the teaching methods of the teachers. No school team affirms that workshops have no impact. School 2 is more positive in their assessment. The members of School 3 instead converge on the opinion that these workshops have a good impact on some teachers and no impact on others who continue teaching in the same way after the workshop.

2. In which level does your school find itself?

Table IV-104. The Management of Processes Leads to Continuous Improvement

Management of Processes Level	School			Total
	School 1	School 2	School 3	
Quality depends solely on the individual	0	0	0	0
Process awakening	0	0	0	0
Vision through processes	0	0	5	5
Systematic assessment and improvement	4	5	0	9
Excellent processes	0	0	0	0
NR/DK	1	0	0	0
<b>Total</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>15</b>

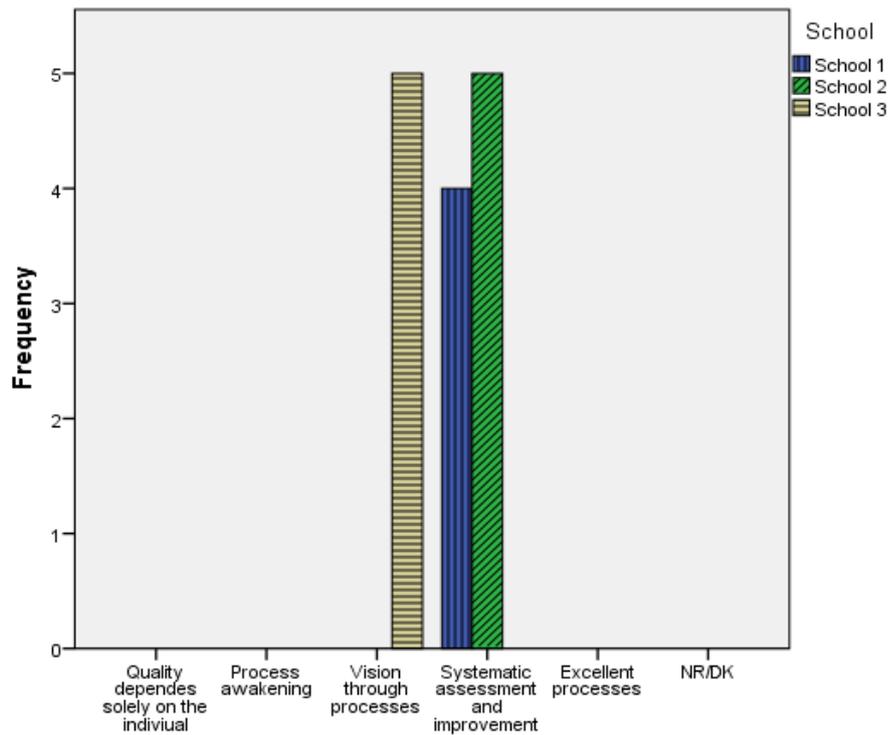


Figure IV-60. The Management of Processes Leads to Continuous Improvement

School 1 and 2 have a similar positive self-perception (Systematic assessment and improvement) that is coherent with the previous question. School 3 instead has an intermediate self-perception (Systematic assessment and improvement).

**4.3.5.3 Sub-criterion 5c: Processes are Responsive according to Students and Parents Needs and Expectations**

The school has defined procedures to identify the needs and expectations of students, parents and other stakeholders and improve its processes accordingly.

1. Does your school systematically identify the needs and expectations of the students and parents?

Table IV-105. Identification of Students and Parents Needs and Expectations

Does your school systematically identify the needs and expectations of the students and parents?	School			Total
	School 1	School 2	School 3	
No	2	0	0	2
Yes	2	5	5	12
NR/DK	0	0	0	0
Total	4	5	5	14

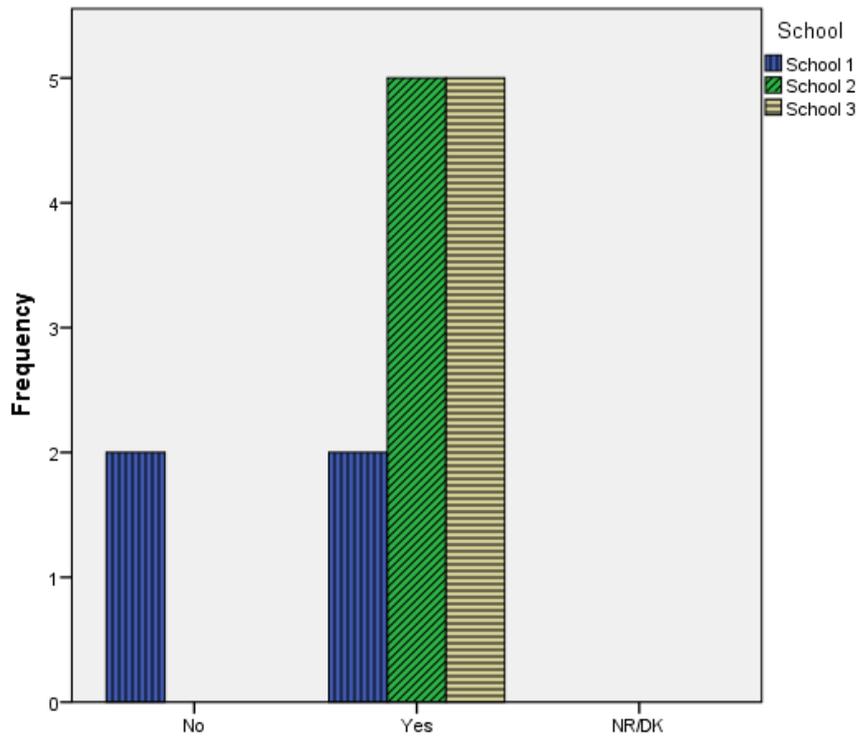


Figure IV-61. Identification of Students and Parents Needs and Expectations

Schools 2 and 3 state that they systematically identify the needs and expectations of students and parents. The School 1 team instead is divided and therefore their answer cannot be considered meaningful.

- How does the school identify the needs and expectations of the students and parents?

Table IV-106. Ways of Identifying the Needs and Expectations of the Students and Parents

How does the school identify the needs and expectations of the students and parents?	School			Total
	School 1	School 2	School 3	
Through personal encounters	2	0	0	2
Through written letters (Suggestions' Box)	0	0	2	2
In formal meetings	0	5	3	8
Through questionnaires or surveys.	0	0	0	0
NR/DK	2	0	0	2
<b>Total</b>	<b>4</b>	<b>5</b>	<b>5</b>	<b>14</b>

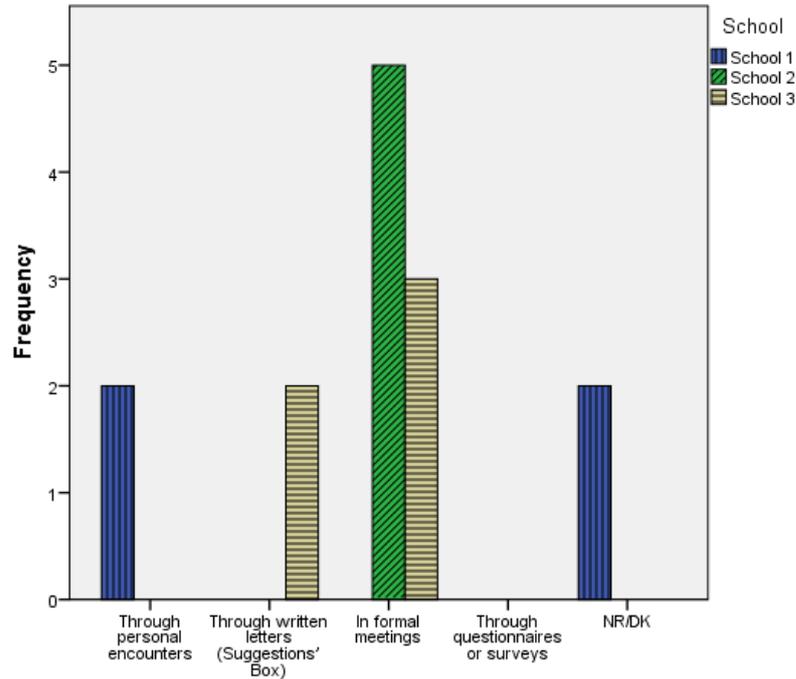


Figure IV-62. Ways of Identifying the Needs and Expectations of the Students and Parents

Two present members of the School 1 team did not answer this question. Just two did it. These ones affirm that the school identify the needs and expectations of the students and parents through personal encounters. School 2 does it through formal meetings while the members of the School 3 team are divided between written letters (Suggestions' Box) and formal meetings.

It is interesting to recall the perception on the expectations of students according to the understanding of the school administration during the seminar previous to the formation of the quality teams:

Table IV-107. How the Students Regard the School Administration

School	How the Students Regard the School Administration
School 1	Reliability, responsiveness, empathy, tangibility, assurance
School 2	Excellent school in comparison with the other schools of the context
School 3	With appreciation and respect

3. In which level does your school find itself?

Table IV-108. Processes are Responsive according to Students and Parents Needs and Expectations

Processes are responsive according to students and parents needs and expectations	School			Total
	School 1	School 2	School 3	
Quality depends solely on the individual	4	0	0	4
Process awakening	0	0	5	5
Vision through processes	0	5	0	5
Systematic assessment and improvement	0	0	0	0
Excellent processes	0	0	0	0
NR/DK	1	0	0	1
<b>Total</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>15</b>

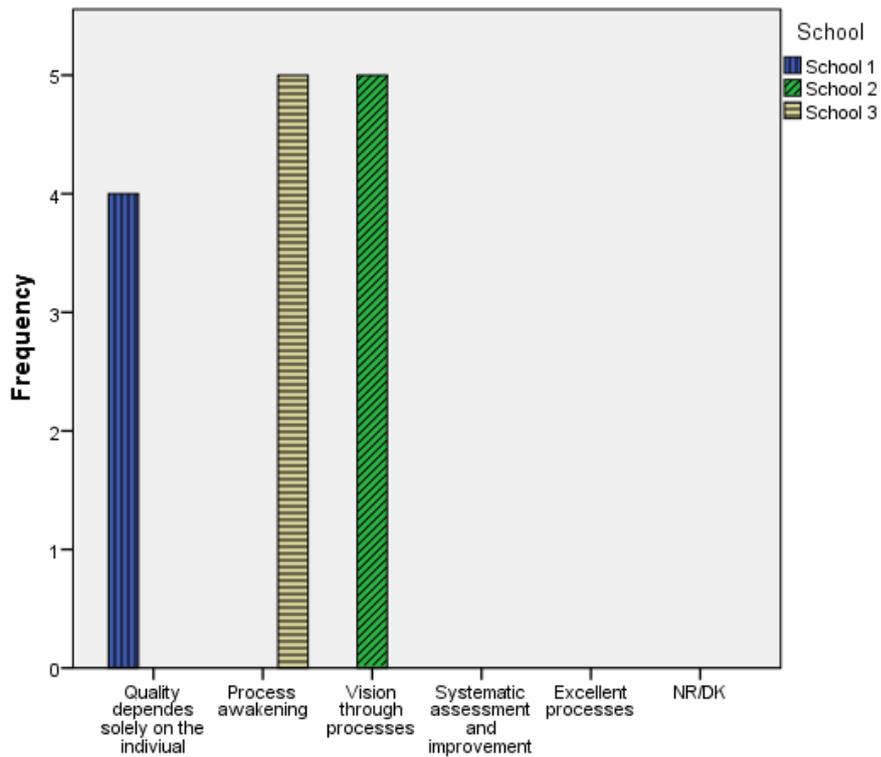


Figure IV-63. Processes are Responsive according to Students and Parents Needs and Expectations

School 1 considers being at the lowest level: “Quality depends solely on the individual”. This perception is coherent with the two previous questions. School 2 has an intermediate self-perception (Vision through processes) while School 3 considers itself to be at the level of “Process awakening”. Therefore no school has self-perception above the intermediate one as for the consideration of the needs of its main clients (students, parents).

#### 4.3.5.4 Sub-criterion 5d: Administrative and Financial Management

The school is equipped with an efficient, effective system for administrative and financial management.

1. In which level does your school find itself?

Table IV-109. Administrative and Financial Management

Administrative and Financial Management Level	School			Total
	School 1	School 2	School 3	
Quality depends solely on the individual	0	0	5	5
Process awakening	0	0	0	0
Vision through processes	0	5	0	5
Systematic assessment and improvement	4	0	0	4
Excellent processes	0	0	0	0
NR/DK	0	0	0	1
<b>Total</b>	<b>4</b>	<b>5</b>	<b>5</b>	<b>14</b>

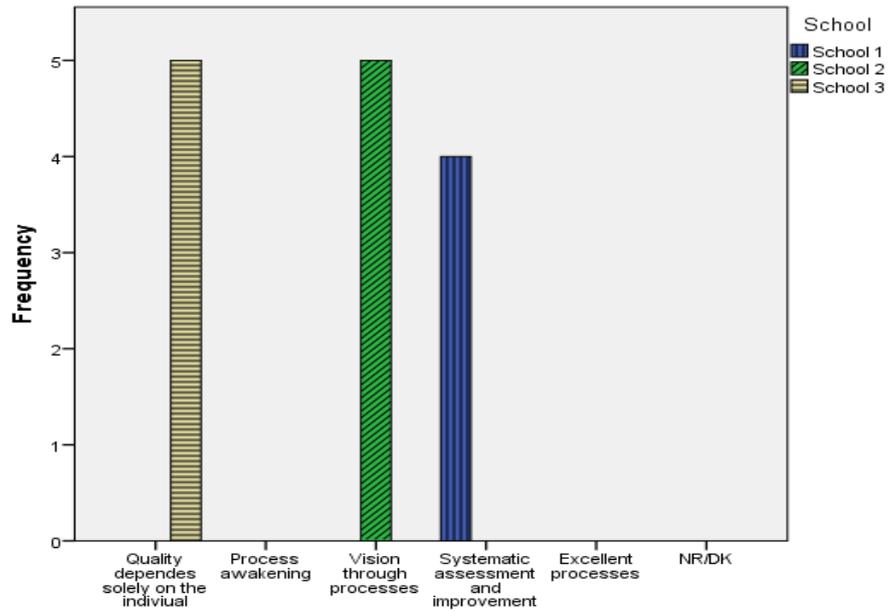


Figure IV-64. Administrative and Financial Management

As for the administrative and financial management, School 3 has the lowest self-perception (Quality depends solely on the individual). School 2 has an intermediate self-perception (Vision through processes) while School 1 has a positive one (Systematic assessment and improvement).

#### 4.3.5.5 *Summary of Criterion Results and Identification of Strengths and Areas for Improvement*

The results for the self-perception on this criterion can be calculated with the Self-Assessment Matrix (Appendix 6) and summarized as follows:

Table IV-110. Summary of Results on Processes, Products and Services

Criterion	Sub-criterion or question	Question	School 1	School 2	School 3
5 PROCESSES, PRODUCTS AND SERVICES	Well-designed processes	1			
		2	3	3	3
		3	10	6	6
	The management of process leads to continuous improvement	1	1.5	2.2	2
		2	10	10	6
	Processes are responsive according to students and parents needs and expectations	1	2.5	5	5
		2	0	2	1.6
		3	1	6	2
	Administrative and financial management	1	10	6	1
	Maximum Total = 64. 10% of the total Score. Maximum Score = 100		TOTAL =	38	40.2
		SCORE = TOTAL × 1.56	59.28	62.712	41.496

In this case there are no sources of confrontation to have different results based upon data.

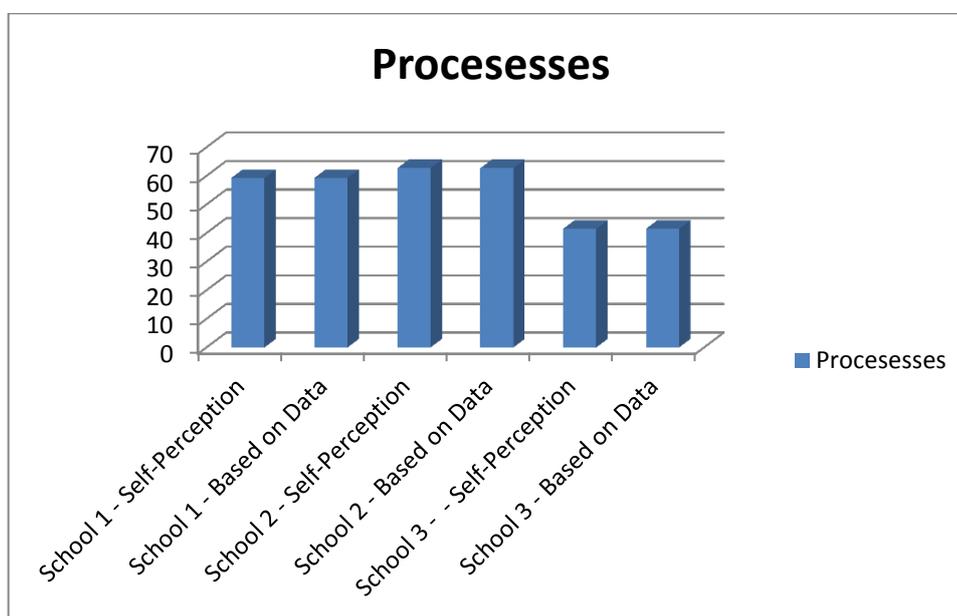


Figure IV-65. Comparison of Results for Processes

Considering all this data, the researcher summarized like this the strengths and areas for improvement of these schools:

Table IV-111. Processes: Strengths and Areas for Improvement

School	Strengths	Areas for improvement
1	Well-designed processes through periodical assignments and tests in addition to the final exams Administrative and financial management	Processes are responsive according to students and parents needs and expectations
2		
3		Administrative and financial management

#### 4.3.6 Criterion 6: Students and Parents (Customers) Results

Excellent schools achieve and sustain outstanding results that meet or exceed the needs and expectations of students and their parents.

##### 4.3.6.1 Sub-criterion 6a: Students and Parents Satisfaction

Here the school evaluates the perception of students and parents in relation to the school work.

1. In which level does your school find itself?

Table IV-112. Students and Parents Satisfaction

Level	School			Total
	School 1	School 2	School 3	
Quality depends solely on the individual	0	0	0	0
Process awakening	0	0	0	0
Vision through processes	4	4	5	13
Systematic assessment and improvement	0	0	0	0
Excellent processes	0	0	0	0
NR/DK	0	1	0	1
<b>Total</b>	<b>4</b>	<b>5</b>	<b>5</b>	<b>14</b>

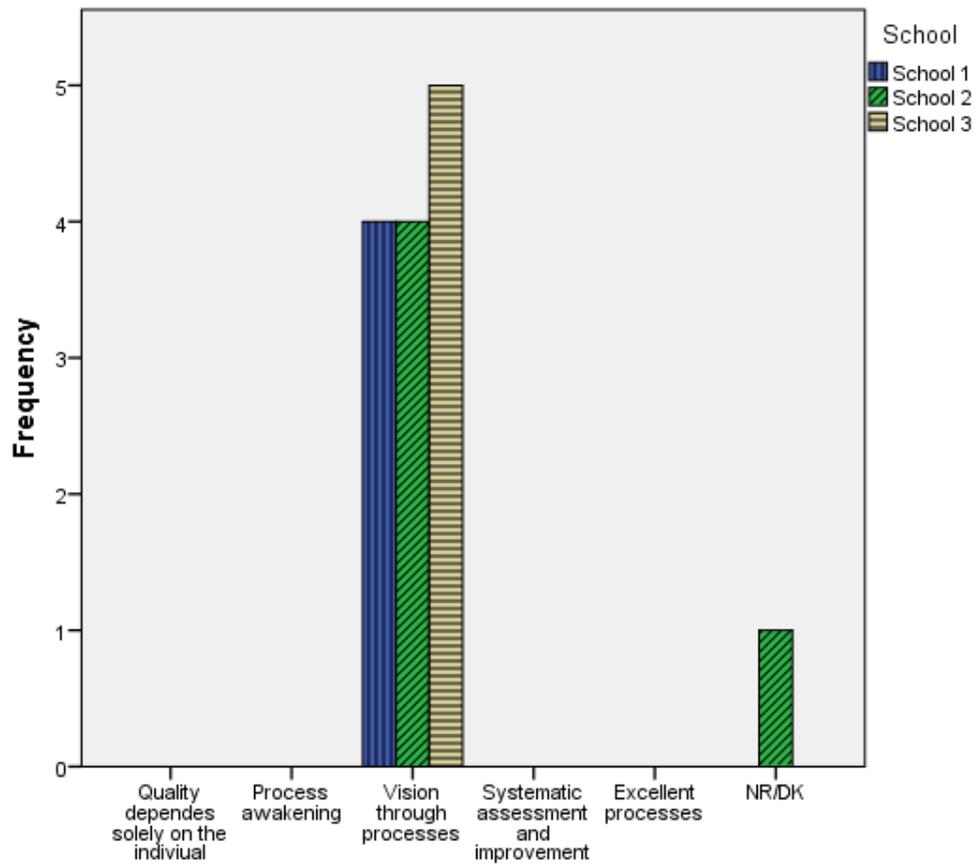


Figure IV-66. Students and Parents Satisfaction

The three schools converge on the intermediate level: “Vision through processes”.

#### 4.3.6.2 Sub-criterion 6b: Indicators of Performance

These indicators predict perceptions of students and parents.

1. Which percentage of students leaves your school every year before reaching their final class (class 8) and move to other schools?

Table IV-113. Dropout Percentage

Which percentage of students leaves your school every year before reaching class 8 and move to other schools?	School			Total
	School 1	School 2	School 3	
Not known	0	0	0	0
≥30%	0	0	0	0
≥16%≤30%	0	0	0	0
≥6%≤15%	1	0	0	1
≤5%	3	5	5	13
NR/DK	0	0	0	0
<b>Total</b>	<b>4</b>	<b>5</b>	<b>5</b>	<b>14</b>

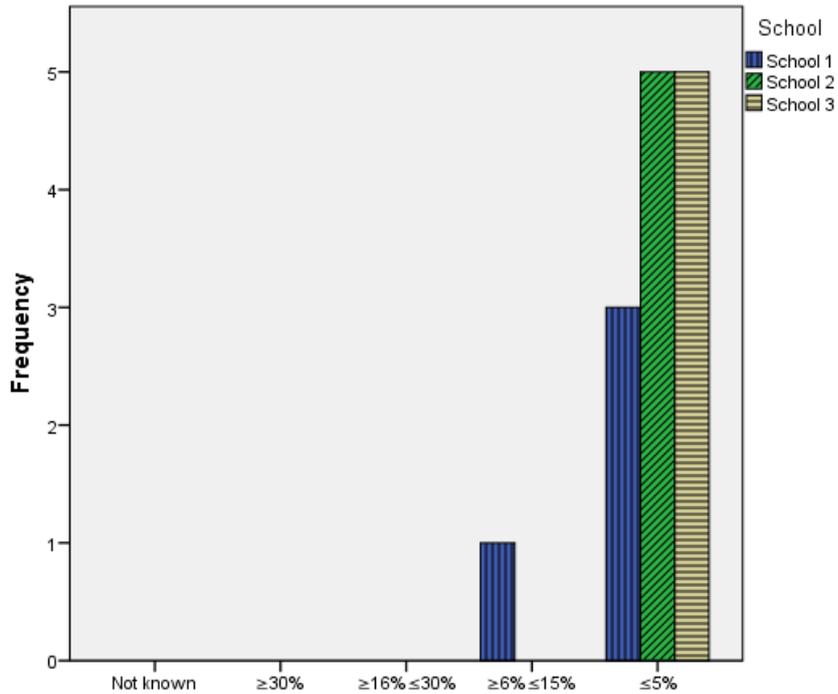


Figure IV-67. Percentage of Students who Leave the School every Year before Reaching Class 8 and Move to Other Schools

The three schools state that less than 5% of the students leave the school every year before reaching their final class (class 8) and move to other schools.

Here the question does not mention students who may have left their school journey (dropout cases). This question will be recaptured within sub-criterion 9b.

2. How many written complaints per year are received?

Table IV-114. Written Complaints per Year

How many written complaints per year are received?	School			Total
	School 1	School 2	School 3	
≤ 2	4	5	5	14
≥3≤10	0	0	0	0
≥11≤20	0	0	0	0
≥21	0	0	0	0
NR/DK	0	0	0	1
<b>Total</b>	<b>4</b>	<b>5</b>	<b>5</b>	<b>14</b>

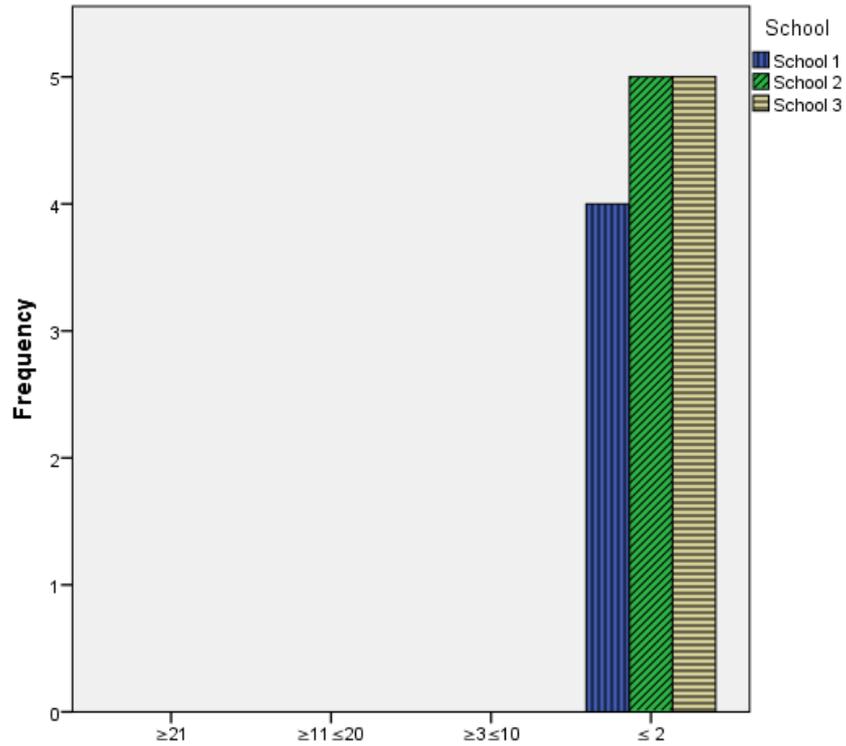


Figure IV-68. Written Complaints per Year

The three schools agree on having two or less than two complaints per year.

#### 4.3.6.3 *Summary of Criterion Results and Identification of Strengths and Areas for Improvement*

The results for the self-perception on this criterion can be calculated with the Self-Assessment Matrix (Appendix 6) and summarized as follows:

Table IV-115. Summary on Students and Parents Results

Criterion	Sub-criterion	Question	School 1	School 2	School 3
6 STUDENTS AND PARENTS (CUSTOMERS) RESULTS	Students and parents satisfaction	1	6	6	6
	Indicators of performance	1	3.75	4	4
		2	3	3	3
Maximum Total = 19. 15% of the total Score. Maximum Score = 150		<b>TOTAL</b>	12.75	13	13
		<b>SCORE = TOTAL × 7.89</b>	100.56	102.57	102.57

In this case there are no sources of confrontation to have different results based upon data.

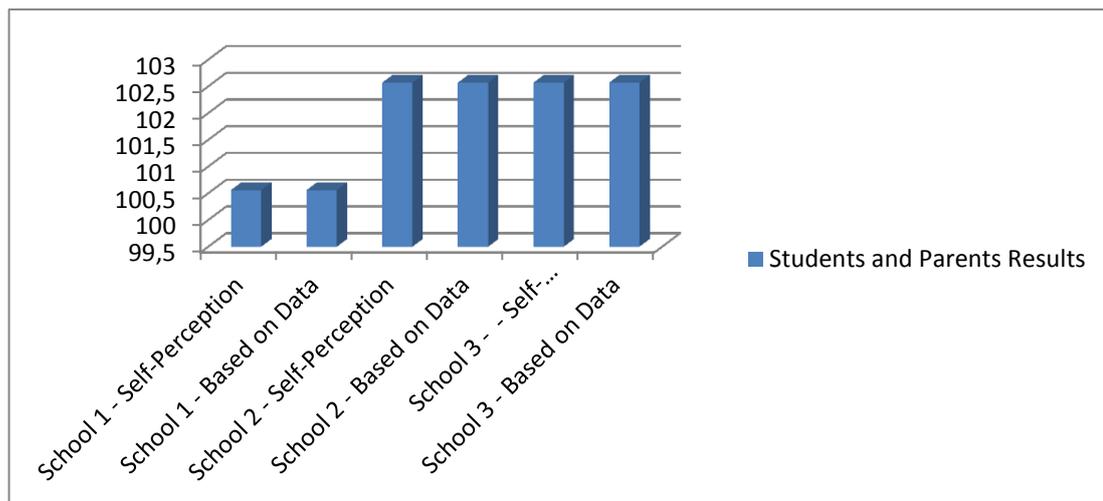


Figure IV-69. Students and Parents Results

Considering all this data, the researcher summarized like this the strengths and areas for improvement of these schools:

Table IV-116. Strengths and Areas for Improvement

School	Strengths	Areas for improvement
1	Continuity of students in the school and no complaints	
2	Continuity of students in the school and no complaints	
3	Continuity of students in the school and no complaints	

The three schools look to have good results that meet the needs and expectations of students and their parents, even if previously it was noticed that they do not have defined procedures to identify those needs and expectations.

#### 4.3.7 Criterion 7: Personnel Results

Excellent schools achieve and sustain outstanding results that meet or exceed the needs and expectations of their staff. The criterion addresses the results of the work and satisfaction of all those within the school and also links to the human resource management criterion. Measurement focuses on the areas over which the school has freedom to act.

##### 4.3.7.1 Sub-criterion 7a: Staff Satisfaction

Staff members consistently exhibit satisfaction with their being employed in the school, as well as with their specific roles and responsibilities. They are consistently satisfied with the support that the administration provides regarding motivation, recognition, training, atmosphere, health, etc.

1. An indicator of satisfaction is the absence rate. How many staff members have a one day absence per week in a normal week?

Table IV-117. Staff Members with One Day Absence per Week in a Normal Week

How many staff members have a one day absence per week in a normal week?	School			School
	School 1	School 1	School 3	
Not known	0	0	0	0
≥30%	0	0	0	0
≥16≤30	0	0	0	0
≥6≤15	0	0	0	0
≤5%	4	5	5	14
NR/DK	0	0	0	0
<b>Total</b>	<b>4</b>	<b>5</b>	<b>5</b>	<b>14</b>

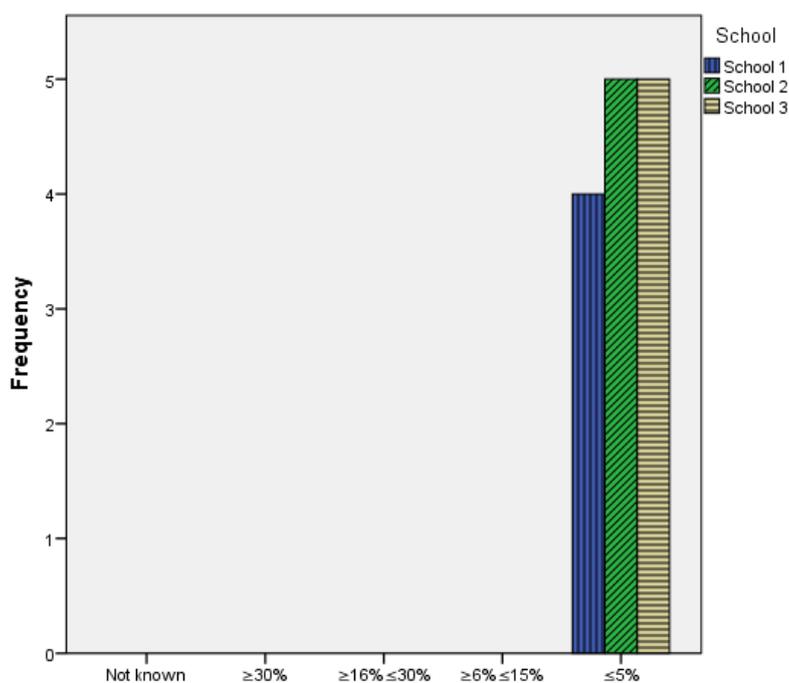


Figure IV-70. Staff Members with One Day Absence per Week in a Normal Week

In the three schools the staff members look very committed with the work as the percentage of absence is low. There is a meaningful agreement among the different members of the three teams. Every school keeps records of their staff attendance.

This a sign of a strong school management which is significant in a country where a study funded by the European Union points the “regular absenteeism of the

teachers” (EU et al., 2015, p. 99). The same report “observed that schools started late, that the breakfast breaks in the school often exceeded the fixed duration and that the schools ended before the official school day ended, thus reducing the effective teaching time considerably” (2015, p. 121).

This study has placed the question on the absenteeism of the staff within the sub-criterion “staff satisfaction”. Nonetheless, it is clear that the level of absenteeism has a direct impact on the learning outcomes and therefore on the students’ absenteeism that diminish when the latter ones and their parents find utility in the school (EU et al., 2015, pp. 125-126).

The link between poor teacher attendance and higher dropout rates have been observed in other countries (Chaudhury et al., 2006).

According to the study of the World Bank, in government schools of Sudan “many schools do not maintain adequate leave records, or any other records, for teachers” (2012, p. 148).

2. In which level does your school find itself?

Table IV-118. Staff Satisfaction Level

Staff Satisfaction Level	School			Total
	School 1	School 2	School 3	
Quality depends solely on the individual	0	0	0	0
Process awakening	0	0	0	0
Vision through processes	4	0	1	5
Systematic assessment and improvement	0	5	4	9
Excellent processes	0	0	0	0
NR/DK	0	0	0	0
<b>Total</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>15</b>

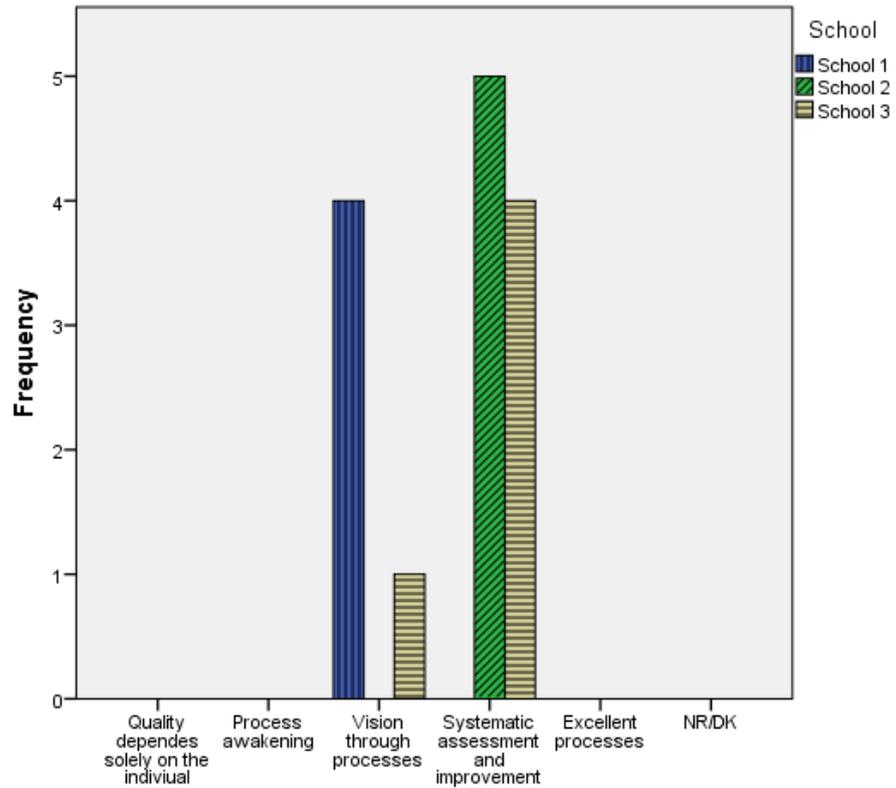


Figure IV-71. Staff Satisfaction Level

While School 1 has an intermediate self-perception concerning staff satisfaction (“Vision through processes”) Schools 2 and 3 have a high self-perception (“Systematic assessment and improvement”).

#### 4.3.7.2 Sub-criterion 7b: Staff Performance

The school has enough staff to respond to the needs and expectations of students and parents productively and efficiently. School staff members are assessed through performance evaluations, feedback from students and parents, and contributions to school goals.

1. What is the frequency of the homework asked by every teacher?

Table IV-119. Frequency of the Homework Asked by Every Teacher

What is the frequency of the homework asked by every teacher?	School			Total
	School 1	School 2	School 3	
Rarely	0	0	0	0
Monthly	0	0	0	0
Weekly	4	0	1	5
Daily	0	5	4	9
NR/DK	0	0	0	0
<b>Total</b>	<b>4</b>	<b>5</b>	<b>5</b>	<b>14</b>

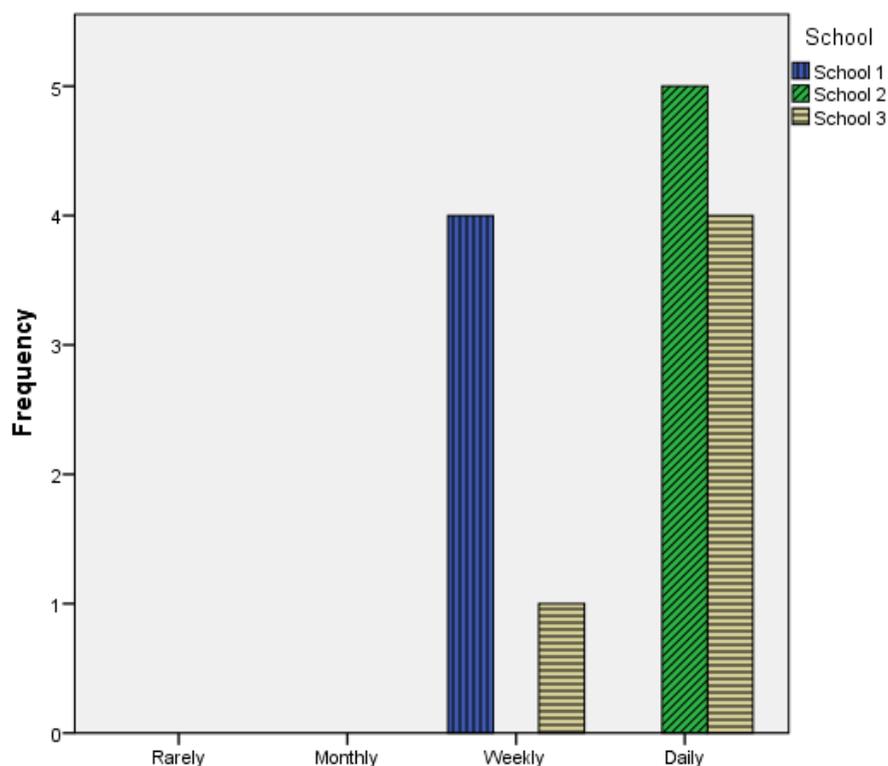


Figure IV-72. Frequency of the Homework Asked by Every Teacher

One of the characteristics of these schools according to the general opinion of Sudanese people is that there is discipline and homework. This general opinion is confirmed by the frequency of home-work asked by every teacher. At School 1 teachers ask for homework once a week while at Schools 2 and 3 they ask even daily.

It is worth recalling that the studies of Fuller & Clarke (1994, quoted by Scheerens 2004, p. 22) state that “frequency homework” is one of the input variables that showed significant association with achievement in nine out of eleven studies carried out in primary schools of developing countries.

2. In which level does your school find itself?

Table IV-120. Staff Performance Level

Staff Performance Level	School			Total
	School 1	School 2	School 3	
Quality depends solely on the individual	0	0	0	0
Process awakening	0	0	0	0
Vision through processes	0	0	0	0
Systematic assessment and improvement	4	5	5	14
Excellent processes	0	0	0	0
NR/DK	0	0	0	0
Total	4	0	0	14

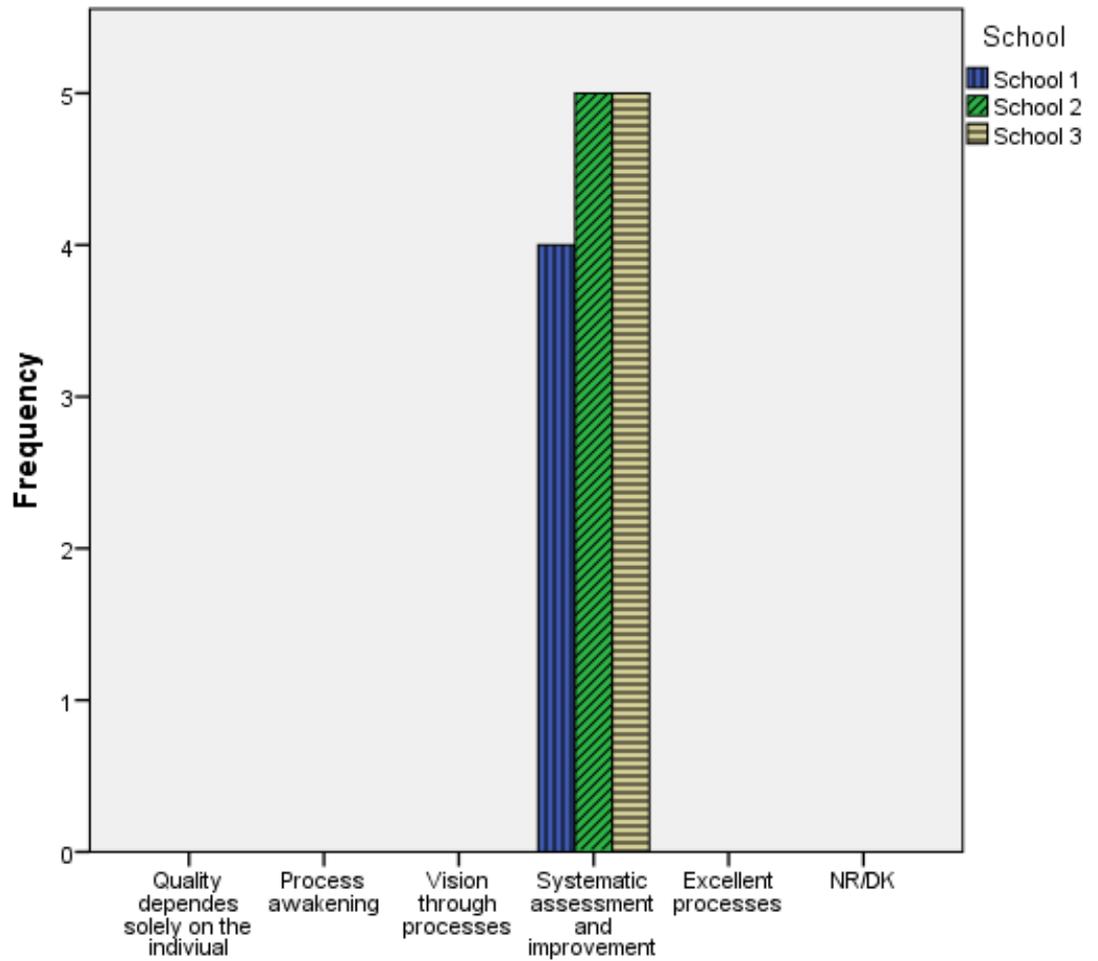


Figure IV-73. Staff Performance Level

The three schools coincide on describing their staff performance at the level of “Systematic assessment and improvement”.

#### 4.3.7.3 *Summary of Criterion Results and Identification of Strengths and Areas for Improvement*

The results for the self-perception on this criterion can be calculated with the Self-Assessment Matrix (Appendix 6) and summarized as follows:

Table IV-121. Summary on Personnel Results

Criterion	Sub-criterion	Question	School 1	School 2	School 3
7 PERSONNEL RESULTS	Staff satisfaction	1	4	4	4
		2	6	10	9.2
	Staff performance	1	2	3	2.8
		2	10	10	10
Maximum Total = 31. 11% of the total Score. Maximum Score = 110		TOTAL	22	27	26
		SCORE = TOTAL × 3.55	78.1	95.85	92.3

In this case there are no sources of confrontation to have different results based upon data.

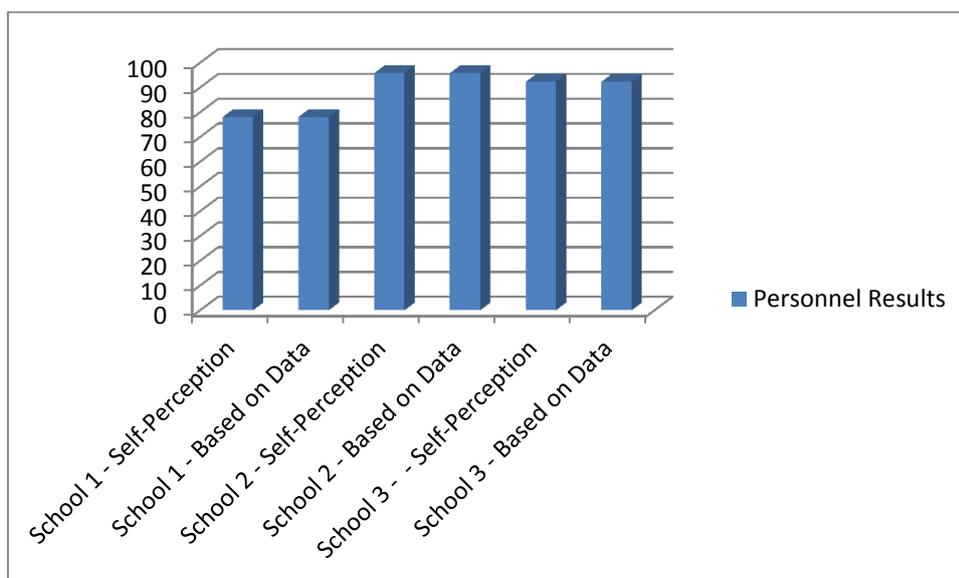


Figure IV-74. Personnel Results

Considering all this data, the researcher summarized like this the strengths and areas for improvement of these schools:

Table IV-122. Strengths and Improvement Areas

School	Strengths	Areas for improvement
1	Staff satisfaction	
2	Staff satisfaction and commitment with homework	
3	Staff satisfaction and commitment with homework	

In the three schools the staff looks to be satisfied. It is also worth mentioning their commitment with their work expressed through the low frequency of absence and their commitment with the homework.

#### **4.3.8 Criterion 8: Society Results**

Excellent schools achieve and sustain outstanding results that meet or exceed the needs and expectations of relevant stakeholders within society.

##### ***4.3.8.1 Sub-criterion 8a: Image***

School's visibility, engagement and reputation are recognised as a result of its programmes, extra-curricular activities, and the role of its personnel in society.

Table IV-123. Image Level

Image Level	School			Total
	School 1	School 2	School 3	
Quality depends solely on the individual	0	0	0	0
Process awakening	0	0	5	5
Vision through processes	4	5	0	9
Systematic assessment and improvement	0	0	0	0
Excellent schools	0	0	0	0
NR/DK	0	0	0	0
<b>Total</b>	<b>4</b>	<b>5</b>	<b>5</b>	<b>14</b>

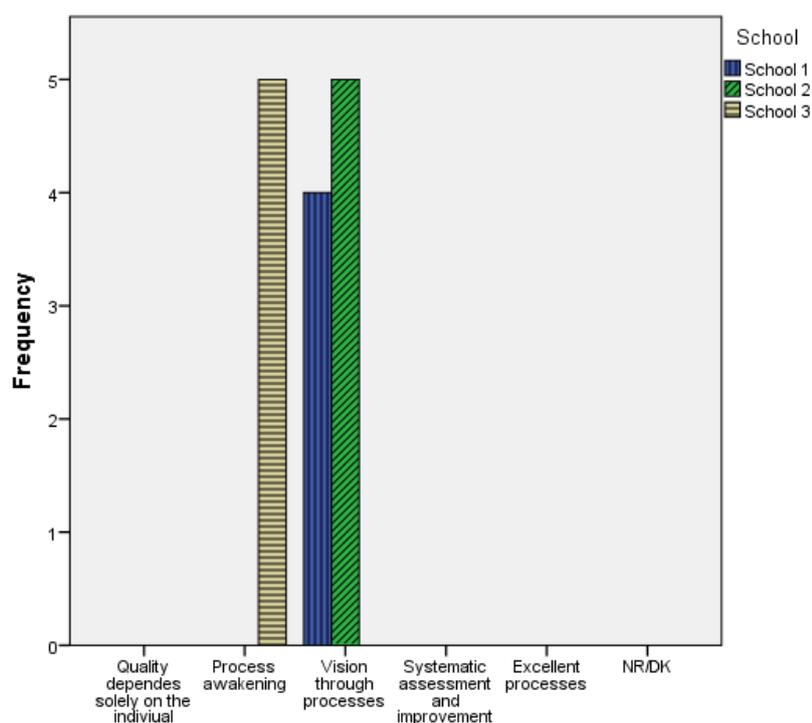


Figure IV-75. Image Level

As for school visibility, engagement and reputation, School 3 has a low self-perception (Process awakening level). Schools 1 and 2 have an intermediate self-perception (Vision through processes).

**4.3.8.2 Sub-criterion 8b: Social Responsibility**

As part of its routine activities, the school takes a proactive role in developing socially-oriented awareness, and concrete activities which are relevant to its own staff and the external community.

Table IV-124. Social Responsibility Level

Social Responsibility	School			Total
	School 1	School 2	School 3	
Quality depends solely on the individual	0	0	0	0
Process awakening	0	0	0	0
Vision through processes	3	5	0	8
Systematic assessment and improvement	1	0	5	6
Excellent schools	0	0	0	0
NR/DK	0	0	0	0
<b>Total</b>	<b>4</b>	<b>5</b>	<b>5</b>	<b>14</b>

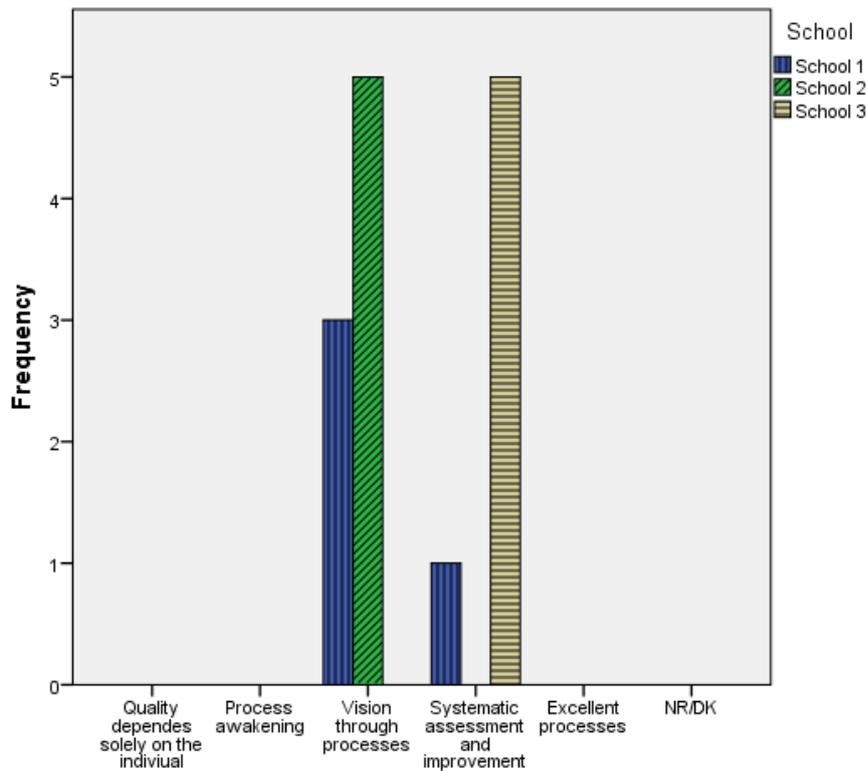


Figure IV-76. Social Responsibility Level

As for the role of the schools in developing socially-oriented awareness and concrete activities which are relevant for the community, Schools 1 and 2 coincide in considering themselves at an intermediate level (Vision through processes), while Schools 3 has a positive self-perception (Systematic assessment and improvement).

#### 4.3.8.3 *Sub-criterion 8c: Sustainability*

The school demonstrates environmental awareness by being proactive in sustainability, reducing its own energy consumption and waste, and including environmental education as part of its programs.

Table IV-125. Level of Sustainability

Sustainability	School			Total
	School 1	School 2	School 3	
Quality depends solely on the individual	0	0	0	0
Process awakening	0	0	0	0
Vision through processes	4	5	5	14
Systematic assessment and improvement	0	0	0	0
Excellent schools	0	0	0	0
NR/DK	0	0	0	0
<b>Total</b>	<b>4</b>	<b>5</b>	<b>5</b>	<b>14</b>

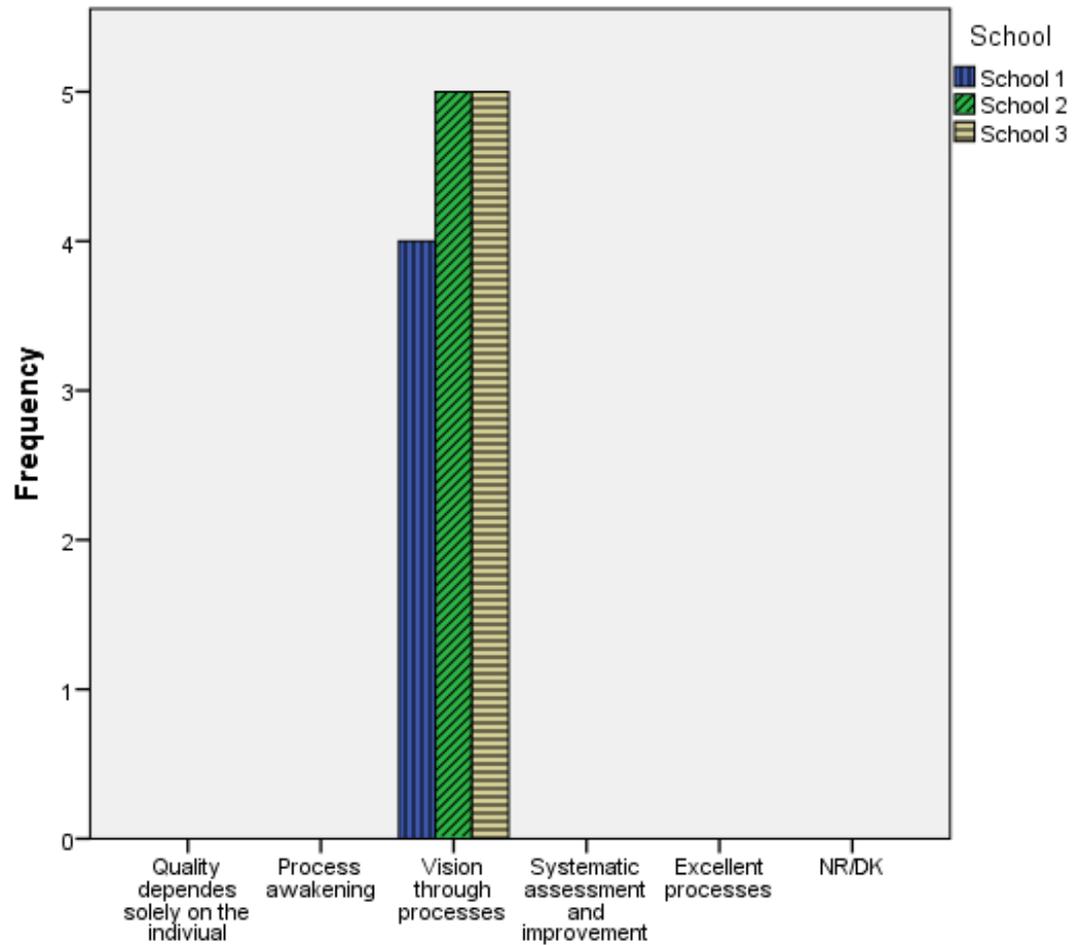


Figure IV-77. Sustainability Level

As for the environmental awareness of the school, the three describe themselves at the level of “Vision through processes”.

#### ***4.3.8.4 Summary of Criterion Results and Identification of Strengths and Areas for Improvement***

The results for the self-perception on this criterion can be calculated with the Self-Assessment Matrix (Appendix 6) and summarized as follows:

Table IV-126. Summary on Society Results

Criterion	Sub-criterion	Question	School 1	School 2	School 3
8 SOCIETY RESULTS	Image	1	6	6	3
	Social responsibility	2	7	6	10
	Sustainability	3	6	6	6
Maximum Total = 36. 10% of the total Score. Maximum Score = 100		TOTAL	19	18	19
		SCORE = TOTAL × 2.78	52.82	50.04	52.82

In this case there are no sources of confrontation to have different results based upon data.

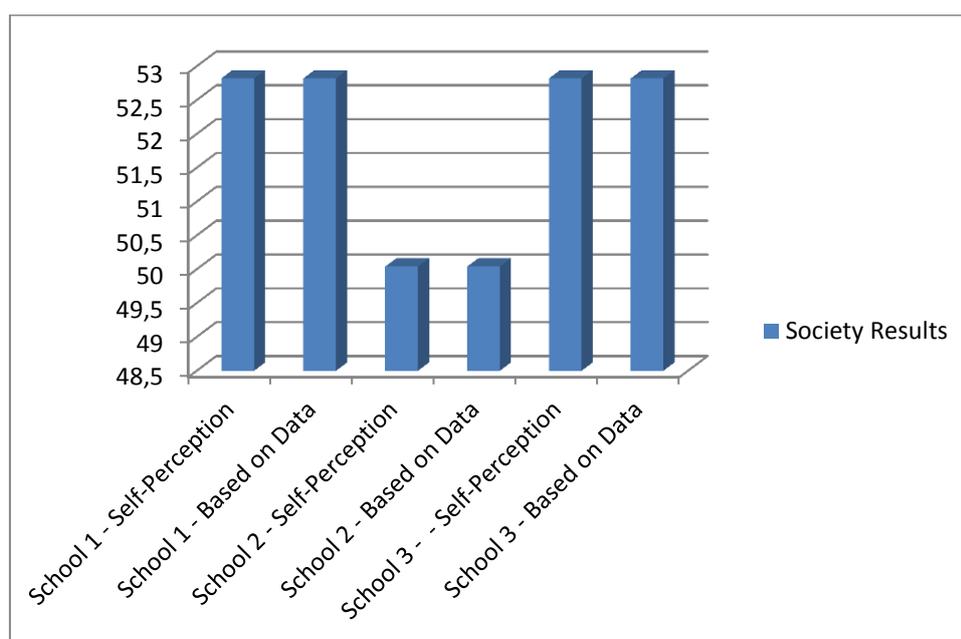


Figure IV-78. Society Results

Considering all this data, the researcher summarized like this the strengths and areas for improvement of these schools:

Table IV-127. Society Results: Strengths and Areas for Improvement

School	Strengths	Areas for improvement
1		
2		
3	Social responsibility of the school	School image

The results of this criterion do not look particularly meaningful. There would be need of improving the indicators.

#### 4.3.9 Criterion 9: Key Results

Excellent schools achieve and sustain outstanding results that meet or exceed the needs and expectations of students, parents and other stakeholders and are expected to meet the key goals of their policies and strategies (EFQM, 2017; Martinez Mediano and Rioperez, 2005; Aragón Marin, 2001).

For every question the following aspects should be considered:

- The magnitude: degree of excellence of the results.
- The tendencies: what has been achieved in the last years (three or more)? An excellent organization will have positive tendencies and a sustained performance.
- The goals: the objectives should be suitable.
- The performance of an excellent school will be the result of the approaches and benchmarking.
- The reach: the results have an impact on relevant areas previously identified. The results are relevant for the students, their families and the staff.

These measures will be both financial and non-financial, and many will be closely linked to strategy and planning (criterion 2) and critical processes (criterion 5). Results relate to measurement of the school's performance, with regard to achievement of goals, the outcomes of key activities (effectiveness), and the internal functioning of

the school. Furthermore, they involve measurements of the performance of the school in making rational and economic use of its financial resources (economy).

#### 4.3.9.1 Sub-criterion 9a: Financial

This sub-criterion deals with the financial results of the school. The final score will be the average of all the scores recorded for the key financial results.

##### 1. Percentage of school fees collected

Table IV-128. Self-perception on % of School Fees Collected

% of school fees collected	School			Total
	School 1	School 2	School 3	
Results are not measured and/or no information is available.	0	0	5	5
Results are measured and show negative trends and/or results do not meet relevant targets	0	0	0	0
Results show improving trends and/or most relevant targets are met	5	3	0	8
Results show substantial progress and/or all relevant targets are met	0	0	0	0
Excellent and sustained results are achieved. All relevant targets are met. Positive comparisons with relevant schools for all key results are made	0	0	0	0
NR/DK	0	2	0	2
<b>Total</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>15</b>

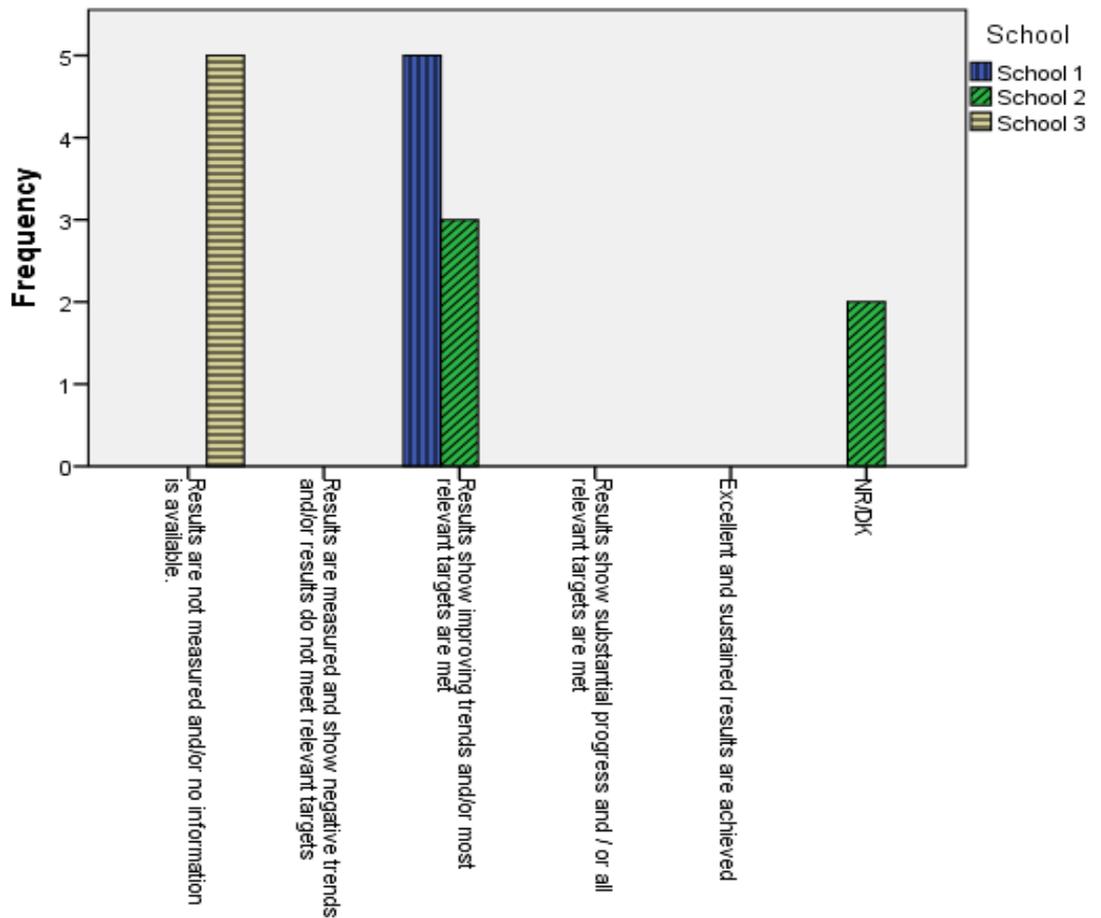


Figure IV-79. % of School Fees Collected

School 1 Team considered themselves at the level of “Results show improving trends and/or most relevant targets are met”. The Headmaster brought the percentage of fees that were collected in the last academic year after the respective workshop.

Three members of School 2 team consider the school at the same level but did not bring results to support their view. From the interview with the Headmaster the researcher came to know that financial information is found at the Parish Education Office (Transcript A, par. 10).

School 3 stated that “Results are not measured and/or no information is available”. Their respective data were obtained through the interview with the Parish Priest (Transcript C, par. 3).

Table IV-129. Percentage of School Fees Collected in the Last Two Years

Percentage of School Fees Collected by	2016/2017	2017/2018
School 1	94.87%	96.18%
School 2		
School 3	61%	52.1%

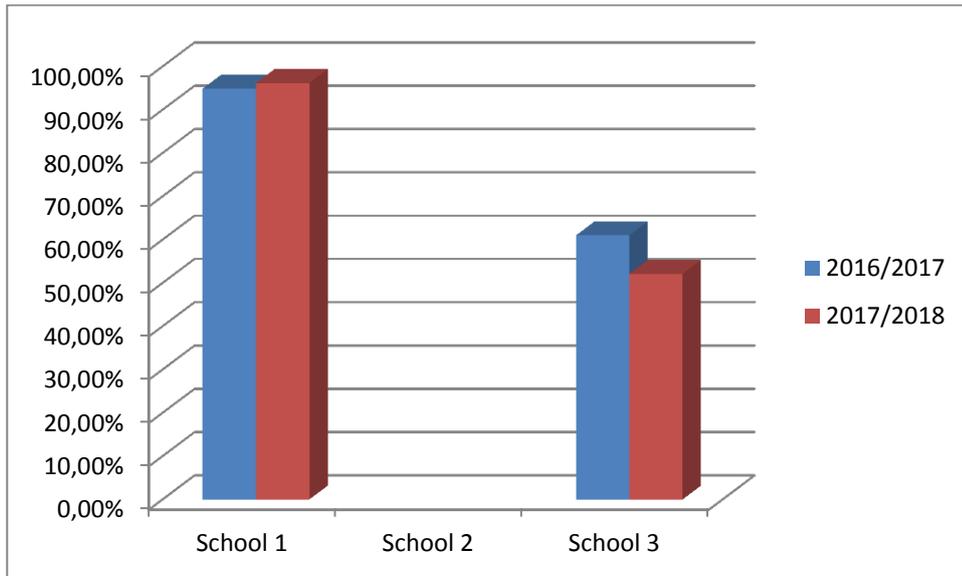


Figure IV-80. Percentage of School Fees Collected in the Last Two Years

It is also worth mentioning the 2018-2019 budgets of the two schools that shared the information:

Table IV-130. 2018-2019 School Budgets

School	2018-2019 Budgeted Ordinary Income (SDG)
School 1	9,903,000
School 2	
School 3	426,500

## 2. Annual surplus

Table IV-131. Self-perception on Annual Surplus

Annual Surplus	School			Total
	School 1	School 2	School 3	
Results are not measured and/or no information is available.	0	0	5	5
Results are measured and show negative trends and/or results do not meet relevant targets	0	1	0	1
Results show improving trends and/or most relevant targets are met	5	4	0	9
Results show substantial progress and/or all relevant targets are met	0	0	0	0
Excellent and sustained results are achieved. All relevant targets are met. Positive comparisons with relevant schools for all key results are made	0	0	0	0
NR/DK	0	0	0	0
<b>Total</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>15</b>

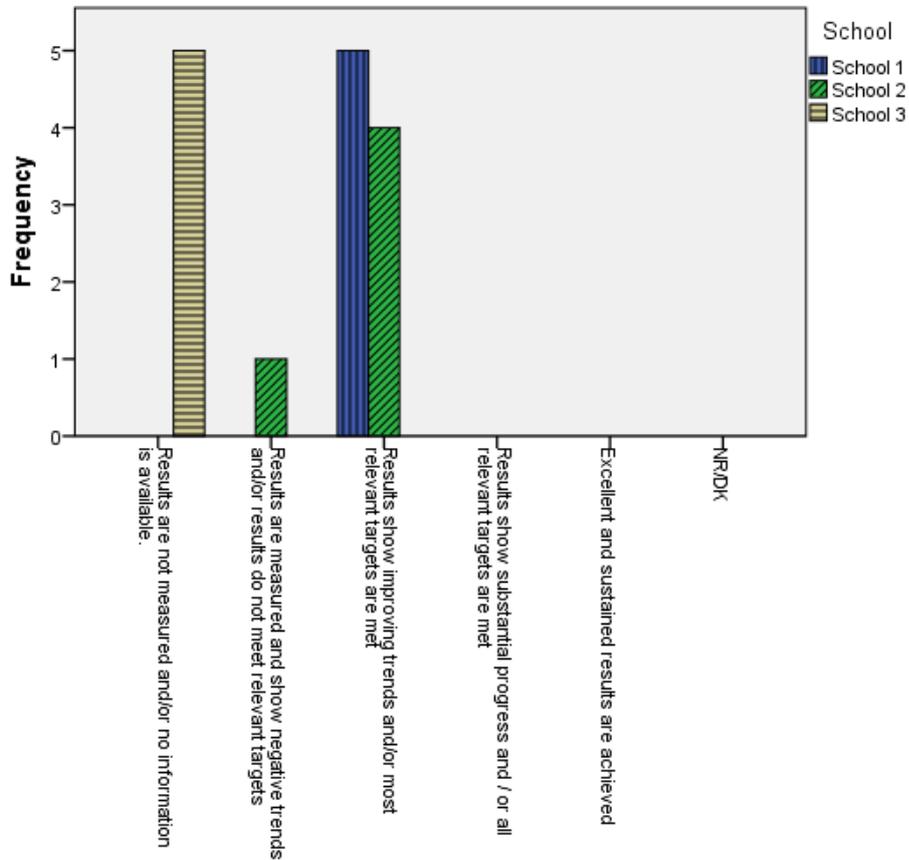


Figure IV-81. Self-perception on Annual Surplus

Table IV-132. Annual Surplus.

Annual Surplus	2016/2017	2017/2018
School 1		
School 2		
School 3	- 32,000 SDG	- 45,000 SDG

The members of School 1 team consider themselves at the level of “Results show improving trends and/or most relevant targets are met”. They affirm that their yearly surplus is 0.

Four members of School 2 team consider themselves at the same level than School 1 but did not share the information about the surplus. As in the previous case, the Headmaster explained that financial data are with the Parish Education Office (Transcript A, par. 10).

The members of the School 3 team stated that “Results are not measured and/or no information is available”. But the Parish Priest in charge for the School brought them. In the interview with him, the researcher came to know that the School covers the deficit with the surplus of another Parish School. In that one, according to this interview, there is a better follow up from the school administration on the fees collection with a more direct contact with the parents (Transcript C, par. 4).

### 3. Expenditure per student

Table IV-133. Self-perception on Expenditure per Student

Expenditure per student	School			Total
	School 1	School 2	School 3	
Results are not measured and/or no information is available.	0	2	5	7
Results are measured and show negative trends and/or results do not meet relevant targets	0	1	0	1
Results show improving trends and/or most relevant targets are met	5	0	0	5
Results show substantial progress and/or all relevant targets are met	0	0	0	0
Excellent and sustained results are achieved. All relevant targets are met. Positive comparisons with relevant schools for all key results are made	0	0	0	0
NR/DK	0	2	0	2
<b>Total</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>15</b>

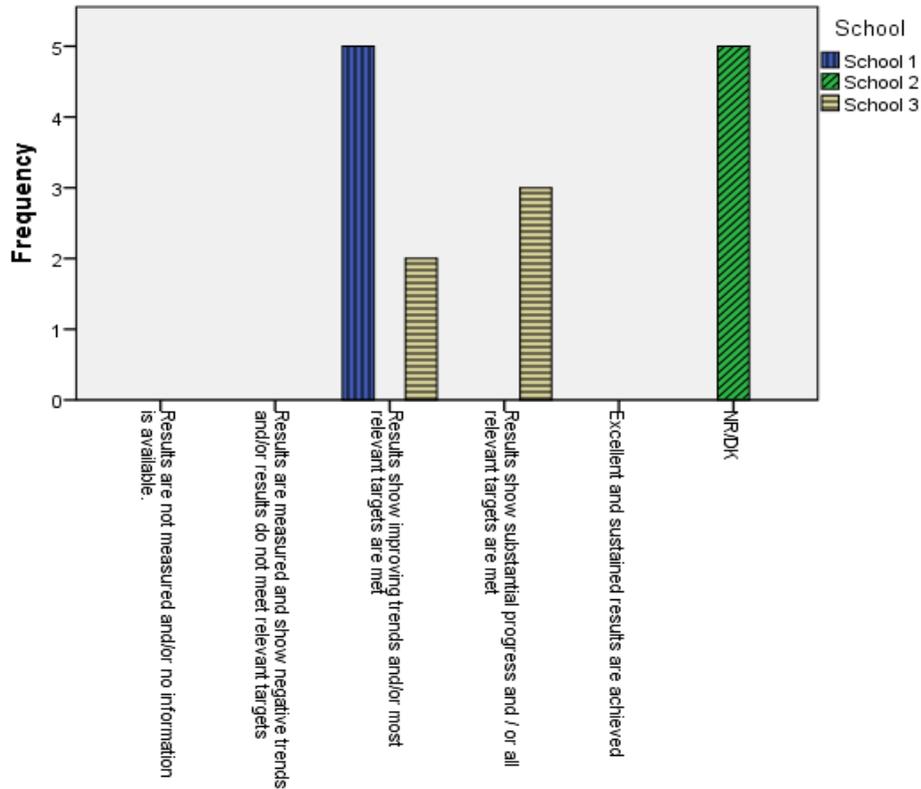


Figure IV-82. Self-perception on Expenditure per Student

Table IV-134. Expenditure per Student

Expenditure per student	2016/2017	2017/2018
School 1	2,427 SDG	4,333 SDG
School 2		
School 3	1,910 SDG	1,613 SDG

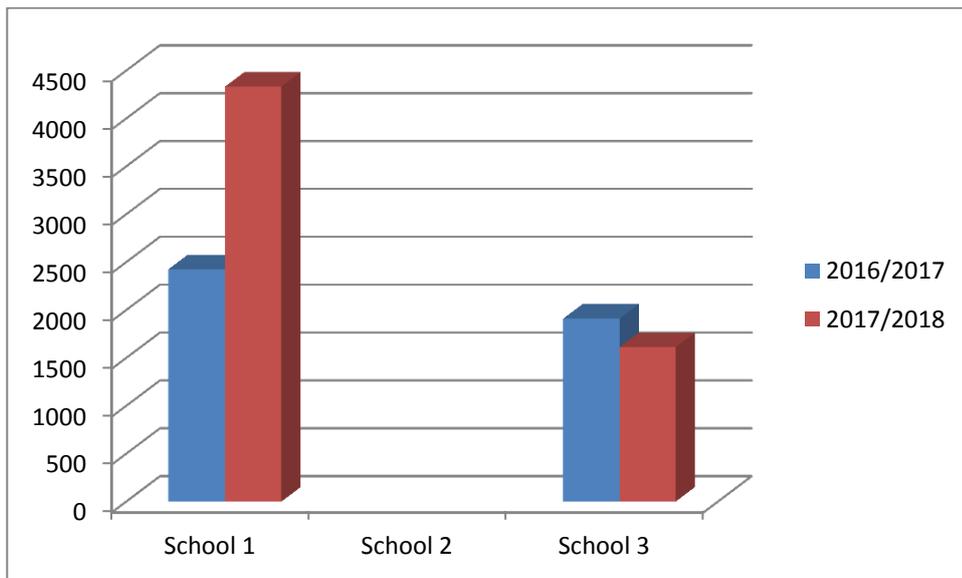


Figure IV-83. Expenditure per Student (SDG)

School 1 also considered itself at the level of “Results show improving trends and/or most relevant targets are met”. They calculated the expenditure per student and this came to be 4,333 SDG.

The members of the School 2 team are divided. Two members consider the school at the level of “Results are not measured and/or no information is available”, one member at the level of “Results are measured and show negative trends and/or results do not meet relevant targets” and two members did not answer.

The members of School 3 team agree on qualifying their school at the level “Results are not measured and/or no information is available”. But the Parish Priest in charge for the School brought them.

### 3. Summary

Table IV-135. Key Financial Results Table Based upon Self-perception

Key financial results	Definitions of levels				
	Level 1	Level 2	Level 3	Level 4	Level 5
	Results are not measured and/or no information is available.	Results are measured and show negative trends and/or results do not meet relevant targets.	Results show improving trends and/or most relevant targets are met.	Results show substantial progress and / or all relevant targets are met.	Excellent and sustained results are achieved. All relevant targets are met. Positive comparisons with relevant schools for all key results are made.
1.% of school fees collected	School 3		School 1 and School 2		
2.Annual surplus	School 3		School 1 and School 2		
3.Expenditure per student	School 3 and School 2		School 1		
School 1 Average	3		Fr= Average *5	15	
School 2 Average	$(3+2.8+0.86)/3= 2.22$		Fr= Average *5	11.1	
School 3 Average	1		Fr= Average *5	5	

The researcher modified this initial table, considering the difficulty to base the assessment on concrete data, in order to include objective indicators in addition to the perception indicator and facilitate a more objective assessment:

Table IV-136. Key Financial Indicators

Key financial results	Level 1	Level 2	Level 3	Level 4	Level 5
1. % of school fees collected	Results are not measured and/or no information is available.	The % of school fees collected diminish from one year to the following one	The % of school fees collected increase less than 10 percentage points in relation to the previous year	The % of school fees collected increase between 11 and 30 percentage points	More than 95 % of school fees are collected
	2016-2017		2017-2018		
	SDG		SDG		
2. Annual surplus	Results are not measured and/or no information is available.	There is a deficit in the final balance	There is a positive balance but smaller than last year's in percentage in relation to the total expenses	The positive balance is bigger than last year's in percentage in relation to the total expenses	The positive balance is more than 15% bigger than last year's in percentage in relation to the total expenses
	2016-2017		2017-2018		
	SDG		SDG		
3. Expenditure per student	Results are not measured and/or no information is available.	The expenditure per student diminish in relation to last year	The expenditure per student is similar to the last year's	The expenditure per student increased by more than 10% and less than 29% in relation to last year	The expenditure per student increased by more than 30% in relation to last year
	2016-2017		2017-2018		
	SDG		SDG		

School Average		Fr= Average *5	
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Therefore, by taking the new assessment table, the results are as follows:

Table IV-137. Key Results Table Based upon Data

Key financial results	Level 1	Level 2	Level 3	Level 4	Level 5
1.% of school fees collected		School 3			School 1
2. Annual surplus	School 1	School 3			
3. Expenditure per student		School 3			School 1
School 1 Average	3.67		Fr= Average *5	18.3	
School 2 Average	$(3+2,8+0,86)/3= 2,22$		Fr= Average *5	11.1	
School 3 Average	2		Fr= Average *5	10	

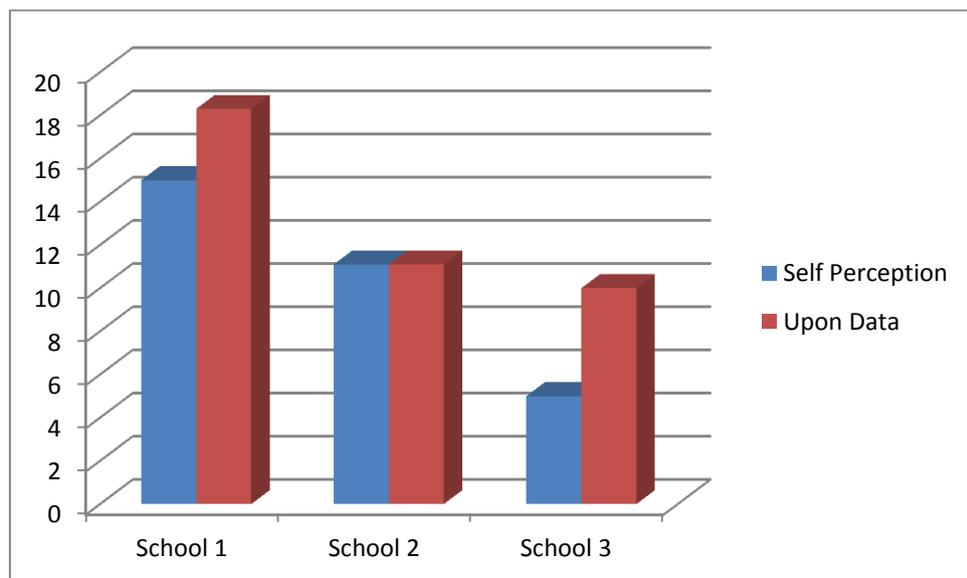


Figure IV-84. Key Financial Results

#### 4.3.9.2 Sub-criterion 9b: Academic Performance

This sub-criterion deals with the academic results of the school. The average score will be the average of all the scores recorded for the key academic results.

1. Number of students who left the school before the end of the year

Table IV-138. Self-perception on Number of Students who Left the School Before the End of the Year

No. of students who left the school before the end of the year	School			Total
	School 1	School 2	School 3	
Results are not measured and/or no information is available.	0	0	0	0
Results are measured and show negative trends and/or results do not meet relevant targets	0	0	0	0
Results show improving trends and/or most relevant targets are met	5	0	2	2
Results show substantial progress and/or all relevant targets are met	0	0	3	3
Excellent and sustained results are achieved. All relevant targets are met. Positive comparisons with relevant schools for all key results are made	0	0	0	0
NR/DK	0	5	0	10
<b>Total</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>15</b>

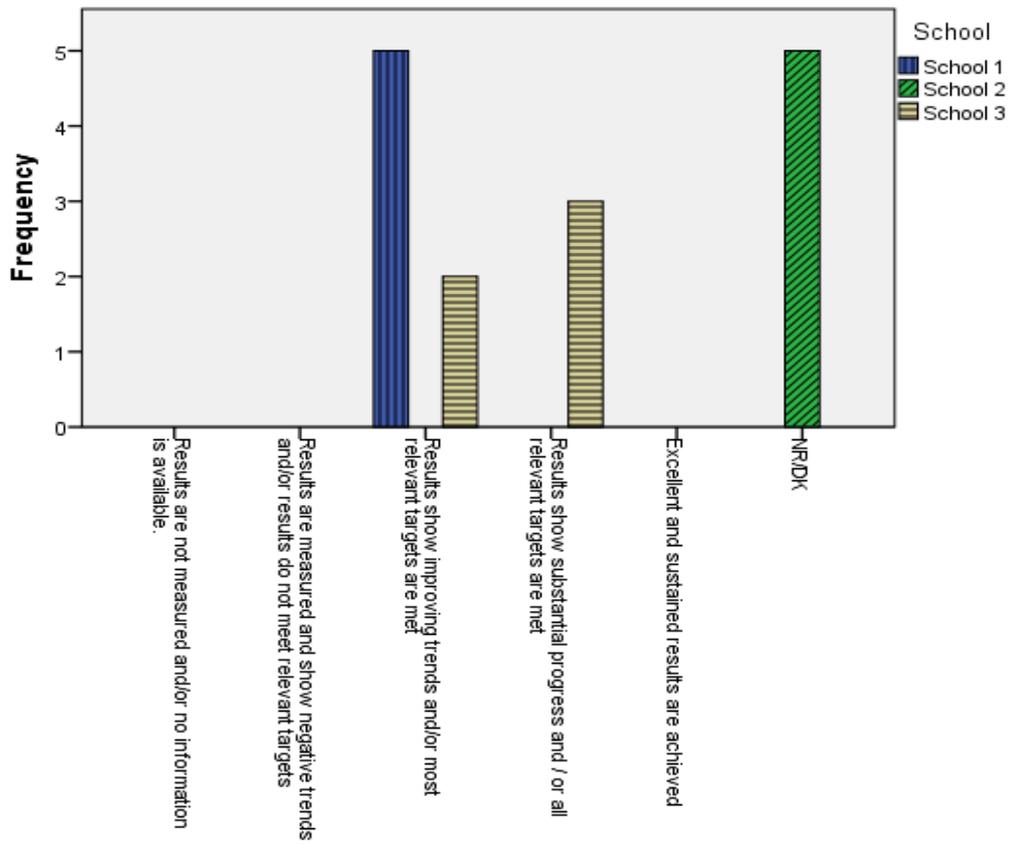


Figure IV-85. Self-perception on Number of Students who Left the School before the End of the Year

Table IV-139. Data on the No. of Students who Left the School before the End of the Year

No. of students who left the school before the end of the year	2016/2017	2017/2018
School 1	3	5
School 2	5	3
School 3	5	3

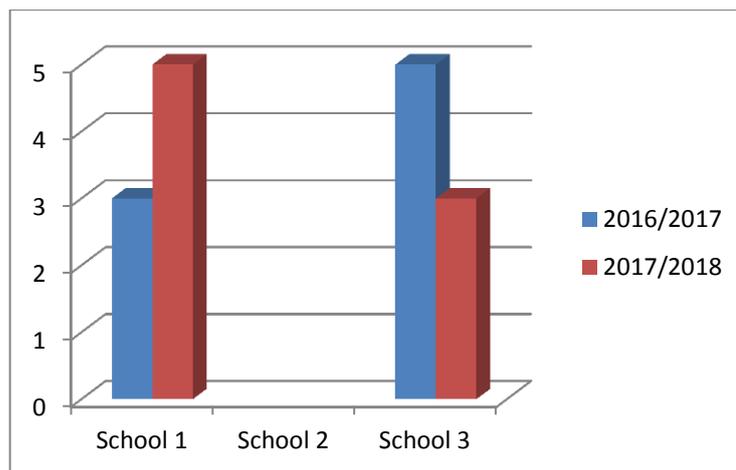


Figure IV-86. Data on the No. of Students who Left the School before the End of the Year

School 1 Team again locates itself at the level of “Results show improving trends and/or most relevant targets are met” and states that no student left the school before the end of the academic year. The Principal instead brought the data that appear on the last table. Some students left the school before the end of the school year.

The members of School 2 did not answer the question.

The members of School 3 are divided into two opinions: two are for “Results show improving trends and/or most relevant targets are met” and three are for “Results show substantial progress and/or all relevant targets are met”. The statistics provided for the last two years point in that direction.

It is interesting to contextualize these data. The primary completion rate is calculated as the number of non-repeaters in grade 8 divided by the number of students age 13. “In 2008, the primary completion rate (PCR) was low (54 percent)” (World Bank, 2012, p. 3). And the average dropout per grade was of 6 percent from grades 1 through 7 in Sudan.

A more recent study shows that “15% of primary school children are at risk of dropping out before the final grade of primary school” (UNICEF, 2014; quoted by Unesco, 2018, p. 28). The survival rate is better for the girls: 72.10%. “The good retention of girls may be explained by strong incentives for them to stay in school to

delay marriage and to delay entrance into an uncertain labour market” (Unesco, 2018, p. 32).

In comparison with these studies, the results of the three Comboni Schools of the sample can be considered excellent. But it is convenient to analyse them together with those of the following question.

2. Number of students who left the school and did not register for the following year

Table IV-140. Self-perception on the No. of Students who Left the School and did not Register for the Following Year

	School			Total
	School 1	School 2	School 3	
Results are not measured and/or no information is available.	0	0	0	0
Results are measured and show negative trends and/or results do not meet relevant targets	0	0	0	0
Results show improving trends and/or most relevant targets are met	5	0	2	7
Results show substantial progress and/or all relevant targets are met	0	0	3	3
Excellent and sustained results are achieved. All relevant targets are met. Positive comparisons with relevant schools for all key results are made	0	0	0	0
NR/DK	0	5	0	5
<b>Total</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>15</b>

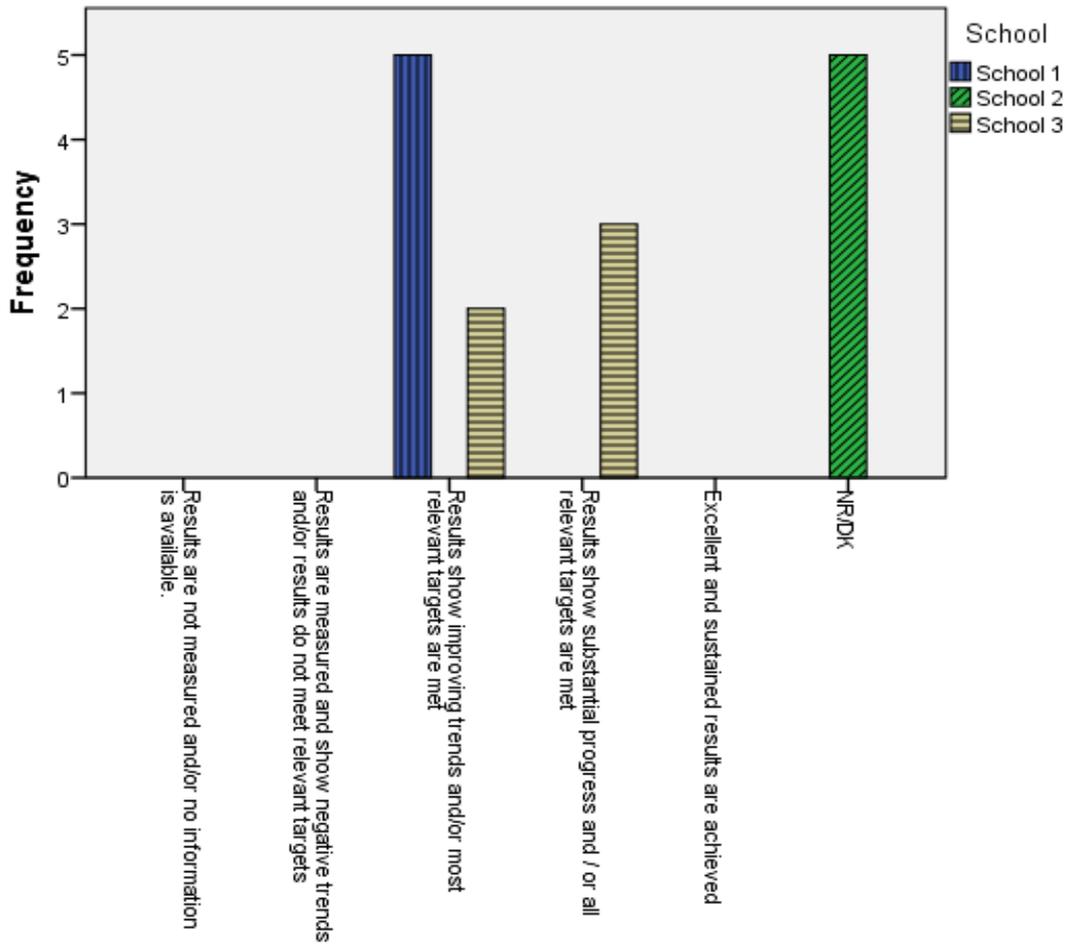


Figure IV-87. Self-perception on the No. of Students who Left the School and did not Register for the Following Year

Table IV-141. Number of Students who Left the School and did not Register for the Following Year.

No. of students who left the school and did not register for the following year	2016/2017	2017/2018
School 1	80	70
School 2		
School 3	7	5

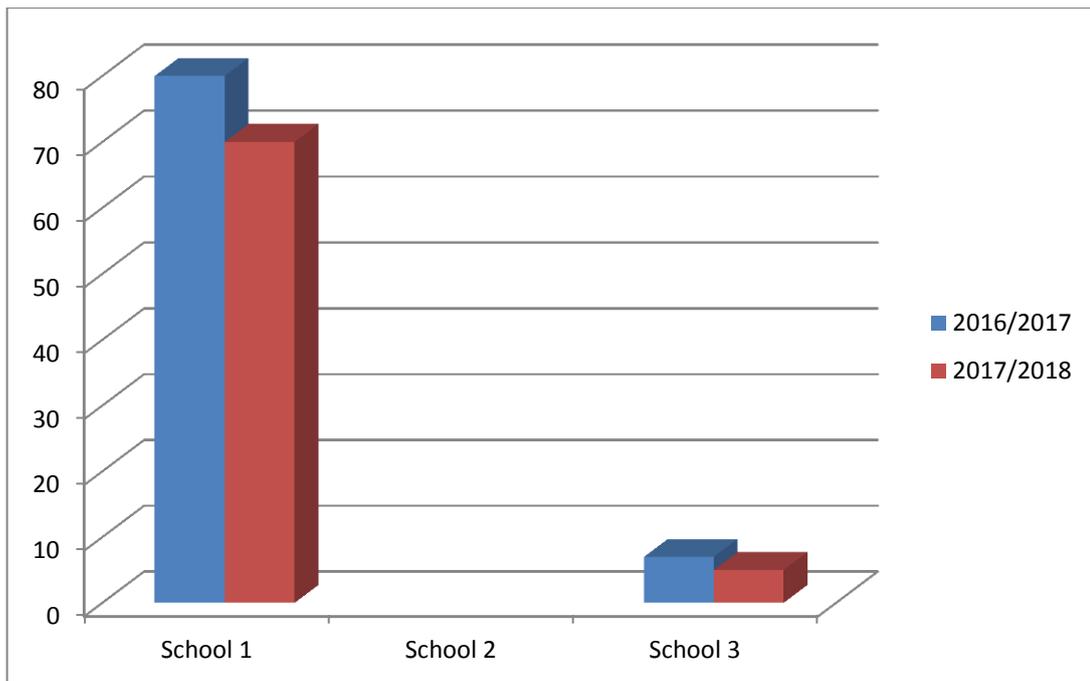


Figure IV-88. Number of Students who Left the School and did not Register for the Following Year

School 1 again places itself at the level of “Results show improving trends and/or most relevant targets are met”. The headmaster provided the number of students who left the school two years ago and did not register for the 2017-2018 year (35 students). The Principal corrected these data and added those of the previous year that are those of Table IV-141. The difference is due to the fact that some students left the school in a regular way while others, mainly South Sudanese students, left the school without informing the administration.

School 2 again did not express itself on this regard while the members of the School 3 team are again divided as in the previous question: two are for “Results show improving trends and/or most relevant targets are met” and three are for “Results show substantial progress and/or all relevant targets are met”. The statistics provided for the last two years point in that direction.

### 3. Percentage of failures in the GPSC

Table IV-142. Self-perception on the % of Failures in the GPSC

Self-perception on the % of failures in the GPSC	School			Total
	School 1	School 2	School 3	
Results are not measured and/or no information is available.	0	0	0	0
Results are measured and show negative trends and/or results do not meet relevant targets	0	0	0	0
Results show improving trends and/or most relevant targets are met	5	0	2	2
Results show substantial progress and/or all relevant targets are met	0	0	3	3
Excellent and sustained results are achieved. All relevant targets are met. Positive comparisons with relevant schools for all key results are made	0	0	0	0
NR/DK	0	5	0	10
<b>Total</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>15</b>

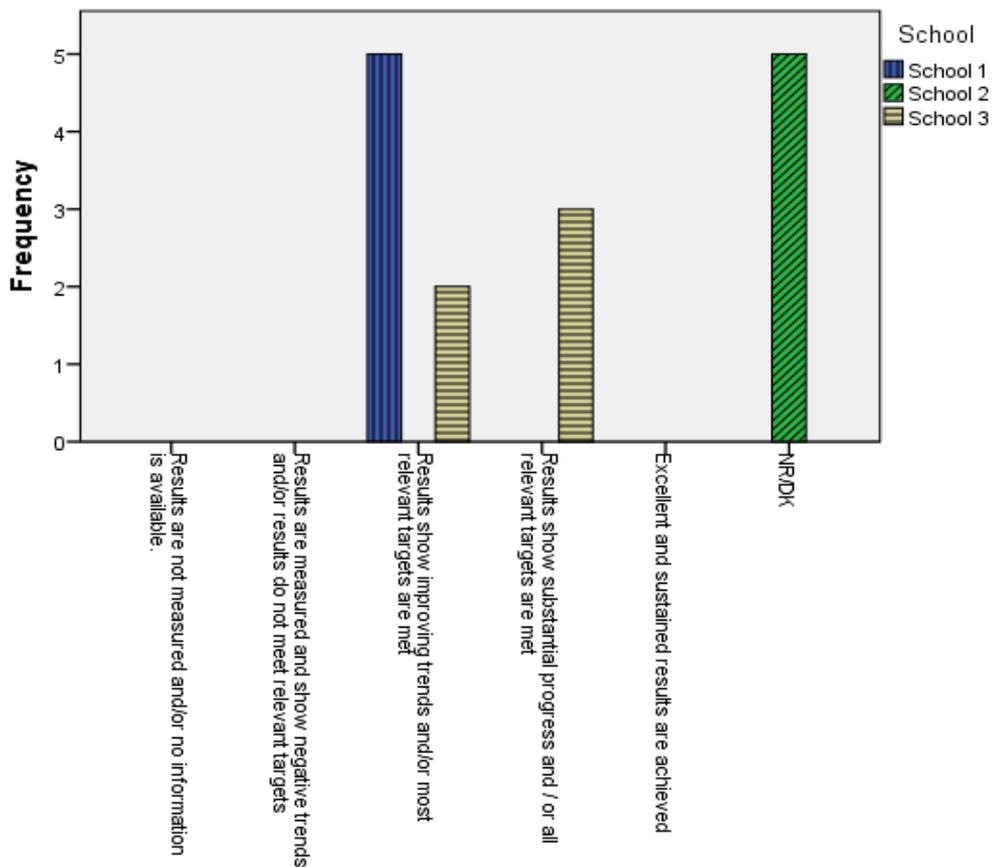


Figure IV-89. Self-perception on the % of Failures in the GPSC

Table IV-143. % of Failure in the PSGC

Percentage of failure in the Primary School General Certificate	2016/2017	2017/2018
School 1	9.9%	15%
School 2	50%	30%
School 3	56%	0%

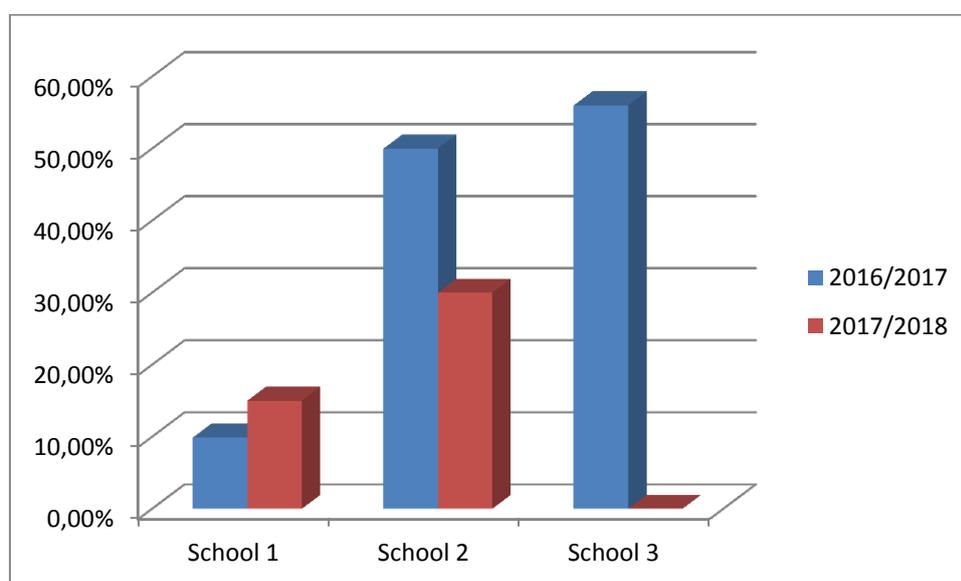


Figure IV-90. Percentage of failure in the Primary School General Certificate

At School 1, 15% of the 8 year students failed in the General Primary School Certificate in 2018 and 9.9% in 2017. Nonetheless, the Quality Team considers their performance at the level of “Results show improving trends and/or most relevant targets are met”.

At School 2, 30% of the students failed in the General Primary School Certificate in 2017/2018. The members of School 2 did not express themselves concerning the % of failures. The data were provided by the Headmaster who, in the interview, explained that the improvement from 2016/2017 to 2017/2018 was due to two factors: the organization of a one month camp and the improvement in the quality

of the teachers. This camp was organized with the financial contribution of the students' parents (Transcript A, par. 14).

The members of School 3 Team are divided in their self-perception: two are for "Results show improving trends and/or most relevant targets are met" and three are for "Results show substantial progress and/or all relevant targets are met". All the students of School 3 passed the exam in February 2018 while 56% had failed in February 2017. The progress is outstanding.

According to the information collected in the interview to the Parish Schools Supervisor, the students who sat for the exam in 2017 were 21 and the students who sat in 2018 were 16 (Transcript B, par. 1). From the interview to the Parish Priest instead, it can be drawn that the factor that caused this improvement in the performance was the one month camp organized by the Parish in which a daily breakfast was offered to the students (Transcript C, par. 5).

In a study carried out in twelve locations of Red Sea State and Blue Nile State, the schools also organize camps:

to prepare the eighth grade students optimally. The students come to school at 7.00 a.m. and work till 6 p.m. to prepare for the exams. To avoid their being overworked, the academic subjects are alternated with co-curricular activities. There is singing, dancing, and lunch. All this is paid for and organized by the school and financed by the resources generated by the Education Council (EU et al., 2015, p. 371).

Table IV-144. Pass Percentage in Relation to the Organization of a Camp with Breakfast

School	2016/2017		2017/2018	
	Preparation camp with breakfast	% Pass in the GPSC	Preparation camp with breakfast	% Pass in the GPSC
School 1	No	90.1%	No	85%
School 2	No	50%	Yes	70%
School 3	No	44%	Yes	100%

This fact is coherent with the research of the efficient schools movement in developing countries for the input variable “child nutrition and feeding”: 7 out of 8 studies showed a significant positive association (Table II-3, Scheerens, 2004, p. 22).

But it is also worth underlining that the number of students of School 3 who sat for the GPSC was very small. While the studies collected by Fuller and Clarke in primary schools of developing countries are not so clear on the relevance of the “class size” factor, just nine out of twenty six showed significant positive association with achievement (Table II-3, Scheerens, 2004, p. 22), the research of Fawzia Ṭaha Mahdī (2006) at Khartoum State mentions that local inspectors and headmasters underline the overcrowding in the classrooms among the main factors that have a negative impact on the results of the students.

In the same line, the evaluation of the performance of the “Save the Saveable Schools” revealed that the increase in the ratio of students per class had a negative impact on the results of the National Exams of Grade 8. From the data collected for the selection of the three schools of this study, it can be seen that School 1 has an average of 27.91 students per class, School 2 has 35.94 and School 3 has 27.6.

Table IV-145. Students per Class and Pass %

	2016/2017		2017/2018		
	8 year students	Pass %	8 year students.	Students per class	Pass %
School 1		90.1%		27.91	85%
School 2		50%		35.94	70%
School 3	21	44%	16	27.6	100%

These results can be compared with those of the Save the Saveable Program reported on Table II-13. Between 1991 and 2002 the results of those schools oscillated between 60% and 85% of pass. The average percentage of students who succeeded in the GPSC was 74.3%.

The correlation between the percentage of pass and the variables “students per class” and “students per teacher” for the results of the National Exams of Grade 8 during the years 1991-1992 to 2000-2001 for the Save the Saveable Schools was:

Table IV-146. Correlation between % of Pass and Students per class and per Teacher Ratios

Save the Saveable Schools Results National Exams of Grade 8 From 1991-1992 to 2000-2001	Students per class	Students per teacher
% of pass	-0,54	0,64

There is an intermediate negative correlation between the % of pass and the students per class ratio (-0.54). The respective coefficient of determination is 0.29, which indicates that there are 71% of other factors that explain that result. This result looks coherent with those of the sample of three schools.

It does not happen the same with the student per teacher ratio that shows a positive correlation with the % of pass.

In 2013, the ratio in Sudanese schools had gone down to 25.33 students per teacher, which is better than the ratio of the schools of the Save the Saveable program and other countries of the context. The average class size for basic education in northern Sudan was “approximately 48 students per class, according to the FMoGE 2008–09 statistical yearbooks” (Unesco, 2018, p. 93).

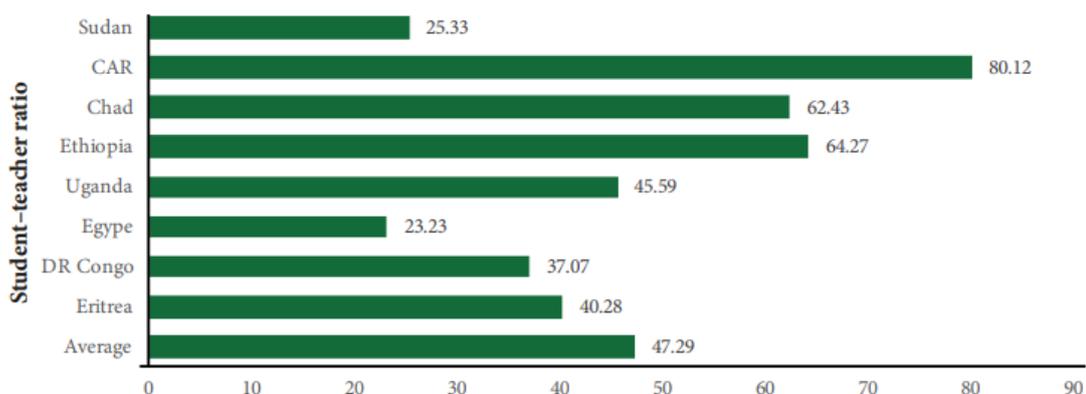


Figure IV-91. Student-Teacher Ratio at Primary Level in 2013 (Unesco, 2018, p. 49 quoting UIS, 2017)

The Unesco Report of 2018 instead criticizes the teacher utilization in Sudan:

with a basic-education student–teacher ratio (STR) of 34:1 and an average class size of 48. This gap implies that almost one-third of teachers in basic education are not in front of a class (FMoGE, 2015). Since teachers may work as subject specialists in Sudan from Grade 3, STRs are not an appropriate indicator of teachers' presence in classrooms (Unesco, 2018, p. 89).

The same report explains that the relationship between STR and average class size is affected by many factors related to distribution hours (Unesco, 2018, p. 89). And this analysis is important because:

empirical studies show that class sizes within the range of thirty to sixty students per teacher have a relatively equal level of student learning. Classes with fewer than thirty students do tend to produce better learning outcomes, but such small class sizes are uncommon and financially unsustainable in most countries in sub-Saharan Africa. Class sizes above sixty students, however, tend to have a negative impact on student learning (World Bank, 2012; quoted by Unesco, 2018, p. 90).

The ratio of the three schools of the sample is higher than the national average.

#### 4. Summary

Table IV-147. Definition of Levels for Key Academic Results

	Definitions of levels				
	Level 1	Level 2	Level 3	Level 4	Level 5
Key academic results	Results are not measured and/or no information is available.	Results are measured and show negative trends and/or results do not meet relevant targets.	Results show improving trends and/or most relevant targets are met.	Results show substantial progress and /or all relevant targets are met.	Excellent and sustained results are achieved. All relevant targets are met. Positive Comparisons with relevant schools for all key results are made.
1. No. of students who left the school before the end of the year	School 2		School 1	School 3	
2.No. of students who left the school and did not register for the following year	School 2		School 1	School 3	
3. % of failures in the GPSC	School 2		School 1	School 3	
School 1 Average	3		Ar= Average *5	15	
School 2 Average	1		Ar= Average *5	5	
School 3 Average	$(3.6+3.6+3.6)/3= 3.6$		Ar= Average *5	18	

To this initial table, and after acknowledging the difficulty to base the assessment on concrete data, the researcher modified the previous table to include objective indicators in addition to perception indicator with the aim of facilitating a more objective assessment:

Table IV-148. Key Academic Results based upon Data

<b>Key academic results</b>	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Level 4</b>	<b>Level 5</b>
1. No. of students who left the school before the end of the year	Results are not measured and/or no information is available.	The no. of students who left the school before the end of the year increased in percentage in the last year	The no. of students who left the school before the end of the year diminished in less than 10% in relation to the previous year	The no. of students who left the school before the end of the year diminished in more than 11% in relation to the previous year	No students left the school before the end of the year
	2016-2017		2017-2018		
2.No. of students who left the school and did not register for the following year	Results are not measured and/or no information is available.	The n. of students who left the school and did not register for the following year increased in the last year	The n. of students who left the and did not register for the following year diminished in less than 10% in relation to the previous year	The n. of students who left the school and did not register for the following year diminished in more than 11% in relation to the previous year	No students left the school and did not register for the following year
	2016-2017		2017-2018		
	SDG		SDG		

3.Percentage of failure in the General Primary School Certificate (GPSC)	Results are not measured and/or no information is available.	The percentage of students who failed in the GPSC increased in the last year	The percentage of students who failed in the GPSC diminished in less than 10 percentage points in relation to the previous year	The percentage of students who failed in the GPSC diminished in more than 11 percentage points in relation to the previous year	No students failed in the GPSC
	2016-2017		2017-2018		
School Average		Fr= Average *5			

Therefore, taking the new assessment table, the results are as follows:

Table IV-149. Key Academic Results Table Based upon Data

Key academic results	Level 1	Level 2	Level 3	Level 4	Level 5
1. No. of students who left the school before the end of the year	School 2	School 1	School 3		
2.No. of students who left the school and did not register for the following year	School 2		School 3	School 1	
3.Percentage of failure in the Primary School General Certificate (PSGC)		School 1			School 3
School 1 Average	3	Fr= Average *5	15		
School 2 Average	1	Fr= Average *5	5		
School 3 Average	3.66	Fr= Average *5	18.3		

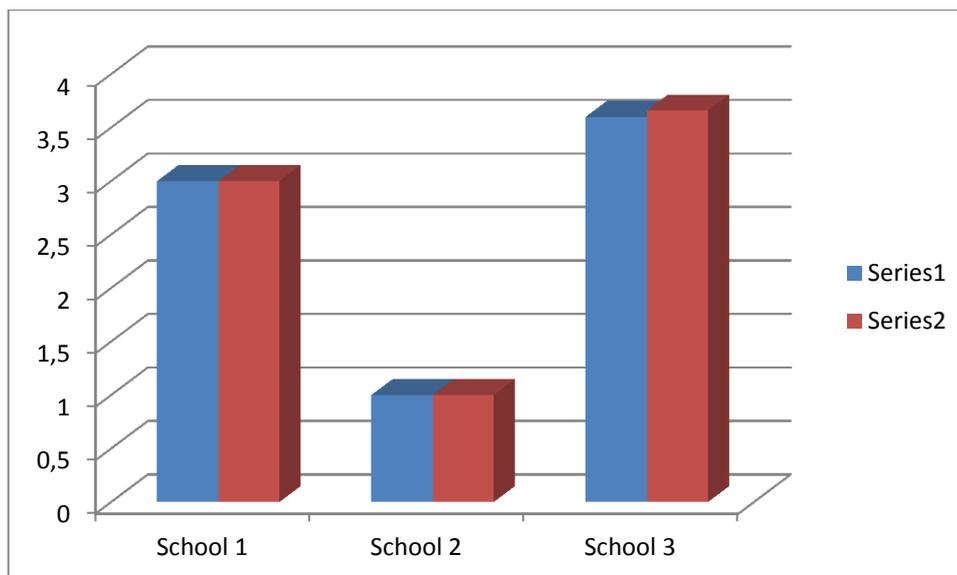


Figure IV-92. Key Academic Results: Comparison between Results based on Self-perception (Series 1) and on Data (Series 2)

#### 5. Analysis of the GPSC results for School 1 during the last three years.

After the workshops with the quality teams, School 1 provided a copy of the marks of the students for the GPSC exams of the last three years. These data were statistically analysed with SPSS. If we compare the marks for every year, we get the following results:

Table IV-150. School 1 GPSC Marks for last three Years

Exam year	Mean	No.	Std. Deviation	Minimum	Maximum	Kurtosis	Skewness
2019	193.57	128	47.062	85	277	-0.816	-0.078
2018	181.95	98	40.627	107	262	-0.946	0.169
2017	186.44	81	43.381	95	268	-0.704	0.073
Total	187.98	307	44.270	85	277	-0.819	0.063

The table shows that in 2019 the results were better than in the previous years. In the same year the skewness is negative which indicates that the results concentrate in the highest part of the frequency curve. All the three curves are instead platykurtic which means that the results spread over instead of being concentrated around the mean.

In 2019, 93% of the 128 students passed the exam, which means an improvement in relation to previous results:

Table IV-151. Failure Percentage at School 1

Percentage of failure in the GPSC	2016/2017	2017/2018	2018/2019
School 1	9.9%	15%	7%

The researcher could identify the nationality of the students through the name but had to leave 19 students without identification as this was not evident. From these statistics, that do not include those cases, we could verify that Sudanese students perform better than South Sudanese students. The number of Ethiopian-Eritrean students is not meaningful enough to draw conclusions.

Table IV-152. School 1 GPSC Results according to Nationality

Nationality	Mean	No.	Std. Deviation	Minimum	Maximum	Kurtosis	Skewness
Sudanese	203.10	176	41.731	107	277	-0.850	-0.183
South Sudanese	164.08	110	38.339	85	260	-0.012	0.396
Ethiopian-Eritrean	189.00	2	69.296	140	238		
Total	188.10	288	44.675	85	277	-0.827	0.053

In the case of the Sudanese students, the results concentrate in the highest part of the distribution curve (negative skewness) while for South Sudanese students, the results concentrate on the lower part (positive skewness).

We can visualize these results with the following boxplots:

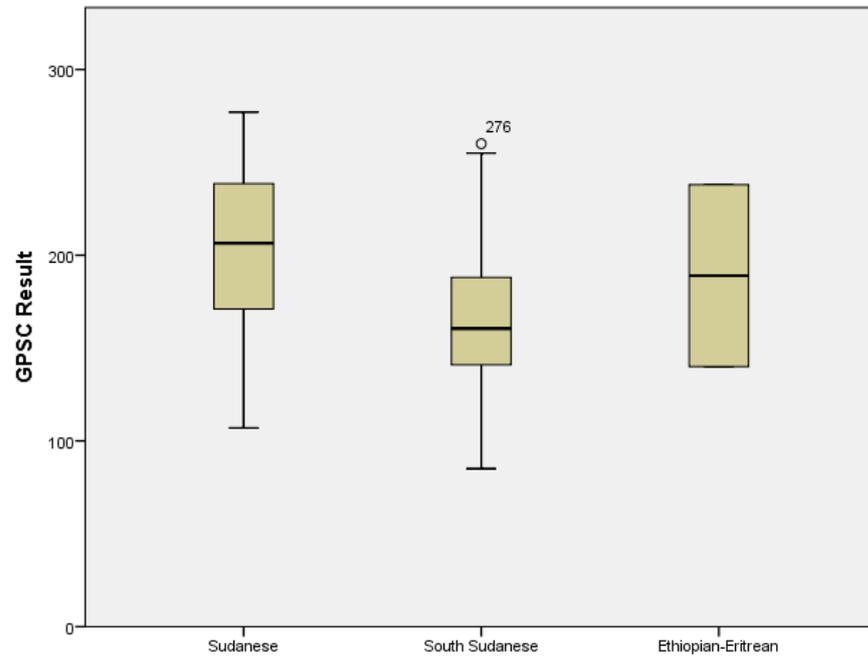


Figure IV-93. Boxplots for Results according to Nationality

We just notice the presence of a single outlier for the marks of the South Sudanese students, but not far from the upper sign that is calculated by adding 1.5 times the interquartile range to the the value of the third quartile (Q3).

It is also evident from the figure that the range of marks is wider for Sudanese students than for South Sudanese ones and that the median of the first ones is much better than the one of the second ones.

In order to verify the normality of the distributions of frequencies according to nationality in view of further analysis, we apply the Kolmogorov-Smirnov Test:

Table IV-153. Kolmogorov-Smirnov Test for GPSC Results

Nationality	Kolmogorov-Smirnov		
	Statistic	df	Sig.
Sudanese	0.087	176	0.003
South Sudanese	0.092	110	0.022
Ethiopian-Eritrean	0.260	2	

From these results, we can deduce that the marks of the Sudanese students are not distributed according to the normal curve ( $p < 0.05$ ). The marks of the South Sudanese students instead are distributed according to the normal curve ( $p > 0.05$ ). As for the Ethiopian-Eritrean students, their number is too small for such analysis.

We can visualize these statements with the respective histograms and normal Q-Q Plots:

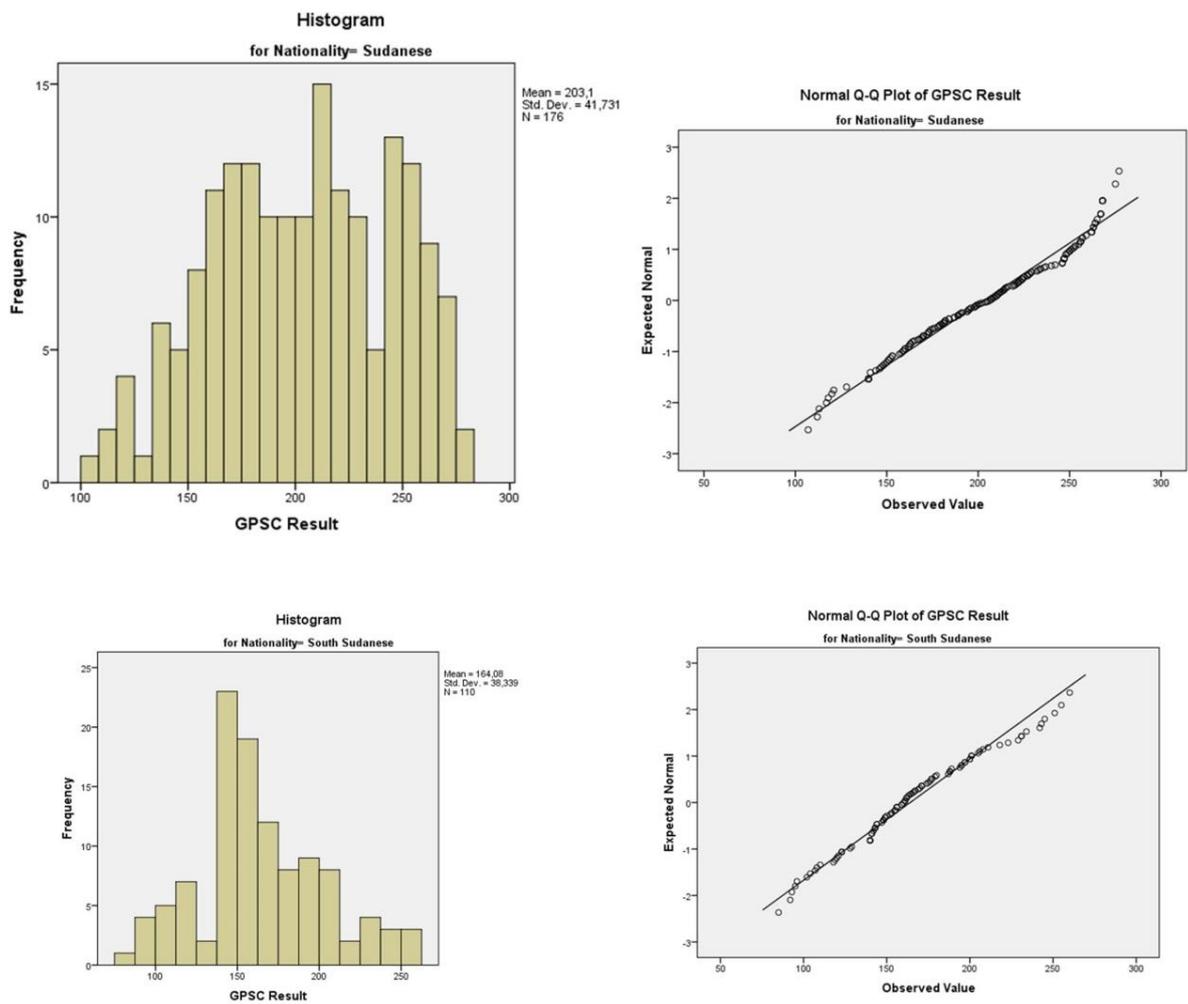


Figure IV-94. Histograms and Q-Q Plots for Results according to Nationality

In the Q-Q Plot for Sudanese students, it is evident that the frequencies separate from the normal distribution in the extremes. Moreover the frequency curve presents a second peak around the values 242-247.

As for the Q-Q Plot for South Sudanese students, the observed values concentrate around the expected ones except for the extremes. In fact the tails are a bit irregular.

If we do the test of homogeneity of variance we get the following results:

Table IV-154. Test of Homogeneity of Variance according to Nationality

	Levene Statistic	df1	df2	p
Based on Mean	2.922	4	569	0.021
Based on Median	2.926	4	569	0.021
GPSC Result Based on Median and with adjusted df	2.926	4	563.317	0.021
Based on trimmed mean	2.973	4	569	0.019

Since the asymptotic value  $p < 0.05$ , the obtained differences in sample variances are unlikely to have occurred based on random sampling from a population with equal variances. Thus, the null hypothesis of equal variances is rejected and it is concluded that there is a difference between the variances in the population. We do not have homogeneity of variance.

Finally, in order to assess if the different mean between the results of the Sudanese and the South Sudanese students is statistically meaningful, we apply the Mann-Whitney U Test as the distribution of frequencies for Sudanese students does not follow the normal pattern.

Table IV-155. Ranks in View of Mann-Whitney U Test

	Nationality	N	Mean Rank	Sum of Ranks
GPSC Result	Sudanese	176	171.53	30190.00
	South Sudanese	110	98.65	10851.00
	Total	286		

Table IV-156. Mann-Whitney U Test

Test Statistics <sup>a</sup>	
	GPSC Result
Mann-Whitney U	4746.000
Wilcoxon W	10851.000
Z	-7.252
Asymp. Sig. (2-tailed)	0.000

a. Grouping Variable: Nationality

From these results (asymptotic significance level,  $p < 0.05$ ) it is possible to state that the difference in the mean between the students of both nationalities is statistically meaningful.

#### 6. Analysis of the GPSC Results for Schools 1 according to the Stream.

The school offers the students the possibility of studying in English or Arabic. Students who follow the Arabic stream get better marks:

Table IV-157. GPSC Result according to Stream

Stream	Mean	N	Std. Deviation	Minimum	Maximum	Kurtosis	Skewness
English	180.45	195	44.743	85	268	-0.752	0.179
Arabic	201.09	112	40.385	113	277	-0.997	0.009
Total	187.98	307	44.270	85	277	-0.819	0.063

We can visualize these results with these boxplots:

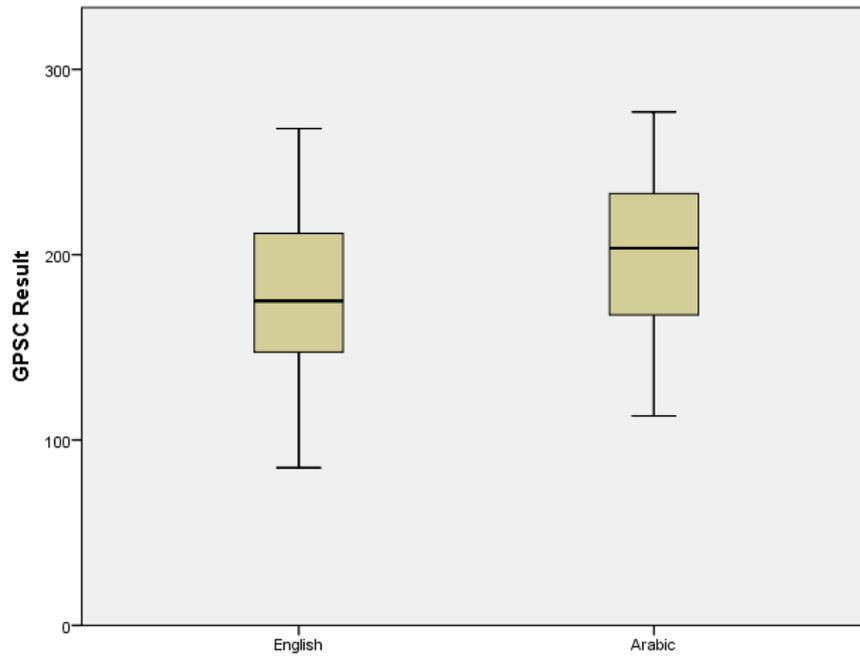


Figure IV-95. Boxplots for Streams

It is worth mentioning that there are no outliers. The range of results looks similar but the median of the Arabic stream is higher than the median of the English stream.

In order to verify the characteristics of the distributions of frequencies according to the stream in view of further analysis, we apply the Kolmogorov-Smirnov Test:

Table IV-158. Kolmogorov-Smirnov Test for GPSC Results according to Stream

Stream		Kolmogorov-Smirnov		
		Statistic	df	Sig.
GPSC Result	English	0.060	183	0.200
	Arabic	0.084	105	0.065

According to Kolmogorov-Smirnov Test, the marks of both the Arabic and the English stream are distributed according to the normal curve ( $p > 0.05$ ).

We can verify these statements with the respective histograms and normal Q-Q plots:

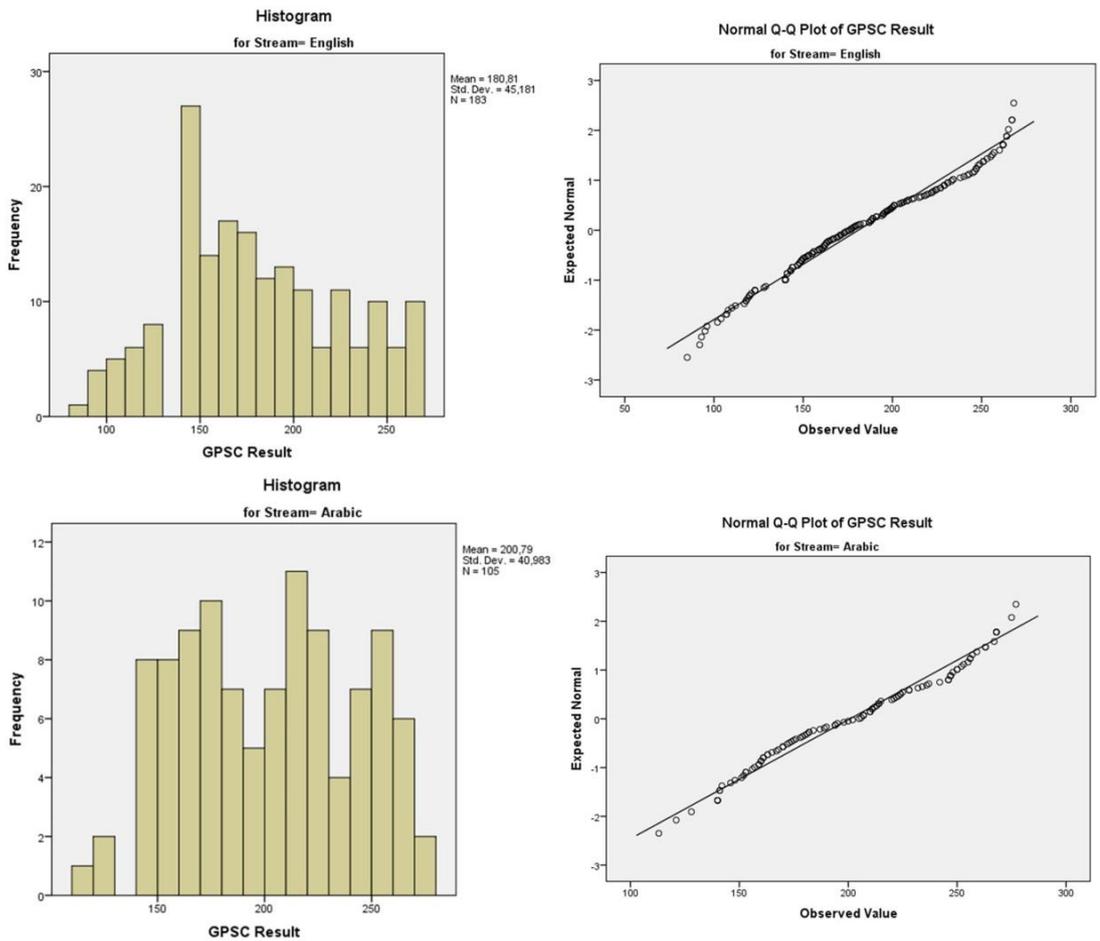


Figure IV-96. Histograms and Q-Q Plots for both Streams

From the normal Q-Q Plots we see that the observed values separate from the expected ones for the normal curve especially for the highest results but they remain not far from the reference line. The distribution for the English stream is closer to the normal distribution.

We can also do the test of homogeneity of variance:

Table IV-159. Test of Homogeneity of Variance according to the Stream

	Levene Statistic	df1	df2	Sig.	
GPSC Result	Based on Mean	0.756	1	286	0.385
	Based on Median	0.621	1	286	0.431
	Based on Median and with adjusted df	0.621	1	278.496	0.431
	Based on trimmed mean	0.755	1	286	0.386

Since  $p > 0.05$  we have homogeneity of variance.

Therefore, we can apply the Student's-t Test for independent samples. The same conclusion, even if with different value, can be drawn concerning the homogeneity of variance ( $p = 0.317 > 0.05$ ).

Table IV-160. Levene's Test for Equality of Variances and t-Test for Equality of Means

GPSC Result according to stream	Levene's Test for Equality of Variances		t-test for Equality of Means		
	F	Sig.	t	df	Sig. (2- tailed)
Equal variances assumed	1.003	0.317	-4.029	305	0.000
Equal variances not assumed			-4.142	251.232	0.000

Since the p value for the t-test is  $< 0.05$ , we can state that there is a statistically meaningful difference between the two means. Students who choose the Arabic stream perform better than those of the English stream.

7. Is the stream or the nationality the most determining factor?

Knowing that most South Sudanese students choose the English stream, the question is if it is the stream or the nationality the major factor behind the difference in the results.

Table IV-161. Contingency Table for Stream and Nationality

		Stream		Total
		English	Arabic	
Nationality	Sudanese	80	96	176
	South Sudanese	101	9	110
	Ethiopian-Eritrean	2	0	2
Total		183	105	288

The problem is that parametric tests like ANOVA with two factors (nationality and stream) where the GPSC Result is the dependent variable will not be fully reliable because of the lack of normality for the independent variable “nationality=Sudanese” and the lack of homogeneity of variance for the variable “nationality”.

Nonetheless, we can see in the following table that Sudanese students perform better than South Sudanese students in both streams:

Table IV-162. Comparison of Means for the Four Groups

Stream	Nationality	Mean	Std. Deviation	No.
English	Sudanese	200.70	43.660	80
	South Sudanese	164.90	39.847	101
	Total	180.72	45.128	181
Arabic	Sudanese	205.09	40.174	96
	South Sudanese	154.89	8.767	9
	Total	200.79	40.983	105
Total	Sudanese	203.10	41.731	176
	South Sudanese	164.08	38.339	110
	Total	188.09	44.643	286

In order to verify the adjustment to the normal curve of the four groups, we apply the Kolmogorov-Smirnov Z test :

Table IV-163. Kolmogorov-Smirnov Z Test for the Four Groups

	Group 1,1 English/Sudan	Group1,2 English/SouthS	Group 2,1 Arabic/Sudan	Group 2,2 Arabic/SouthS
Kolmogorov-Smirnov Z	0.785	0.783	0.836	0.577
Asymp. Sig. (2-tailed)	0.569	0.572	0.487	0.893

Since  $p > 0.05$  for the four groups, their distributions of frequencies are all normal. As for the homogeneity of variance, we apply the Levene's Test:

Table IV-164. Levene's Test of Equality of Error Variances

Dependent Variable: GPSC Result			
F	df1	df2	Sig.
4.857	3	282	0.003

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + Nationality + Stream + Nationality \* Stream

Since  $p < 0.05$  the variances are not homogeneous in the four groups and therefore we can confirm that the ANOVA Test for two factors may not detect real effects. Nonetheless, we apply it and analyze the results, in spite of its limits, as there is no a good alternative non-parametric test.

Table IV-165. Anova Test between-Subjects Effects

Dependent Variable: GPSC Result

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	104708.781 <sup>a</sup>	3	34902.927	21.244	0.000
Intercept	3657862.222	1	3657862.222	2226.423	0.000
Stream	219.316	1	219.316	0.133	0.715
Nationality	51391.156	1	51391.156	31.280	0.000
Stream *	1441.884	1	1441.884	0.878	0.350
Nationality					
Error	463306.855	282	1642.932		
Total	10686178.000	286			
Corrected Total	568015.636	285			

a. R Squared = 0.184 (Adjusted R Squared = 0.176)

The ANOVA Test, since the p value for “stream \* nationality” is  $> 0.025$ , states that there is no interaction. As for the nationality instead, the p value  $< 0.025$ , and therefore that variable has a meaningful impact on the dependent variable.

It is also possible to draw a graphic of these results:

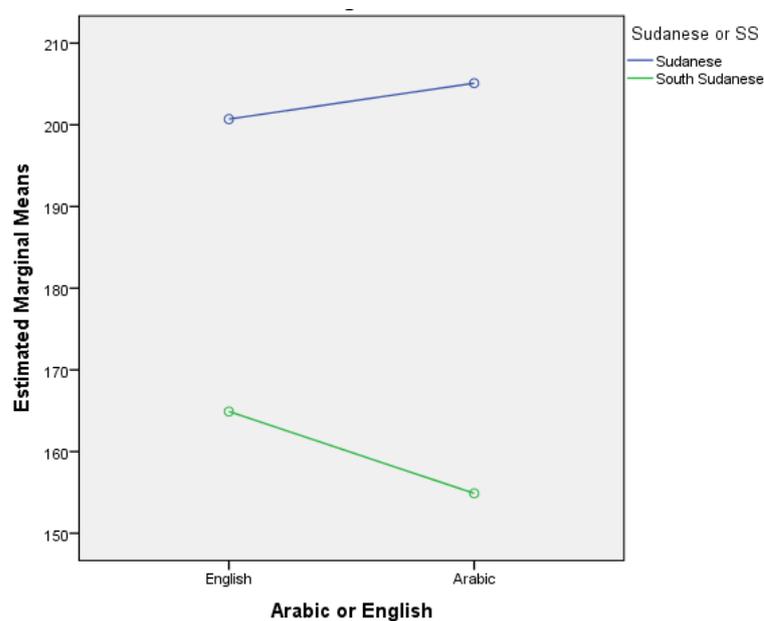


Figure IV-97. Estimated Marginal Means of GPSC Results

The graphic shows that there is a positive interaction between both factors: stream and nationality. The fact of being Sudanese and choosing the Arabic stream exam gives better results.

The alternative non parametric test to the Two-factor Anova could be the McNemar Test. This test does not identify a meaningful difference between the distributions of different values across the variable “stream” and “nationality”:

**Hypothesis Test Summary**

	Null Hypothesis	Test	Sig.	Decision
1	The distributions of different values across Stream and Nationality are equally likely.	Related-Samples McNemar Test	,776	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is ,05.

Figure IV-98. Related Samples McNemar Test

Since there is no homogeneity of variance, another procedure could be the removal of outliers and then the repetition of the Levene test. But the only outlier on Figure IV-93 is too close to the upper extreme and therefore to remove it will not improve the situation.

#### 4.3.9.3 *Sub-criterion 9c: Strategic Goals*

This sub-criterion deals with results related to the mission of Comboni Schools and therefore is related to sub-criterion 2e. The average score will be the average of all the scores recorded for the key strategic results.

1. Number of Christian celebrations with Catholic students (Masses, Christmas Carols...).

Table IV-166. Self-perception on No. of Christian Celebrations with Catholic Students

No. of Christian celebrations with Catholic students	School			Total
	School 1	School 2	School 3	
Results are not measured and/or no information is available.	0	2	0	2
Results are measured and show negative trends and/or results do not meet relevant targets	0	0	0	0
Results show improving trends and/or most relevant targets are met	5	0	0	0
Results show substantial progress and/or all relevant targets are met	0	0	2	2
Excellent and sustained results are achieved. All relevant targets are met. Positive comparisons with relevant schools for all key results are made	0	0	3	3
NR/DK	0	3	0	8
<b>Total</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>15</b>

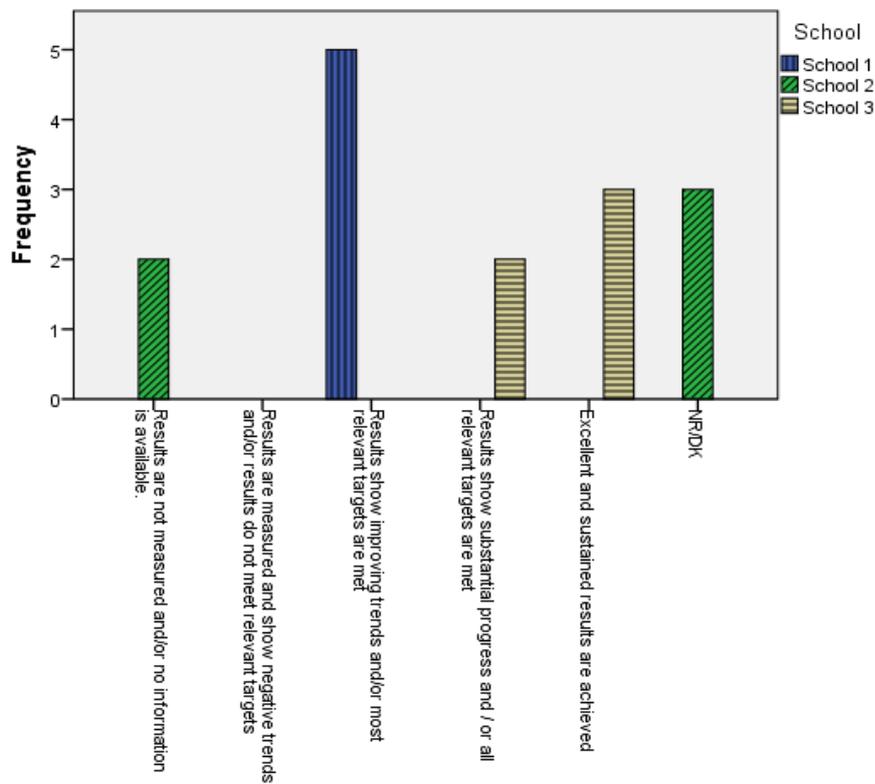


Figure IV-99. Self-perception on No. of Christian Celebrations with Catholic Students

Table IV-167. No. of Christian Celebrations with Catholic Students

No. of Christian celebration with Catholic students in the year (Masses, Christmas Carols...)	2016/2017	2017/2018
School 1	50	50
School 2	1	1
School 3	3	3

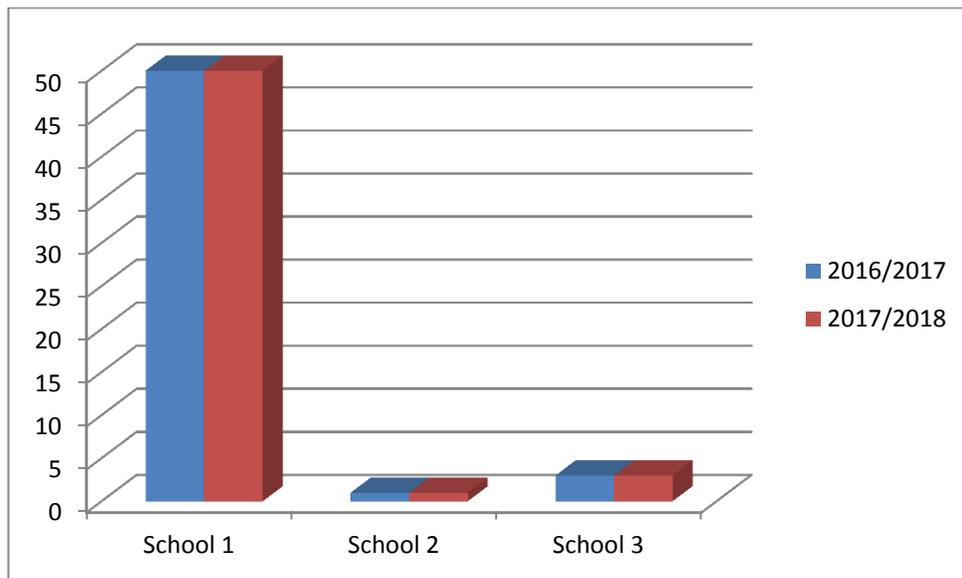


Figure IV-100. No. of Christian Celebrations with Catholic Students

School 1 numbered about 50 the amount of Christian celebrations with Catholic students during the year. It is worth mentioning that Catholic students and staff of the School participate in a weekly mass every Wednesday morning. The team considered the school at the level of “Results show improving trends and/or most relevant targets are met”.

As for School 2, two members consider the school at the level of “Results are not measured and/or no information is available”, while three members did not express themselves.

In the interview with the Headmaster, this one stated that a Christmas celebration took place in the last two years. Instead the Mass that was celebrated in the past did not take place (Transcript A, par. 15).

As for School 3, they present a division of opinions: two are for “Results show substantial progress and/or all relevant targets are met” and three are for “Excellent and sustained results are achieved. All relevant targets are met. Positive comparisons with relevant schools for all key results are made”.

The Parish Priest commented in the interview that there are 75% of Christian students, but they come from different churches and not just from the Catholic one. This fact conditions celebrations like the Mass that are particular to Catholics (Transcript C, par. 6).

2. Number of students from Catholic families who received catechism and Sacraments of Christian Initiation inside or through the school.

Table IV-168. Self-perception on Students from Catholic Families who Received Catechism and Sacraments of Christian Initiation inside or through the School

No. of students from Catholic families who received catechism and Sacraments of Christian Initiation inside or through the school	School			Total
	School 1	School 2	School 3	
Results are not measured and/or no information is available.	0	2	5	7
Results are measured and show negative trends and/or results do not meet relevant targets	0	0	0	0
Results show improving trends and/or most relevant targets are met	5	0	0	0
Results show substantial progress and/or all relevant targets are met	0	0	0	0
Excellent and sustained results are achieved. All relevant targets are met. Positive comparisons with relevant schools for all key results are made	0	0	0	0
NR/DK	0	3	0	8
<b>Total</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>15</b>

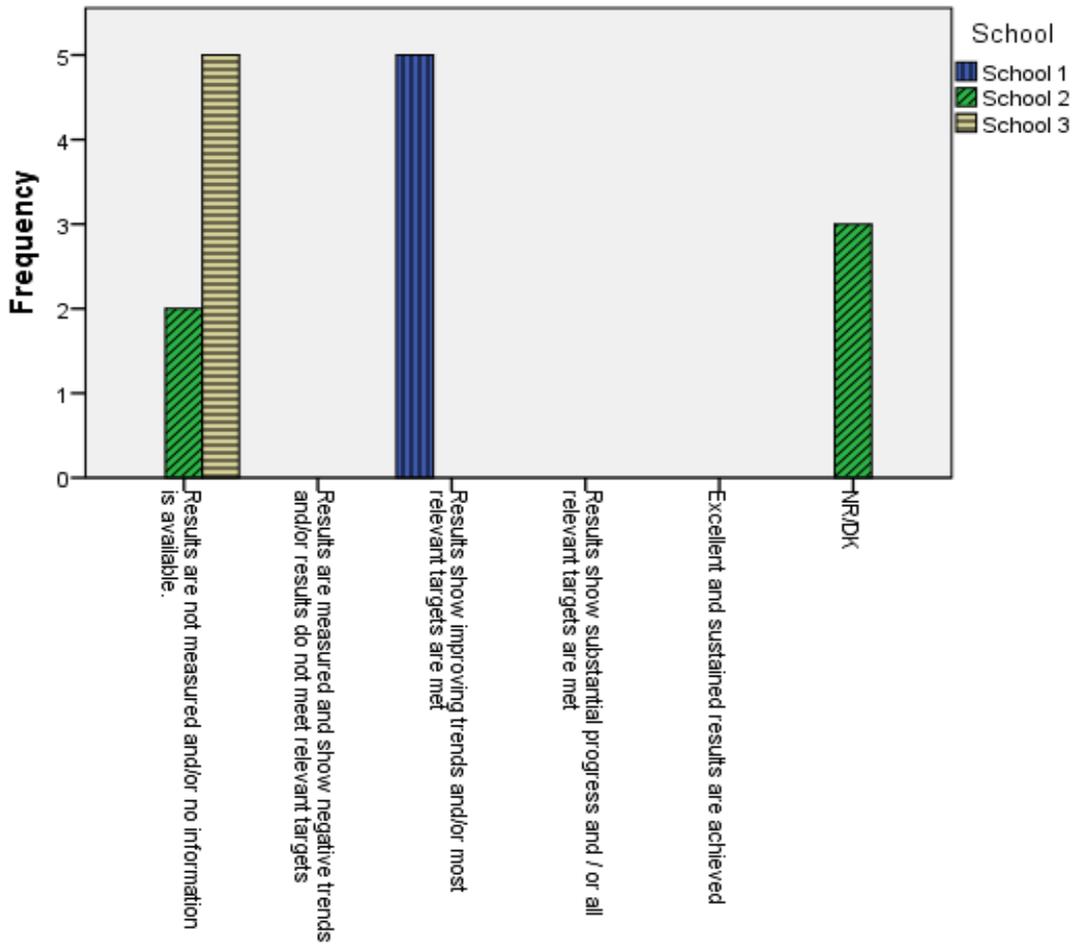


Figure IV-101. Self-perception on Students from Catholic Families who Received Catechism and Sacraments of Christian Initiation inside or through the School

Table IV-169. No. of students from Catholic Families who Received Catechism and Sacraments of Christian Initiation inside or through the School

No. of students from Catholic families who received catechism and Sacraments of Christian Initiation inside or through the school	2016/2017	2017/2018
School 1	0	About 20
School 2		
School 3	0	0

The number of students from Catholic families who received catechism and Sacraments of Christian Initiation inside or through School 1 was about 20. The team considered this performance at the level of “Results show improving trends and/or most relevant targets are met”.

School 2 also repeated the pattern of the previous item. The Headmaster shared in the interview that these activities are organized by the Parish (Transcript A, par. 16).

The five members of School 3 instead coincide this time on the level of “Results are not measured and/or no information is available”.

### 3. Summary

Table IV-170. Definition of Levels for Catholic Identity

Key strategic results	Definitions of levels				
	Level 1	Level 2	Level 3	Level 4	Level 5
	Results are not measured and/or no information is available.	Results are measured and show negative trends and/or results do not meet relevant targets.	Results show improving trends and/or most relevant targets are met.	Results show substantial progress and /or all relevant targets are met.	Excellent and sustained results are achieved. All relevant targets are met. Positive Comparisons with relevant schools for all key results are made.
1.Number of Christian celebrations with Catholic students (Masses, Christmas Carols...)	School 2		School 1		School 3
2. Number of students from Catholic families who received catechism and Sacraments of Christian Initiation inside or through the school	School 2 and School 3		School 1		

School 1 Average	3	Sr= Average *5	15	
School 2 Average	1	Sr= Average *5	5	
School 3 Average	$(4,6+1)/2 = 2,8$	Sr= Average *5	14	

To this initial table, and noticing the difficulty to base the assessment on concrete data, the researcher modified the previous table to include objective indicators in addition to the perception indicator and facilitate a more objective assessment:

Table IV-171. Key Strategic Results based upon Data

Key financial results	Level 1	Level 2	Level 3	Level 4	Level 5
1. No. of Christian celebration in the year (Masses, Christmas Carols...)	Results are not measured and/or no information is available.	The no. of Christian celebrations diminished from the last year to the previous one	The no. of Christian celebrations remains the same or increased from the last year to the previous one in less than 10%	The no. of Christian celebrations increased from the last year to the previous one in more than 11%	Catholic students have access to a weekly mass and celebrations of Advent, Christmas, Lent and Easter
	2016-2017		2017-2018		
2.No. of students from Catholic families who received catechism and Sacraments of Christian initiation inside or through the school	Results are not measured and/or no information is available.	The no. of students from Catholic families who received catechism and Sacraments of Christian initiation inside or through the school diminished	The no. of students from Catholic families who received catechism and Sacraments of Christian initiation inside or through the school increased in	The no. of students from Catholic families who received catechism and Sacraments of Christian initiation inside or through the school increased in	The no. of students from Catholic families who received catechism and Sacraments of Christian initiation inside or through the school increased in

		from the last year to the previous one	less than 10% in relation to the previous year	more than 11% and less than 29% in relation to the previous year	more than 30% in relation to the previous year
	2016-2017		2017-2018		
	Number:		Number:		
School Average			Fr= Average *5		

Therefore, by taking the new assessment table, the results are as follows:

Table IV-172. Key Strategic Results Table Based upon Data

Key financial results	Level 1	Level 2	Level 3	Level 4	Level 5
1. No. of Christian celebration in the year (Masses, Christmas Carols...)			School 3 School 1		
2. No. of students from Catholic families who received catechism and Sacraments of Christian initiation inside or through the school	School 3				School 1
School 1 Average	4		Fr= Average *5	20	
School 2 Average	1		Fr= Average *5	5	
School 3 Average	2		Fr= Average *5	10	

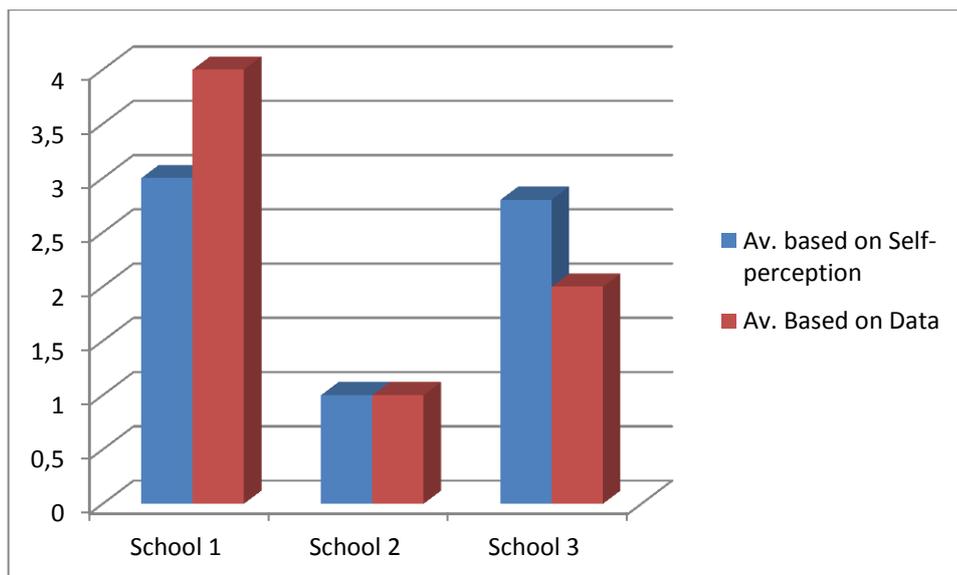


Figure IV-102. Key Strategic Results

#### 4.3.9.4 Summary of Results and Identification of Strengths and Areas for Improvement

The results for the self-perception on this criterion can be calculated with the Self-Assessment Matrix (Appendix 6) and summarized as follows:

Table IV-173. Summary of Key Results

Criterion	Sub-criterion		School 1	School 2	School 3
9 KEY RESULTS	Financial	Fr	15	11.1	5
	Academic	Ar	15	5	18
	Strategic goals	Sr	15	5	14
		TOTAL	45	21.1	37
Maximum Total = 75. 14% of the total Score. Maximum Score = 140		SCORE = TOTAL × 1.87	84.15	39.457	69.19

These results could be compared with those obtained through the results based upon data where the boxes in grey symbolize divergence with the previous results:

Table IV-174. Summary of Key Results based upon Data

Criterion	Sub-criterion		School 1	School 2	School 3
9 KEY RESULTS	Financial	Fr	18.3	11.1	10
	Academic	Ar	15	5	18.3
	Strategic goals	Sr	20	5	10
		TOTAL	53.3	21.1	38.3
Maximum Total = 75. 14% of the total Score. Maximum Score = 140		SCORE = TOTAL × 1.87	99.671	39.457	71.621

Then we can compare both results: those mainly based upon the internal discussion of the Quality Team with those confronted with data:

Table IV-175. Comparison for Key Results

Criterion	School 1		School 2		School 3	
	Self-Perception	Based on Data	Self-Perception	Based on Data	Self-Perception	Based on Data
Key Results	84.15	99.67	39.46	39.46	69.19	78.97

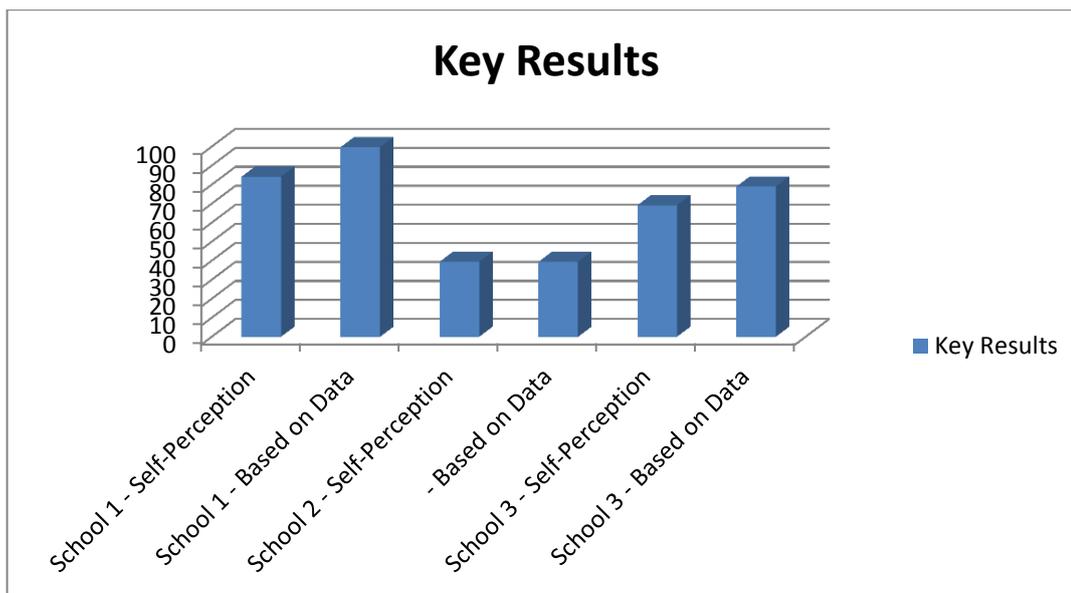


Figure IV-103. Comparison for Key Results

Considering all these data, the researcher summarized like this the strengths and areas for improvement of these schools:

Table IV-176. Key Results: Strengths and Areas for Improvement

School	Strengths	Areas for improvement
1	Catholic identity in general	
2		
3	No. of students who left the school before the end of the year and no. of students who left the school and did not register for the following year and % of failures in the GPSC	

## 4.4 Summary of Self-Assessment Results and Improvement Plans

### 4.4.1 Summary of Results

In the last workshop the researcher presented the following summary of the results of every school to the three quality teams:

Table IV-177. Summary of Results of the Self-assessment based upon Self-perception.

Criterion	Sub-criterion	Question	School 1	School 2	School 3	
1. LEADERSHIP	Development of mission and vision	1	0	0	5	
		2	0	0	2	
		3	9	4.4	6.5	
	Continuous improvement of management systems	1	0	5	5	
		2	0	5	5	
		3	6.5	4.4	6	
	Leadership and external relations	1	2.5	5	5	
		2	0.75	1.66	0.66	
		3	10	5	6	
	Leadership and motivation	1	2	2.8	1.5	
		2	5	5	0	
		3	9	8.6	6	
	Maximum Total = 82. 10% of the total score. Maximum Score = 100		TOTAL	44.75	46.86	48.66
			SCORE = TOTAL × 1.22	54.595	57.17	59.36
	Criterion	Sub-criterion	Question	School 1	School 2	School 3
2. PLANNING AND STRATEGY	Stakeholder input into strategic planning	1	8	6	6	
	Performance indicator input to strategic planning	1	0.75	1.3	2	
		2	0	0	0	
		3	6	6	6	
	Designing, communicating and validating the strategic plan	1	0	0	1.7	
		2	0	2.4	0	
	Implementation of policies and strategy and updating the strategic plan	1	6	10	10	
		1	0	0	0	
		2	0	0	0	

School Catholic identity	3	4.6	0	4.6		
	4	4.6	0	2.3		
	5	4.6	0	4.6		
	6	4.6	4.6	4.6		
	7	4.6	4.6	4.6		
	8	4.6	4.6	4.6		
	9	4.6	4.6	4.6		
	10	4.6	0	4.6		
	11	4.6	4.6	4.6		
	12	4.6	4.6	4.6		
	13	9.2	0.92	5.06		
	Maximum Total = 128. 10% of the total Score. Maximum Score = 100	TOTAL		75.95	54.22	74.46
		SCORE = TOTAL × 0.78		59.24	42.29	58.08

Criterion	Sub-criterion	Question	School 1	School 2	School 3	
3. PEOPLE	Human resource management	1	5	5	5	
		2	10	8.25	8	
	Competence development of the staff	1	0	0	0	
		2	1	3	0	
		3	3	2	2	
		4	10	6	6	
	Staff commitment and involvement	1				
		2				
	Internal communications	1				
		2	6	3	1	
	Maximum Total = 72. 10% of the total Score. Maximum Score = 100	TOTAL =		35	27.25	22
		SCORE = TOTAL × 1.39		48.65	37.88	30.58

Criterion	Sub-criterion	Question	School 1	School 2	School 3
4. PARTNERSHIPS RESOURCES AND	External partnership management	1			
		2	4.4	1	8
	Economic and financial management	1	5	5	5
		2			
		3	1	2	4
		4	7	6	6
	Material resources, premises and equipment management	1	5	5	0
		2	5	0	0
		3	6	6	3
	Technology management	1	1	1	1
		1	0	0	0
		3	6	6	3
Information and knowledge management	1			0	
	2	5	5	0	
	3	6	3	1	
Maximum Total = 91. 10% of the total Score. Maximum Score = 100		TOTAL =	51.4	40	31
		SCORE = TOTAL × 1.1	56.54	44	34.1

Criterion	Sub-criterion or question	Question	School 1	School 2	School 3
5 PROCESSES, PRODUCTS AND SERVICES	Well-designed processes	1			
		2	3	3	3
		3	10	6	6
	The management of process leads to continuous improvement	1	1.5	2.2	2
		2	10	10	6
	Processes are responsive according to students and parents needs and expectations	1	2.5	5	5
		2	0	2	1.6
		3	1	6	2
	Administrative and financial management	1	10	6	1
	Maximum Total = 64. 10% of the total Score. Maximum Score = 100		TOTAL =	38	40.2
		SCORE = TOTAL × 1.56	59.28	62.712	41.496

Criterion	Sub-criterion	Question	School 1	School 2	School 3
6 STUDENTS AND PARENTS (CUSTOMERS) RESULTS	Students and parents satisfaction	1	6	6	6
	Indicators of performance	1	3.75	4	4
		2	3	3	3
Maximum Total = 19. 15% of the total Score. Maximum Score = 150		TOTAL	12.75	13	13
		SCORE = TOTAL × 7.89	100.56	102.57	102.57

Criterion	Sub-criterion	Question	School 1	School 2	School 3
7 PERSONNEL RESULTS	Staff satisfaction	1	4	4	4
		2	6	10	9.2
	Staff performance	1	2	3	2.8
		2	10	10	10
Maximum Total = 31. 11% of the total Score. Maximum Score = 110		TOTAL	22	27	26
		SCORE = TOTAL × 3.55	78.1	95.85	92.3

Criterion	Sub-criterion	Question	School 1	School 2	School 3
8 SOCIETY RESULTS	Image	1	6	6	3
	Social responsibility	2	7	6	10
	Sustainability	3	6	6	6
Maximum Total = 36. 10% of the total Score. Maximum Score = 100		TOTAL	19	18	19
		SCORE = TOTAL × 2.78	52.82	50.04	52.82

Criterion	Sub-criterion		School 1	School 2	School 3
9 KEY RESULTS	Financial	Fr	15	11.1	5
	Academic	Ar	15	5	18
	Strategic goals	Sr	15	5	14
Maximum Total = 75. 14% of the total Score. Maximum Score = 140		TOTAL	45	21.1	37
		SCORE = TOTAL × 1.87	84.15	39.457	69.19

But if we considered the impact of the lack of some documents to support the estimations of the Quality Teams, we would have different results. The divergences, as usual, are pointed with grey boxes:

Table IV-178. Summary of Results of the Self-assessment Incorporating External Evidence

Criterion	Sub-criterion	Question	School 1	School 2	School 3
1. LEADERSHIP	Development of mission and vision	1	0	0	5
		2	0	0	2
		3	9	4.4	6.5
	Continuous improvement of management systems	1	0	0	0
		2	0	0	0
		3	6.5	4.4	6
	Leadership and external relations	1	0	5	5
		2	0.75	1.66	0.66
		3	10	5	6
	Leadership and motivation	1	2	2.8	1.5
		2	5	5	0
		3	9	8.6	6
Maximum Total = 82. 10% of the total score. Maximum Score = 100		TOTAL	42.25	36.86	38.66
		SCORE = TOTAL × 1.22	51.55	44.97	47.16
Criterion	Sub-criterion	Question	School 1	School 2	School 3
2. PLANNING AND STRATEGY	Stakeholder input into strategic planning	1	8	6	6
	Performance indicator input to strategic planning	1	0.75	1.3	2
		2	0	0	0
		3	6	6	6
	Designing, communicating and validating the strategic plan	1	0	0	1,7
		2	0	2.4	0
	Implementation of policies and strategy and updating the strategic plan	1	6	10	10
	School Catholic identity	1	0	0	0
		2	0	0	0
		3	4.6	0	4.6
		4	4.6	0	2.3
		5	4.6	0	4.6
6		4.6	4.6	4.6	
7		4.6	4.6	4.6	
8		4.6	4.6	4.6	
9	4.6	4.6	4.6		

		10	4.6	0	4.6	
		11	4.6	4.6	4.6	
		12	4.6	4.6	4.6	
		13	9.2	0.92	5.06	
Maximum Total = 128. 10% of the total Score. Maximum Score = 100		TOTAL		75.95	54.22	74.46
		SCORE = TOTAL × 0.78		59.24	42.29	58.08

Criterion	Sub-criterion	Question	School 1	School 2	School 3		
3. PEOPLE	Human resource management	1	5	0	5		
		2	10	8.25	8		
	Competence development of the staff	1	2.78	0	1.126		
		2	1	3	3		
		3	3	2	3		
		4	10	6	6		
	Staff commitment and involvement	1					
		2					
	Internal communications	1					
		2	6	3	1		
	Maximum Total = 72. 10% of the total Score. Maximum Score = 100		TOTAL =		30	22.25	27.126
			SCORE = TOTAL × 1.39		41.7	30.93	37.70

Criterion	Sub-criterion	Question	School 1	School 2	School 3		
4. PARTNERSHIPS AND RESOURCES	External partnership management	1					
		2	4.4	1	8		
	Economic and financial management	1	5	5	5		
		2					
		3	1	2	4		
		4	7	6	6		
	Material resources. premises and equipment management	1	5	5	5		
		2	5	0	0		
		3	6	6	3		
	Technology management	1	1	1	1		
		1	0	0	0		
		3	6	6	3		
	Information and knowledge management	1			0		
		2	5	5	0		
		3	6	3	1		
	Maximum Total = 91. 10% of the total Score. Maximum Score = 100		TOTAL =		51.4	40	36
			SCORE = TOTAL × 1.1		56.54	44	39.6

Criterion	Sub-criterion or question	Question	School 1	School 2	School 3
5 PROCESSES, PRODUCTS AND SERVICES	Well-designed processes	1			
		2	3	3	3
		3	10	6	6
	The management of process leads to continuous improvement	1	1.5	2.2	2
		2	10	10	6
	Processes are responsive according to students and parents needs and expectations	1	2.5	5	5
		2	0	2	1.6
		3	1	6	2
	Administrative and financial management	1	10	6	1
Maximum Total = 64. 10% of the total Score. Maximum Score = 100		TOTAL =	38	40.2	26.6
		SCORE = TOTAL × 1.56	59.28	62.712	41.496

Criterion	Sub-criterion	Question	School 1	School 2	School 3
6 STUDENTS AND PARENTS (CUSTOMERS) RESULTS	Students and parents satisfaction	1	6	6	6
	Indicators of performance	1	3.75	4	4
		2	3	3	3
Maximum Total = 19. 15% of the total Score. Maximum Score = 150		TOTAL	12.75	13	13
		SCORE = TOTAL × 7.89	100.56	102.57	102.57

Criterion	Sub-criterion	Question	School 1	School 2	School 3
7 PERSONNEL RESULTS	Staff satisfaction	1	4	4	4
		2	6	10	9.2
	Staff performance	1	2	3	2.8
		2	10	10	10
Maximum Total = 31. 11% of the total Score. Maximum Score = 110		TOTAL	22	27	26
		SCORE = TOTAL × 3.55	78.1	95.85	92.3

Criterion	Sub-criterion	Question	School 1	School 2	School 3
8 SOCIETY RESULTS	Image	1	6	6	3
	Social responsibility	2	7	6	10
	Sustainability	3	6	6	6
Maximum Total = 36. 10% of the total Score. Maximum Score = 100		TOTAL	19	18	19
		SCORE = TOTAL × 2.78	52.82	50.04	52.82

Criterion	Sub-criterion		School 1	School 2	School 3
9 KEY RESULTS	Financial	Fr	18.3	11.1	10
	Academic	Ar	15	5	18.3
	Strategic goals	Sr	20	5	10
Maximum Total = 75. 14% of the total Score. Maximum Score = 140		TOTAL	53.3	21.1	38.3
		SCORE = TOTAL × 1.87	99.671	39.457	71.621

The results for every quality criterion according to the quality teams self-perception and according to the documented data can be summarized in the following table:

Table IV-179. EFQM Final Scores: Self-perception and Based upon Data

Criterion	School 1		School 2		School 3	
	Self-perception	With evidence	Self-perception	With evidence	Self-perception	With evidence
1	54.595	51.55	57.17	44.97	59.36	47.16
2	59.24	59.24	42.29	42.29	58.08	58.08
3	48.65	52.51	37.88	30.93	30.58	37.71
4	56.54	56.54	44	44	34.1	39.6
5	59.28	59.28	62.712	62.712	41.5	41.5
6	100.56	100.56	102.57	102.57	102.57	102.57
7	78.1	78.1	95.85	95.85	92.3	92.3
8	52.82	52.82	50.04	50.04	52.82	52.82
9	84.15	99.67	39.46	39.46	69.19	78.97
TOTAL	593.935	610.27	531.972	512.822	540.5	550.71

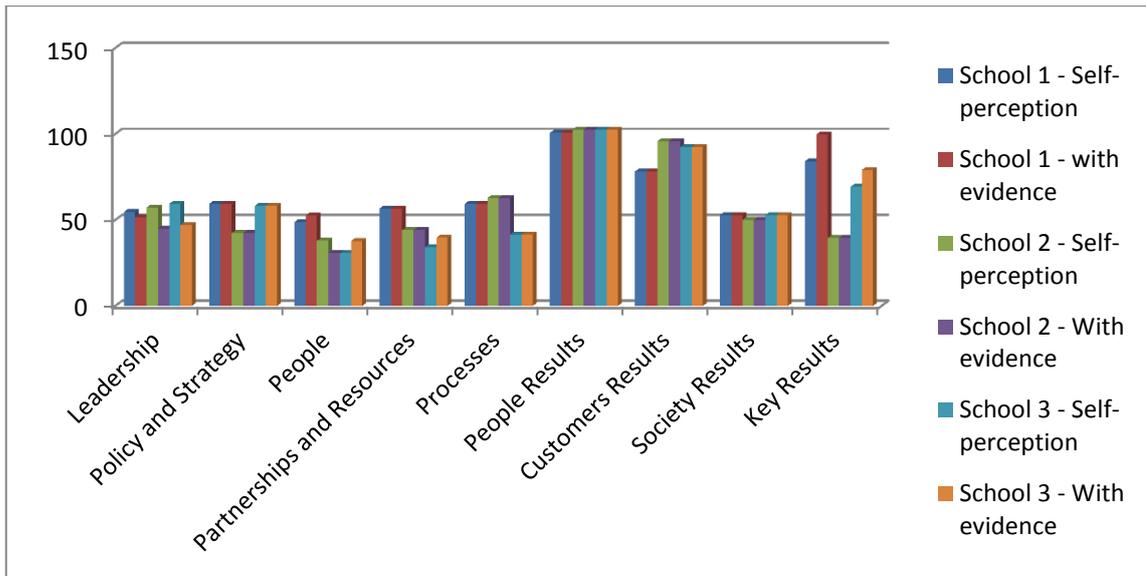


Figure IV-104. Comparison for Every Criterion

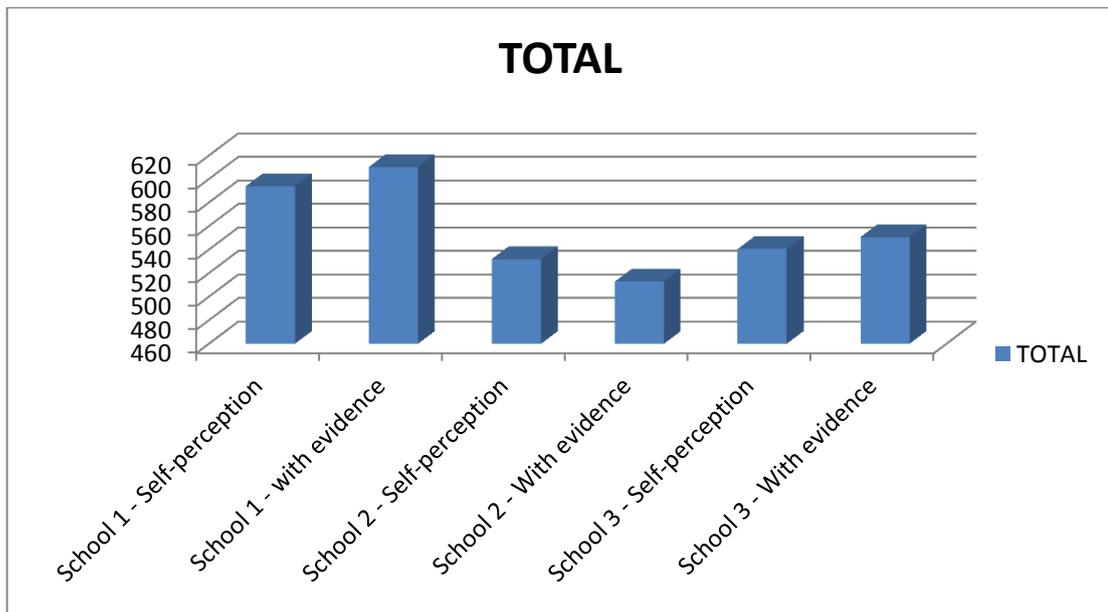


Figure IV-105. Comparison between Total Results

It is worth noting that the final results of the self-assessment based upon the EFQM Model carried out mainly through self-perception gives a worse result for School 1 (2.7% of divergence) and School 3 (1.8% of divergence) than the one

corrected with existing evidence or documents. As for School 2 the result based upon self-perception is a bit better (3.6% of divergence).

It is also interesting to present the percentage of the maximum score that every school got for every criterion. The boxes in grey represent a difference in the value in relation to the result before the contrast with additional questions or request of evidence.

Table IV-180. Percentage in relation to the Maximum Score

Criterion	School 1		School 2		School 3	
	Self-perception	With ext. evidence	Self-perception	With ext. evidence	Self-perception	With ext. evidence
1	54.57	51.52	57.15	44.95	59.34	47.15
2	59.33	59.33	42.36	42.36	58.17	58.17
3	48.61	41.67	37.85	30.9	30.56	37.67
4	56.48	56.48	43.96	43.96	34.07	39.57
5	59.37	59.37	62.81	62.81	41.56	41.56
6	67.11	67.11	68.42	68.42	68.42	68.42
7	70.97	70.97	87.1	87.1	83.87	83.87
8	52.78	52.78	50	50	52.78	52.78
9	60	70.67	28.13	28.13	49.3	51.07
Mean	58.80	58.88	53.09	50.96	53.12	53.36

From these results we see that the criterion in which the three schools have a highest score is the seventh one, people results (criterion 7). There the two main quality indicators were the level of absenteeism (staff satisfaction) and the frequency of the homework asked by every teacher (staff performance) in addition to the self-perception on the school level in these two aspects.

The three schools almost coincide in the weakest criterion: people (criterion 3). School 2 is still weaker in the criterion 9 (key results). The criterion “people” includes human resource management, staff competence development, staff commitment and involvement and internal communication.

One way of interpreting this fact is to think that there is a contradiction between what the school does (criterion 3) and what the school achieves (criterion 7). But another way of interpreting this fact is to think that the indicators for criterion 3 were

much demanding than those for criterion 7 and therefore that new indicators should be added to assess the latter criterion.

If we calculated the descriptive statistics for these data, we would get this table:

Table IV-181. Descriptive Statistics for Percentages of the Maximum Score

School		Range	Minimum	Maximum	Sum	Mean	Std. Dev.	Skewness	Kurtosis
1	Perception	22.36	48.61	70.97	529.22	58.80	6.91	0.492	0.013
	With external data	29.30	41.67	70.97	529.90	58.88	9.66	-0.315	-0.349
2	Perception	58.97	28.13	87.10	477.78	53.09	17.91	0.639	0.284
	With external data	58.97	28.13	87.10	458.63	50.96	18.82	0.796	0.252
3	Perception	53.31	30.56	83.87	478.07	53.12	16.82	0.440	-0.023
	With external data	46.20	37.67	83.87	480.26	53.36	15.00	1.120	0.907

It is also worth mentioning that the range of results for School 1 is just 22.36 (for the self-perception score) and 29.30 (for the contrasted with some external data) while for the other two schools the ranges go from 46.20 to 58.97, which are very high. As for the arithmetic mean, School 1 has the highest value.

The table also shows that in every case the skewness of the frequencies curves is positive, except for the results of School 1 contrasted with external evidence. This means that most results concentrate in the lowest part of the frequency distributions.

Concerning the kurtosis, the positive results indicate that the frequency distribution is leptokurtic and therefore most results are concentrated around the arithmetic mean. In the case of the two negative results, we have a platykurtic distribution and therefore the results are more spread.

Even if the criteria where there is a discrepancy between the two percentages of the maximum score are not many, it can be interesting to assess whether the divergence between the two arithmetic means for every school is statistically significant or not.

The independent variable would be categorical, that is the contrast of data for some questions of the self-assessment questionnaire, and the dependent variable would be continuous, the percentage of the maximum score for every criterion.

Thus we consider two hypotheses:

$H_0$  = the addition of some external verification procedures to the quality team self-assessment does not affect the criterion score in a statistically significant way.

$H_1$  = the verification of self-perception with external verification procedures makes a meaningful difference in the results.

The sample is not big enough to apply the paired-samples t-test. If we wanted to apply the Wilcoxon Signed Ranks Test to the three schools of the sample, the problem would be the reduced number of pairs with different average for every school (three for School 1, two for School 2 and four for school 3). The minimum number of different pairs to apply this test is five.

The same problem happens when we try to apply another non parametric test like the Sign Test to every school. It also demands a minimum of five paired cases with a different value.

Therefore, what we do is to consider the measures on the twenty seventh criteria (nine per every school) as if they had been performed over the same sample. In this way we have nine pairs with different value. Then we apply the Wilcoxon Signed Ranks Test when  $n < 25$ .

$T_+$  results 17 and  $T_-$  results 28. Thus  $T(\min T_+, T_-) = 17$ . If we compare this value with those of the table of critical values for this test (Pérez Juste et al., 2012, p. 594), we have to accept  $H_0$ . In the case of nine different paired values, for a significance level of 0.05 and a two-tailed test, the interval that obliges to accept  $H_0$  is [6,40]. Thus we can conclude that the addition of the few questions or indicators to contrast the answers of the quality teams does not produce a statistically meaningful difference in the criteria scores.

#### 4.4.8 School 1 Improvement Plan

The members of the Quality Team were invited to analyse the results of their self-assessment, discuss and identify the sub-criteria that were more in need of improvement. In a second moment they were supposed to order them according to the following criteria: urgency of intervention; importance and impact on the key results; and the availability of resources to improve the quality of those sub-criteria.

Table IV-182. School 1 Areas of Improvement.

	<b>SCHOOL 1</b>  <b>Which sub-criteria are more in need of improvement?</b>	<b>Order them according to</b>		
		<b>the urgency</b>	<b>their importance and impact on the key results of the school</b>	<b>the availability of resources to improve them</b>
1	Development of mission and mission (vision statement) 1a	1	3	1
2	Continuous improvement (self-assessment plan) 1b	3	1	7
3	Leadership and external relations (parents association) 1c	8	7	3
4	Strategic plan (written) 2c	2	4	2
5	Performance indicators. Parents satisfaction 2b	5	5	6
6	Staff commitment and involvement (reward) 3c	4	6	4
7	External partnerships and cooperation 4a	7	8	5
8	Technology management (computer lab and teacher) 4d	6	2	8
9				
10				
...				

After this, the members of the team selected the areas they wanted to improve and designed the actions to do it:

Table IV-183. School 1 Improvement Plan.

No.	Area for improvement	Action
1	1a. Development of mission and vision. Mission and vision statement	<ul style="list-style-type: none"> <li>• [The Principal]<sup>21</sup> is the person to prepare it and then to be discussed with the committee within the school</li> </ul>
2	2c. Strategic plan (written)	<ul style="list-style-type: none"> <li>• [The Principal] prepares and then it is to be discussed with the school high committee.</li> <li>• Some parts are to be done writing this short period this scholastic year while other could be done next year [sic].</li> </ul>
3	1b. Continuous improvement and self-assessment plan	<ul style="list-style-type: none"> <li>• It is to be done by the administration of the school, “yearly time frame &amp; teachers training”</li> <li>• Teachers are also to assess themselves</li> </ul>
4	Computer lab & its teacher	<ul style="list-style-type: none"> <li>• Computer for teachers/staff</li> <li>• A visit to computer lab in CCST<sup>22</sup></li> <li>• Computer lab “next year”</li> </ul>
5	3c Staff commitment and indicators (reward)	<ul style="list-style-type: none"> <li>• The administration of the school is to assess and reward the staff.</li> <li>• The staff also need to give feedback to the administration</li> <li>• “Yearly assessment”.</li> </ul>

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<sup>21</sup>His name was written here. We omit it in order to protect the privacy of the person and the identity of the school.

<sup>22</sup> CCST stands for Comboni College of Science and Technology.

#### 4.4.9 School 2 Improvement Plan

Similarly the team me

mbers of School 2 were invited to do the same operation.

Table IV-184. School 2 Areas of Improvement

	<b>SCHOOL 1</b>  <b>Which sub-criteria are more in need of improvement?</b>	<b>Order them according to</b>		
		<b>the urgency</b>	<b>their importance and impact on the key results of the school</b>	<b>the availability of resources to improve them</b>
1	Development of mission and mission	1	1	1
2	Continuous improvement of management systems	8	2	6
3	Performance indicator input to strategic planning	2	6	2
4	Designing, communication and validating strategic planning	3	1	3
5	Technology management	5	3	8
6	School Catholic identity	4	5	5
7	Leadership and motivation	6	4	7
8	Leadership and external relations	7	8	4
9				
10				
...				

Based on these results, they proposed the following guidelines for their improvement plan:

Table IV-185. School 2 Improvement Plan

<b>No.</b>	<b>Area for improvement</b>	<b>Action (what, who, when)</b>
1	Development of mission and vision.	<ul style="list-style-type: none"> <li>• To make people understand the mission and vision (what)</li> <li>• The school administration and the staff (who)</li> <li>• Within the school year (when)</li> </ul>
2	Continuous improvement of management systems	<ul style="list-style-type: none"> <li>• Awareness programme through training, seminars and workshops</li> <li>• Parish School Administration in collaboration with school</li> <li>• In Summer holiday</li> </ul>
3	Technology management	<ul style="list-style-type: none"> <li>• To provide computers and other modern materials</li> <li>• Parish School Administration, parents council and School Administration</li> <li>• During school year</li> </ul>
4	Leadership and motivation	<ul style="list-style-type: none"> <li>• To encourage morally and materially</li> <li>• Parish School Office and School Administration</li> <li>• During Academic Year</li> </ul>
5	School Catholic identity	<ul style="list-style-type: none"> <li>• To teach Catholic Doctrine symbols and catechism</li> <li>• School Administration and Staff and Parish</li> <li>• During the school year</li> </ul>

#### 4.4.10 School 3 Improvement Plan

In the workshop carried out with the members of the School 3 Team alone, they defined the strengths and the areas for improvement as follows:

Table IV-186. Strong and Weak Points of School 3

<b>Criterion</b>	<b>Strengths</b>	<b>Areas for improvement</b>
1. Leadership		Leadership and motivation (1d) Leadership and external relations (1c)
2. Planning and strategy		Planning and strategy in general Performance indicator input to strategic planning (2b) Designing, communicating and validating the strategic planning (2c)
3. People	Competence development of the staff (3b)	
4. Partnership and resources	External partnerships management (4a)	Material resources, premises and equipment management (4c) Technology management (4d)
5. Processes, products and services	Well defined processes (5a) The management of processes leads to continuous improvement (5b)	
6. Students and parents results	Indicators of performance (6b)	
7. Personnel results	Staff performance (7b)	
8. Society results	Image (8a) Sustainability (8c)	
9. Key results		Main Financial Results (9a)

Table IV-187. Classification of Improvement Areas for School 3

	Which sub-criteria are more in need of improvement?	Order them according to		
		the urgency	their importance and impact on the key results of the school	the availability of resources to implement them
1	Leadership and external relations (1c)	5	6	4
2	Leadership and motivation (1d)	6	4	6
3	Planning and strategy in general	1	1	2
4	Designing, communicating and validating the strategic planning (2c)	2	2	3
5	Material resources, premises and equipment management (4c)	4	5	5
6	Technology management (4d)	7	7	7
7	Main Financial Results (9a)	3	3	1
8				
9				
10				
...				

Table IV-188. School 3 Improvement Plan

	Areas for improvement	Action
1	Key Financial Results (9a)	<ul style="list-style-type: none"> <li>To increase the academic fees. The Financial Committee will define the percentage.</li> <li>Inform the parents of this increase.</li> <li>Payment in instalments to reach 70% in the collection of fees.</li> <li>Preparation of forms to register the payments of every student.</li> <li>Setting a collection committee.</li> <li>Setting a committee to follow up the implementation of these decisions.</li> </ul>
2	Planning and strategy in general	<p>Definition of the vision, mission and goals of the school in this way:</p> <ul style="list-style-type: none"> <li>Setting a Committee to write a draft with two persons from every Parish School.</li> <li>When: End of the 2018/2019 academic year</li> <li>Evaluation: End of the year.</li> <li>Follow up: the Total Quality Committee should present monthly reports</li> </ul>
3	Leadership and	<ul style="list-style-type: none"> <li>Training and qualification by the institution and personal</li> </ul>

motivation (1d)	ongoing education <ul style="list-style-type: none"> <li>• To scale the salaries according to the years of experience and the academic degree to motivate academic upgrading of teaching staff.</li> </ul>
4 Leadership and external relations (1c)	To improve external relations with: transport company for the students; food programme for students <sup>23</sup> ; school buffet; municipality for exams; parents; other schools for educational activities; popular committee.
5 Material resources, premises and equipment management (4c)	<ul style="list-style-type: none"> <li>• Premises maintenance</li> <li>• Maintenance of equipment, books, tables, chairs, cupboards, electrical installation.</li> <li>• Follow up.</li> <li>• Responsible persons: the headmaster and his deputy.</li> </ul>

## 4.5 Cross-Case Analysis and Recommendations for the Three Schools

### 4.5.1 Strategic Planning and Different Stakeholders' Involvement

The three teams have underlined their need of improving their strategic planning. The research of the Efficient Schools movement underlines the importance of the “correspondence between objectives and strategies as decisive factor for school efficiency” (Martín-Moreno Cerrillo, 2007, p. 126). And in fact, the analysis of the Improvement Plans reveals this difficulty to match objectives and strategies.

Also Gopalan (2014, p. 42) identifies “poor planning” among the major reasons that explain the failures of the implementation of Total Quality Management.

Cultural values have an impact on the making decision process. Siddig Adam Hammed (2016) studies the impact of culture on strategic decisions in the Sudanese context. The three schools of the sample represent a mixture of cultures, mainly Arab,

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<sup>23</sup> The School is supported by the “Italian Agency for Development Cooperation” with a daily lunch for the students.

Nuba and South Sudanese. According to that study, Sudanese culture emphasizes two elements that have an impact on the decision making process: “collectivism” and “performance orientation” (2016, pp. 7-8). The latter one could also be interpreted as “short-term orientation” which helps contextualize the difficulties of the three schools for long term planning and strategic planning.

A UNESCO report also pointed the “absence of forward-looking resource planning” as a challenge for general education in Sudan (2018, p. 128). The difficulty for strategic planning also appears at State level in cases like Blue Nile and Red States for instance (EU et al., 2015, p. 436).

In the strategic planning of the three schools, it would be important to consider the Interim Basic Education Strategy prepared by the Government in Sudan on the one hand, and to involve the parents, on the other hand. The three schools do not show a strong relation with the latter ones. The report of the European Union underlines the challenge of moving “away from seeing parents and community members as those who fill the financial gaps in the school budgetary needs, towards a collective commitment to facilitating and enriching the education of all the children in the community” (EU et al., 2015, p. 465). Their connections could help also these schools to promote a community-wide vision of education that integrates different dimensions like health, food/agriculture/animal husbandry, culture, religion, income generation, trade, administration...

Parents could also be key agents in the organization of extra-curricular activities. These ones are generally:

absent from education in Sudan, except in rare cases. [They] provide motivation to children by rounding out their education in a holistic manner, enabling the further development of qualities such as physical fitness and condition, teamwork and mutual cooperation, curiosity about the environment, care for the environment, application of classroom learning in the immediate context, a holistic approach to human development – personal and social. (EU et al., 2015, p. 466)

Extra-curricular activities are also important for their positive impact on the school climate, especially if they encourage pupils “to develop their talents, in a climate of cooperation and solidarity” (Congregation for Catholic Education, 2014, par. II, 1).

As for parents expectations, a school that would respond to them and to the needs of the community could include “example gardens with nutritious crops, small workshops, tree planting, use of medicinal plants, new or improved agricultural productions” in a rural context (EU et al., 2015, p. 404). While in urban contexts like those of Omdurman and Khartoum they could focus on “business development, management, accounting and on construction skills: bricklaying, carpentry, electrician, plumber and others” (EU et al., 2015, p. 406).

#### **4.5.2 Staff Development**

The preservice training of the teaching staff of the three schools looks a factor of quality. School 1 has 35 out of 39 teachers (89%) who are Bachelor’s Degree holders. School 2 has sixteen teachers in total: three just completed Secondary School, three got an Intermediate Diploma, nine a Bachelor’s Degree Holders and one, the Headmaster, is a Master’s Degree holder. Instead in Sudan “around 50% of basic-education teachers are considered untrained” (Unesco, 2018, p. 46, quoting Unesco, 2008), even if the report refers to the lack of specific training in the subject they teach. In an older survey:

conducted in three states (Kassala, North Kordofan and River Nile), the most common teacher qualifications range as follows: 7–38% have completed secondary education, 11–26% have a Bachelor of Arts (B.A.) or Bachelor of Science (B.Sc.) degree, and 9–37% have a B.A. or B.Sc. degree and a B.Ed. degree (World Bank, 2012; quoted by Unesco, 2018, p. 47).

Certainly the above mentioned data are not updated and the passing of time has improved the situation. Nonetheless, it looks clear that in this point the three schools of the sample look stronger than the average situation of the country.

It is also interesting to compare the in-service staff training in the three schools and put it in relation with the percentage of pass and the results of the self-assessment based upon the EFQM Model.

Table IV-189. Staff Training in Relation to Key Results

School	Internal Workshops	External Workshops	Courses	University Degree	2016/2017 % of pass in the GPSC	2017/2018 % of pass in the GPSC	EFQM Result with data
School 1	2	2 ( one at Municipality level and one at the level of the Education Office)	1 for 5 teachers organized by Education Office	1 teacher for Master Arts Degree	91.1	85	610.27
School 2	0	1 for headmasters organized by the Education Office of the Archdiocese	1 for 5 teachers organized by Education Office		50	70	512.82
School 3	0	1 for headmasters organized by the Education Office of the Archdiocese	1 for 5 teachers organized by Education Office 1 for 3 teachers (Diploma in Teaching Techniques and Methods)		44	100	550.71

As already mentioned, in the studies of Fuller & Clarke (1994) collected on Table II-3, the input variable “in-service teacher training” showed significant association with achievement in eight out of thirteen studies carried out in primary schools of developing countries.

Moreover the weak practical pre-service training provided in the faculties of education in Sudan (Unesco, 2018, p. 86) recalls the need of caring the in-service continuous education of teachers.

In this case, we see that the school that has more resources in general, School 1, is the one that cares more for in-service training of its staff and gets a better result in the self-assessment with the tool based upon the EFQM Model. School 3 also invested more in in-service training and got a better score than School 2.

It is also worth mentioning that this correlation is not so evident with the results of the GPSC where the preparation camp looked to have done the great difference.

### 4.5.3 Financial Resources and Quality

Certainly the care for the in-service training has to do with the financial resources of the school. The average salaries express this reality:

Table IV-190. Average Salaries in Relation to GPSC Results and EFQM Score

School	Average Salary	2016/2017 % of pass in the GPSC	2017/2018 % of pass in the GPSC	EFQM Result with data
School 1	1,600	91.1	85	610,27
School 2	1,166	50	70	512,82
School 3	1,248	44	100	550,71

Moreover, the correlation between the results of the self-assessment based upon the EFQM Model and the average salary is very close to 1. Just as a curiosity, the researcher also included the dependent variable “2016/2017 % of pass in the GPSC” even if the salaries correspond to the 2017-2018 academic year to avoid the strong impact of the preparation camp on the results of School 3.

Table IV-191. Correlation between Academic Results, EFQM Score and Average Salaries

	Average Salary	2016/2017 % of pass in the GPSC	2017/2018 % of pass in the GPSC	EFQM Result with data
Average Salary	1			
2016/2017 % of pass in the GPSC	0,96	1		
2017/2018 % of pass in the GPSC	0,18	-0,12	1	
EFQM Result with data	0,98	0,87	0,39	1

The studies of Fuller & Clarke (1994) collected on Table II-3 state that “teacher salary level” is one of the input variables that showed significant association with achievement in four out of eleven studies carried out in primary schools of developing countries.

In Sudan it is also worth mentioning that “between 6% and 20% of regular teachers have other jobs or provide private tutoring to students, indicating a need for supplementary income” (Unesco, 2019, p. 92), which surely has an impact on the quality.

#### 4.5.4 Information and Knowledge Management

Concerning the sub-criterion 4e, Information and Knowledge Management, none of the three teams mentioned documents related to staff attendance or teachers management. Therefore, there would be need of improving staff performance through well-defined standards and adequate information about performance (World Bank, 2012, p. 150).

This research showed the divergence between the statements of the members of the quality teams and the real data. This is a real challenge in Sudan as a UNESCO report underlines in relation to the management of Educational Management Information System. There is “lack of skills and qualifications required to collect,

manage and use the data” (Unesco, 2018, p. 135). In many occasions, self-perception or self-assessment is based on the desire about how things should be and not on real facts.

#### 4.5.5 Input Variables Related to School Achievement and Quality

Certainly the size of the sample of this research is too small for a proper statistical analysis. Nonetheless, it can be interesting to study the correlations between some input variables that showed significant and positive association with achievement in primary schools of developing countries. The two dependent variables related to achievement would be the percentage pass in the General Primary School Certificate and the EFQM final score based upon data.

Table IV-192. Input Variables Related to School Achievement in the Three Schools

School	No. of students <sup>1</sup>	Av. No. of students per class	Av. No. of students per teacher	% of teachers holders of a university degree	% of teachers holders of a specialized university degree <sup>2</sup>	% of pass in the GPSC	EFQM Result with data
1	1,200	50	27.91	89	70,00	85	610,27
2	575	57.5	35.94	62.50	50,00	70	512,82
3	185	23.12	15.42	41,7	29,20	100	550,71

1. Data collected by the researcher on 26/04/2018.

2. Here the university degree is related to the taught subject.

Table IV-193. Correlation between Input Variables Related to School Achievement in the Three Schools

	No. of students	Av. No. of students per class	Av. No. of students per teacher	% of teachers holders of a univ. degree	% of teachers holders of a sp. univ. degree	% of pass in the GPSC	EFQM Result with data
No. of students	1						
Av. No. of students per class	0.65	1					
Av. No. of students per teacher	0.49	0.98	1				
% of teachers holders of a university degree	0.998	0.70	0.55	1			
% of teachers holders of a specialized university degree	0.99	0.75	0.61	0.997	1		
% of pass in the GPSC	-0.38	-0.95	-0.99	-0.44	-0.51	1	
EFQM Result with data	0.71	-0.08	-0.27	0.66	0.60	0.39	1

Considering the percentage of pass in the GPSC as sign of achievement, the two input variables that have a greater impact are average number of students per class (-0.95) and the average number of students per teacher (-0.99). The less those ratios are, the better the marks in the GPSC are.

But if we consider the result of the self-assessment based upon the EFQM model and corrected with data, the three more significant relevant variables that have an impact on the school quality are: number of students (0.71), percentage of teachers holders of a university degree (0.66), percentage of teachers holders of a specialized university degree (0.60).

It would be interesting to extend the research to a greater sample to test these results and also to compare them with those of 2016/2017.

In relation to the two independent variables “school ownership” and “school administration”, it is worth recalling the report of Wani that pointed that the quality of Save the Saveable schools depended on the Parish Priest support. When the Parish was entrusted to the care of a priest who belongs to a Congregation, there was better follow up of the school administration and more material resources. Diocesan Priests found it

more difficult to identify additional funding for these schools (Wani, 2002). But if we bring the results of the three schools of the sample, the results do not look decisive.

Table IV-194. School Ownership and Administration in Relation to Quality

School	Owner of the school	Administration of the school	2016/2017 % of pass in the GPSC	2017/2018 % of pass in the GPSC	EFQM Result with data
School 1	Congregation	Congregation	91.1	85	610.27
School 2	Parish	Congregation	50	70	512.82
School 3	Parish	Teachers	44	100	550.71

Certainly the sample is too small to apply the Student's t-test or even the Mann-Whitney *U* test for instance. But at first sight, it is clear that the percentage of pass in the 2017-2018 GPSC of School 1 is in the middle of the percentages of the other two Parish schools while it was the best result in 2016/2017. It is worth recalling again that School 1 did not organize a camp to prepare the GPSC while School 3 did in 2017/2018 and that School 1 states to have registered a high number of South Sudanese students with very poor academic background for the 2017/2018 GPSC.

The results are different when we consider the EFQM score based upon data. There School 1, that is owned and run by a congregation, appeared as the one with more quality. But along with this factor, it is necessary to consider that it is the bigger school in terms of number of students and financial and human resources.

It is also interesting to see the relation between the administrative style and EFQM results based upon data. The school with a more managerial style (6) got the best results in the self-assessment. Unfortunately, School 2 did not define itself on this regard. As for the results in the GPSC, the best school is the one with collegial style (1).

Table IV-195. Administrative Style and EFQM Results

School	Administrative Style (1 to 7)	% of pass in the GPSC	EFQM Result with data
School 1	6	85	610.27
School 2	-	70	512.82
School 3	1	100	550.71

It is interesting at this point to mention, even if it is a bit old, the non-published study of Munira Muḥamad Ḥamad Muḥamad (1996) under the title “Job satisfaction in relation to the leadership style of the Primary School Headmaster”. This research involved 150 teachers of Primary Schools of Khartoum State. The study associated the job satisfaction of the teachers with the democratic style of leadership.

The autocratic style instead had a negative correlation with job satisfaction while the correlation of the laissez-faire style was not meaningful enough to state a positive or negative impact on the job satisfaction.

#### 4.6 Meta-evaluation

After finishing the Improvement Plan, the members of the different Quality Teams were invited to fill Appendix 7 (Meta-Evaluation of the Self-Assessment Process). The results were the following ones:

1. Which difficulties did you find during the process of self-assessment?

Table IV-196. Difficulties Ordered according to Frequency

No.	Item	Frequency
1	Assessment procedures and way of drawing final results	5
2	Questions related to financial issues	3
3	Questions that concerned the attachment of documents	2
4	Questions related to development of staff competence	2
5	Questions related to the development of mission and vision (1a)	1
6	Questions related to continuous improvement of management	1

	systems (1b)	
7	Is there an association of parents of the students? (1c1)	1
8	In addition to the marks of the students, which indicators does the school use to assess its performance? List them (2b2)	1
9	Designing, communicating and validating the strategic plan (2c)	1
10	Is there a census of Catholic families who have not received the Sacrament of Initiation? (2e1)	1
11	Are there catechism classes for children of Catholic families who have not received the Sacrament of Initiation? (2e2)	1
12	What is the percentage of teachers who, in the subject they teach, are holders of a university diploma in that specific field of knowledge? (3b1)	1
13	Staff commitment and involvement (3c)	1
14	Who is involved in the preparation of the budget? (4b2)	1
15	When and how is the budget compared with the financial situation? (4b3)	1
16	How many computers does the school have? (4d1)	1
17	How many multimedia projectors does the school have? (4d2)	1
18	List the kind of files contained in the school archives (bills, payment sheets, students' records...)? (4e1)	1

2. Was the process helpful? Why?

Table IV-197. Was the Process Helpful?

<b>Item</b>	<b>Frequency</b>
Yes	9
No	0
ND/	0

Table IV-198. Why Was the Process Helpful?

<b>No.</b>	<b>Item</b>	<b>Frequency</b>
1	Improvement of processes and outputs (or quality in general)	6
2	Development of mission and vision	1
3	I benefitted a lot	1
4	It showed the different components involved in raising the standard of performance and how to assess it	1
5	The process addressed most important aspects in school	1

3. Where there some sub-criteria non meaningful or difficult to apply to your school?

Table IV-199. Difficult and Non-meaningful Sub-criteria

<b>Item</b>	<b>Frequency</b>
Yes	3
No	6
ND/	0

Those who said “yes”, referred to the difficulty and not to the utility.

Two persons mentioned the difficulty to involve Muslims parents in the strategic plan of a school that is defined as Christian.

One person mentioned here the difficulty to answer the questions that required documents and precise information.

4. Did you identify any sub-criteria or aspect that was not mentioned and should be considered in the Self-Assessment?

Table IV-200. Any Non Considered Sub-criteria?

<b>Item</b>	<b>Frequency</b>
Yes	0
No	9
ND/	0

5. Is your team ready to repeat the process after one year? Up to which extent do you support a new self-assessment with this model in one year time?

Table IV-201. Readiness to Repeat the Process after one Year

Disagree ` We will not repeat it	No idea We do not know	Partially agree	Agree	Full support. Surely we will repeat it
			9	

## **4.7 Discussion of Theoretical Framework**

The work done with the quality teams shows that the EFQM Model can be, properly contextualized, a suitable theoretical framework for the self-assessment of the schools. This same research has allowed verifying some elements of the theoretical framework and the literature review.

### **4.7.1 Child feeding and exams preparation camp**

The studies collected by Fuller and Clarke (1994) in primary schools of developing countries (Table II-3) show that the variables child nutrition and feeding have positive association with achievement in seven out of eight studies. In the analysis of the results of the General Primary School Certificate, two schools of our sample showed a meaningful improvement in their marks after organizing a preparation camp that included a daily meal. This result is coherent with the above mentioned studies. Nonetheless it is not clear which one of the two variables has a greater impact, either the feeding or the conditions for better study that the camp provides (time table, quiet place that facilitates concentration, teachers 'support). At any case, these camps should be incorporated to the questionnaire as factor of quality.

### **4.7.2 Instructional Time**

In the same collection of studies analysed by Fuller and Clarke (1994), the variable instructional time showed significant association with achievement in fifteen out of seventeen studies carried out in primary schools of developing countries

(Table II-3). In Sudan, the official number of school days in the academic year is 210 which should mean around 1,050 hours of intended instructional time per year (5 hours per day).

This figure is coherent with the average official school year in primary education across countries, which is 200 days, with a range of 175–210 days (Unesco, 2007, p. 122).

However, actual instructional time in Sudan is significantly less. And this diminution of instructional days looks a worrying trend during the last years.

The World Bank Report of 2012 showed that the actual number of instructional hours per year was 714. “This figure means that students receive an average of 336 hours less instructional time annually than what is officially sanctioned” (World Bank, 2012, p. 146).

In the same report, the “average length of the official school year reported by head teachers in the sample schools in the three states [Kassala, North Kordofan and Blue Nile] lies within the range of 200–214 days” (World Bank, 2012, p. 114).

If we come to more recent times, for instance to the 2017-2018 academic year, we find that Christian Schools in general and Catholic Schools in particular had to reduce their weekly days to just four at Khartoum State. They were resting on Fridays and Sundays to give both Muslim and Christian families the possibility of staying at home and praying in their respective holy day. The State Minister of General Education of Khartoum forbid private schools to work on Saturdays since July 26, 2017 and demanded from them to cover 169 school days a year. Catholic Schools refused to work on Sundays and reacted increasing one period from Monday to Thursday accumulating 8 periods of 45 minutes per day. In this way they balanced the missed hours. The final number of school days during that year was 115 which meant about 690 hours a year. Just if we considered every period as one instructional hour the result is 920 hours.

But the number of school days in government schools at Khartoum State was not much higher. They covered around 140 days with eight periods per day in theory, as in practice the high rate of absenteeism of teachers often shortens the school day.

Certainly, the daily increase of one period made the day heavier for students and school staff. Nonetheless, according to the Principal, there was not a negative impact on the final academic results neither in the number of registered students (Transcript E, par. 3). Another issue would have been to consider the impact on the learning outcomes.

The number of school days per year has been a serious problem in the last years, at least in Khartoum State (2016-2018), as the State Minister was very strict in having all the schools closed whenever heavy rains destroyed some of the weakest schools, or any school had some students participating in the National Sports Championships, or the weather was very cold. The reason to justify these orders is the fact of not giving advantage to the schools that do not need to close. But at the end, the result is the equalization by the bottom which certainly does not help to raise quality.

In January 2019, at the beginning of the last Revolution, Comboni College Khartoum found itself in the middle of massive demonstrations that took place in the area where it is located. This fact led to the loss of some school days. Therefore, the actual number of instructional hours looks a very fragile aspect in the Sudanese educational system, very exposed to climate, State Ministry policies, teacher absenteeism, demonstrations, strikes...

The Administrative Decree no. 18 issued by the General Director of the Ministry General Education of Khartoum State about the 2019-2020 school calendar fixed 164 academic days.

In spite of having the number of school days decreed by the State Ministry, schools should do an effort to maximize the instructional time as this is a quality factor. Therefore the analysis of the quality of the three schools should also have added the effective school days and hours per year.

Criterion 7a assesses staff absence. This factor is considered within the context of staff motivation and commitment. But certainly it is closely related to the instructional time. It would have been interesting to try to identify the reason behind the absence: sickness, family sickness, emergency, social events, not defined.

### **4.7.3 Strong Leadership and Strategic Planning**

The results of the early and the most recent Effective Schools research converged about five factors of quality. The first one was a “strong educational leadership” (Scheerer, 2004, p.8; Martín-Moreno Cerrillo, 2007, p. 126). The Model we have used for the self-assessment of quality includes this factor inside criterion one (Leadership). In this model, the main source of strength for the leadership should be the definition, communication and implementation of the mission and vision of the school. This need also came out in the self-assessment of the three schools, in concrete the need of having a well-known written document on this.

Another factor of quality defined by the most recent research of the Efficient Schools movement, and not considered in their early research (Scheerer, 2004, p. 8), is a “clear definition of objectives” (Martín-Moreno Cerrillo, 2007, p. 126). This one would be considered inside the second quality criterion in the model of this research: planning and strategy. School 1 selected the development of a strategic plan as area in need of improvement.

We already recalled how the research of the Efficient Schools movement underlines the importance of the “correspondence between objectives and strategies as decisive factor for school efficiency” (Martín-Moreno Cerrillo, 2007, p. 126) and that Gopalan identifies “poor planning” as one of the reasons that explain the failures of the implementation of Total Quality Management (Gopalan, 2014, p. 42).

### **4.7.4 Students and parents expectations**

The early research of the efficient schools movement mentions “high expectations of pupil attainment” (Scheerer, 2004, p. 8) as very important factor of quality, while the most recent research gives more emphases to another factor, “high moral and expectations of the teaching staff” (Martín-Moreno Cerrillo, 2007, p. 126). The first factor, students’ expectations, should be considered under the sub-criterion 6a

of the self-assessment model presented in this research along with that of their parents. These expectations are also supposed to be considered in the process of strategic planning (Sub-criterion 2a) and in the design of processes (Sub-criterion 5c). Therefore, the EFQM Model includes this factor of quality, which is underestimated by the three schools of the sample.

The evaluation of the schools under the “Save the Saveable Program” carried out by Wani also underlined the poor involvement of the parents in the education of their children and their low expectations concerning their future (2002, p. 28).

#### **4.7.5 Development and Promotion of Teaching Staff**

The questionnaire included in a second moment the number of workshops organized by the school (internal workshops) or the workshops or other activities of professional development to which the school has sent staff members as indicators to evaluate “competence development of the staff” (3b). School 3 for instance has invested in the training of their teaching staff last year, which had created the self-perception of being strong in this regard. Nevertheless, the first version of the questionnaire was not asking for this information.

There is still an aspect neglected in the questionnaire that is the criteria for the promotion of the teaching staff. It was not explicitly considered under the sub-criterion 1a (leadership and motivation) nor under the sub-criterion 3c (staff commitment and involvement). The importance of this issue can be understood from the study on schools of twelve locations of Blue Nile and Red Sea States which states that:

teachers’ promotions are not based on confidential reports to measure performance, but on time-based entry system, which has damaged the level of the overall performance of teachers, created unfairness among teachers and weakened the regulatory and technical role of supervisors (EU et al., 2015, p. 446).

As for the expectations of the teaching staff, they have to do with the same sub-criterion 2a and with sub-criterion 3c (staff commitment and involvement).

It would have enriched the research the inclusion of direct observations of complete lessons to assess the teaching methods and classroom life as part of sub-criterion 5a (well-designed processes). These observations would have helped triangulate data by looking at teachers' social interaction with students in the classrooms and their pedagogic and didactic skills. It would have been interesting to verify if the teachers use teacher-centred methodologies or child-centred methodologies such as the use of group teaching methods, of open questions and of teaching aids that help children to be actively involved in constructing their own learning (EU et al., 2015, p. 218).

Another indicator that would have helped the self-assessment of the teaching methodology (criterion 5a) is the percentage of students who are able to participate fully in the lessons, to contribute and to receive feedback from the teacher during one class.

The document of the Congregation for Catholic Education "Educating today and tomorrow: a renewing passion" criticizes "teaching that only promotes repetitive learning" and proposes that Catholic schools should deliver "learning through research and problem-solving" as it "develops different and more significant cognitive and mental abilities, whereby students do more than just receiving information, while also stimulating teamwork" (2014, par. II, 3).

Moreover, the same document states that "education is based on participation, shared intelligence and intelligence interdependence; dialogue, self-giving, example, cooperation and reciprocity are also equally important elements" (2014, par. III).

These proposals look important in a context where "there is significant use of oral drilling and choral repetition led by teachers – rote learning" (EU et al., 2015, p. 220).

Still another indicator that would have improved the assessment of the teaching processes would have been to verify if there were lesson planning notebooks, to revise them and to verify through direct observation if they correspond with actual teaching.

It can be verified if they contain any description of what the students would actually be asked to do or they just contain a summary of the contents of the text book (EU et al., 2015, p. 220).

School development staff should lead them to have “control over instructional decisions” which is one of the six main characteristics of the Efficient Schools movement model (Martín-Moreno Cerrillo, 2007, p. 126). This factor leads us again to sub-criterion 3c (Staff commitment and involvement) and to criterion 2 (Planning and Strategy) that revealed a certain weakness in these schools and a top-bottom approach in their making decision process.

#### **4.7.6 Acquisition of Basic Skills and Frequent Assessment of Pupil Progress**

A fourth factor of quality according the research of the Efficient Schools movement is the “emphases on the acquisition of basic skills” (Martín-Moreno Cerrillo, 2007, p. 126; Scheerer, 2004, p. 8). This factor has to do with two criteria of the model of this research: processes and key results. The results of Primary School General Certificate could be an indicator to assess this factor but it is not enough.

The early Effective Schools research includes “frequent assessment of pupil progress” (Scheerer, 2004, p. 8) as a factor of quality. Also the research of Lako underlined the importance of this factor for the schools of Khartoum State (2010, p. 60). The assessment of students’ progress is considered in the sub-criterion 5a of the model of this research. This, in fact, is one of the strong points of Comboni Schools.

#### **4.7.7 School Environment**

A fifth criterion of quality according to both the early and the most recent research of the Efficient Schools Movement is “an orderly and secure environment” (Scheerer, 2004, p. 8). This factor can be related to the management of resources in the

EFQM Model (criterion 4), especially with sub-criterion 4c (Material Resources, Premises and Equipment Management).

The research of the efficient schools movement in developing countries showed that the quality of the facilities had significant positive association with achievement (in 6 out of 8 studies, Table II-3).

The research of Fawzia Taha Mahdi (2006) in Basic Schools of Khartoum State also concluded in a similar way. The local inspectors and the headmasters underlined the overcrowding in the classrooms among the main factors that have a negative impact on the results of the students along with problems related to school environment like the lack of furniture.

The research of Martin Lako (2010) also identified physical facilities and the safety, cleanness and good maintenance of premises as fundamental factors of quality according to the 94 students, 30 teachers and three head teachers who filled his questionnaires.

Another significant material resource is the textbooks. According to the studies collected by Fuller & Clarke (1994) reported on Table II-3, their availability is a significant input variable in 19 out of 26 studies.

A study conducted in 2008 based on visits to seventy-one government basic schools in seven states documents significant differences in textbook availability across states and urban and rural areas (EU et al., 2008). In 2012, at primary level there were three pupils per mathematics and reading textbook (UIS, 2017), whereas the official policy on the student–textbook ratio is 2:1 (FMoGE, 2008) (Unesco, 2018, p. 50).

This research could be enriched with questions like: student-textbook ratio, student-notebook-ratio, student-desk ratio and chalkboard-classroom-ratio.

Still inside sub-criterion 4c, the management of material resources, premises and equipment, the information could have been enriched by adding questions on the conditions of toilets or latrines, electricity, drinkable water and classrooms (fans, blackboards, cleaning...); the presence of other visual or learning aids in addition to the

blackboard or the multimedia projector (wall posters for instance); or the number of students per desk.

#### **4.7.8 Society Results**

This quality criterion assesses if the school results meet the needs and expectations of relevant stakeholders in society. The assessment of the three sub-criteria (image, social responsibility and sustainability) is left to self-perception and there is a lack of objective indicators to verify that perception.

Some schools in other countries are already incorporating experiences of service among the students (for instance in the field of alphabetization...) as part of their curriculum, which creates links with the community where the school is inserted. Students “have the opportunity to experience how important what they learn is for their lives and their communities” (Congregation for Catholic Education, 2014, par. III, 1.h). In this way their motivation does change and schools may become agents of community transformation.

### **4.8 Discussion of the Research Methodology and Self-Assessment Model**

This section is divided into two parts. The first one has to do with the research questions that were the starting point of the study and the second one proposes new items to improve the future application of the self-assessment tool.

### 4.8.1 Revisiting the Research Questions

In this section, we discuss if the research methodology and self-assessment model did help answer the research questions.

#### **Main Research Question**

The main question was: “How can the EFQM Excellence Model be effectively implemented in Comboni Primary schools located at Khartoum State?”

The EFQM Excellence Model was in fact adapted and applied to the three schools of the sample and their quality teams were able to produce their improvement plans.

The members of the quality team found the process helpful (Table IV-197) because they think that the model can lead them to “improvement of processes and outputs (or quality in general)” (Table IV-198). They also expressed their readiness to repeat the process after one year (Table IV-201).

As for the difficulties that the team members found (Table IV-196) is necessary to mention the complexity of the “assessment procedures and the way of drawing final results” (five persons) and the access to the necessary data to answer “questions related to financial issues” (3 members).

#### **First Secondary Research Question**

The first secondary question was “what are the particular characteristics of quality for a Comboni Primary School?”

Among the particular characteristics of these schools we find the stress on continuous evaluation of the students through periodical tests in addition to the final exams.

Another characteristic of these schools is the diversity of their staff and students. Diversity is considered a value. In a context dominated by Arab culture and Islamic religion:

instead of following approaches like relativism or assimilation to face the reality of pluralism, church schools adhere to the intercultural approach which aims at realizing an integration of cultures in mutual recognition (Congregation for Catholic Education, 2013, n. 28).

Another characteristic is a greater care for the quality of the premises and material resources in relation to government schools.

Their teaching staff is faithful to the preparation of students' homework. At School 1 teachers ask for homework once a week while at Schools 2 and 3 they ask even daily.

As for the preservice training of the teaching staff of these schools, this one is better than the average one in government schools. For instance, School 1 has 35 out of 39 teachers (89%) who are Bachelor's Degree holders. School 2 has nine out sixteen teachers with a Bachelor's Degree and one, the Headmaster, with a Master's Degree.

Extra-curricular activities have been important in the tradition of Comboni Schools, in particular sports as a way of implementing the holistic character of education that also includes the physical development (Puttinato, 1995, p. 21). In this self-assessment, sports did not appear as part of the school activities.

### **Second Secondary Research Question**

The second secondary question was: "How can the EFQM Excellence Model help the school to know itself better?"

When the school administrations were invited to describe themselves in the above mentioned Seminar previous to this self-assessment, they pointed out these elements (cf. Table IV-10):

Table IV-202. Self-knowledge Before this Study

<b>School</b>	<b>School Description</b>	<b>Values</b>	<b>Attitudes that represent the school culture</b>
School 1	Stable system Moderate performance Difficulty to provide the level of English expected by parents	Dedication; Self-assessment and improvement; Motivating the students; Creative and renewing; Collaborative and sociable	Abiding to school regulations, punctuality, good conduct, friendliness, mutual respect, nationalism, participation in all religious and national occasions
School 2	School in a context with few awareness of the importance of education founded by the Church to help the displaced	Respect for the work of the workers, honesty, collaboration	Discipline Presence of dustbins
School 3	Catholic church School with all the school years with diversity of religious communities (Christian and Muslim)	Religious and cultural values	Honesty; Moral; Mutual respect

As for school descriptions, it is worth mentioning that some of the characteristics that have been pointed in the theoretical framework for these schools appear here: the importance given to diversity (School 3) and their Catholic identity (Schools 2 and 3).

The headmasters were also invited to define the administrative style and scale it from 1 (collegial style) to 7 (managerial style):

Table IV-203. Administrative Style

<b>School</b>	<b>Administrative Style (1 to 7)</b>	<b>Values shared by</b>
School 1	6	Part of the staff
School 2	-	Teachers
School 3	1	All

If we compared this information with that provided by the Self-Assessment process with the EFQM Model, it becomes clear that the latter one provided a more complete framework to inquire in the different dimensions of the school life and to unveil weak points that had not been identified in previous self-assessments.

### **Third Secondary Research Question**

In relation to the third secondary question, “how can the EFQM Excellence Model help the school to produce its Improvement Plan?” the tool did really lead to produce an improvement plan in an articulated way.

And surely it also improved the quality of the self-assessment that is the first step to produce a good improvement plan. This statement looks clear when we bring together the data from Table IV-7 and Table IV-9 where every school was invited to describe its previous way of self-assessment:

Table IV-204. Description of Previous Process of Self-Assessment

<b>School</b>	<b>Description of previous process of self-assessment</b>	<b>Previous knowledge on EFQM</b>
School 1	Random and with conventional and outdated methods	No
School 2	1. Exams; 2. Analysis of the results; 3. Evaluation of the work the groups to know the extent of implementation of the planned programs	Yes
School 3	Students' marks, the budget, positive and negative points, setting solutions	No

The Improvement Plans produced after the assessment with the EFQM Excellence Model were based upon a larger concept of quality and a better knowledge of themselves. The self-assessment process helped the members of the quality teams to think of aspects of school life never considered before.

The schools headmasters were invited to list the characteristics of quality in the Seminar with fourteen school administrations previous to this study (cf. Table IV-10):

Table IV-205. Previous Understanding of Quality

School	Characteristics of Quality mentioned before going through Self-Assessment Process
School 1	Well organized; Trained teachers; Disciplined students; Systematic evaluation of performance; Authentic reports; Clear policies and procedures; Good teaching and learning environment; Continuous updating of the school system
School 2	Strong direction; Nice and civilized educational environment; Availability of technological tools; Continuous success; Discipline; Competence of the teachers
School 3	Well defined mission, vision and strategy; ability to implement projects

In that seminar, School 2 was one of the two with a broader concept of self-assessment, even if much more limited than the provided by the EFQM Model. The headmasters of the other twelve schools had a quite limited understanding and a lack of methodology.

The same School 2 headmaster had been the only one able to provide a good definition of the EFQM Excellence Model: “It is a process that aims at pursuing excellence through a systematic method and good administration”.

The different aspects of the previous understanding of quality for the three teams of the sample can be classified according to the nine criteria of the EFQM Model:

Table IV-206. Previous Concept of Quality in relation to EFQM Model

<b>Criterion</b>	<b>School 1</b>	<b>School 2</b>	<b>School 3</b>
Leadership		Strong direction	
Planning and strategy	Clear policies and strategies Continuous updating of the school system	Continuous success	Well defined mission, vision and strategy; ability to implement projects
People (workers)	Trained teachers	Discipline Competence of teachers	
Partnerships and resources		Availability of technological tools	
Operations	Well organized Systematic evaluation of performance Good teaching and learning environment	Nice and civilized educational environment	
Workers results		Discipline	
Clients results	Disciplined students	Discipline	
Society results			
Key results	Authentic reports		

This table helps understanding the limits of the previous concept of quality in relation to the more holistic vision proposed by the EFQM Model.

In this way we can also see that School 2 focused its attention on the strategic planning of the school: mission, vision, strategy and implementation (criterion 2 of the EFQM Model).

Schools 1 and 3 presented a quite holistic vision of quality but certainly narrower than the proposed by the EFQM Model.

#### **Fourth Secondary Research Question**

As for the last secondary question, “which variables explain the different quality between the schools of the sample?” we can mention the following ones:

- Pre-service teachers training: Table IV-192 and Table IV-193 reveal that the percentage of teachers who hold a university degree correlates with the self-assessment with the EFQM Excellence Model (0.66) while the correlation for the percentage of teachers who hold a university degree related to the subject they teach is 0.60.
- In-service staff training: from Table IV-189 it is possible to state that there is a perfect correlation between the amount of training activities and the score after the self-assessment with the EFQM Excellence Model.
- Average salary: Table IV-191 shows a very high positive correlation between the average salary, which is a sign of the school financial resources, and the score after the self-assessment with the EFQM Excellence Model (0.98).
- Number of students: in Table IV-193 it is possible to see that the correlation between the number of students of the school and EFQM Excellence Model score is 0.71. Certainly the greater the number of students the greater the school income is and therefore the school can enjoy more resources. Nonetheless, School 3, with fewer students than School 2, has better results in the self-assessment (Table IV-192).

#### 4.8.2 Improving the Self-Assessment Tool

The analysis of the data collected during the application of the self-assessment tool and their comparison with the data coming from other reports (EU et al., 2015; Unesco, 2018; World Bank, 2012), lead to the enrichment of that tool with other questions. Moreover, the application of the Wilcoxon Signed Ranks Test showed that the addition of few questions or indicators to contrast the answers of the quality teams did not produce a statistically meaningful difference in the criteria scores. There would be need of increasing the number of these questions to verify if there would be a meaning difference.

In this section, the researcher proposes a list of questions that would help the contextualization of the self-assessment tool and its improvement for future applications.

It is also worth mentioning that the 2020 EFQM Model will gradually substitute the 2013 EFQM Model used for this research. Therefore, future applications of the model will benefit from this experience, but should be adapted to the new version of the model.

As for the process of self-assessment, if the school did not have any previous background in the EFQM Model, there would be need of a slower pace with “more days in order to open space for discussion” (Transcript A, par. 22).

#### **Sub-criterion 3b. Competence Development of Staff**

Question 3 would be better reformulated as follows:

3b3. What is the number of full time teachers in every range of years of experience?

- a.  $5 \leq$ ;
- b.  $\geq 6 \leq 10$ ;
- c.  $\geq 11 \leq 20$ ;
- d.  $\geq 20$ ;

After questions 1, 2 and 3, the questionnaire should add the following questions:

3b4. What was the number of internal workshops organized by the school for the staff professional development during the last school year?

3b5. What was the number of training activities of the staff to which the school sent its staff:

- a. Number of Workshops:
- b. Number of Courses:
- c. University degree (No. of staff members):

#### **Sub-criterion 4c. Material Resources Premises and Equipment Management**

After questions 1 and 2, the questionnaire should better include the following questions:

4c.3 Does every student have his/her personal textbook?

- a. Yes \_
- b. No \_
- c. NR/DK \_

4c.4 In case of negative answer, how many students have to share the same book?

4c.5 Does every student have his/her personal notebook?

- a. Yes \_
- b. No \_
- c. NR/DK \_

4c.6 In case of negative answer, how many students have their personal notebook?

4c.7 Does every student have a desk?

- a. Yes \_
- b. No \_
- c. NR/DK \_

4c.8 In case of negative answer, how many students have to share a desk that is supposed to be for one person?

4c.9 In some schools students have to sit on the floor. In this school, does every student have a chair?

a. Yes \_ b. No \_ c. NR/DK \_

4c.10 In case of negative answer, how many students do not have a chair or bench to sit?

4c.11 How is the provision of drinkable water in the school?

- a. There is a piped supply of water.
- b. The school buys water from providers and stores it in a water tank.
- c. There is not water at the schools. The students should buy mineral water and bring it with them.

4c.12 How many toilets are perfectly working at this moment at the school?

4c.13 What is the number of students per working toilet?

4c.14 Is the school connected to the government electrical network?

a. Yes \_ b. No \_ c. NR/DK \_

4c.15 Does the school have an electrical generator?

a. Yes \_ b. No \_ c. NR/DK \_

4c.16 How many fans per student are there in the school working at this moment?

4c.17 Does the school have a library?

**Sub-criterion 5a. Well-designed Processes.**

After questions 1 and 2, the following could be added:

The quality team will appoint an observer, or more than one, different from the teacher who is teaching. This/these observer(s) will attend a lesson from every teacher of the school and answer the following questions:

*Classroom management*

5a.3. What is the percentage of:

- a. Teacher-centred lessons:
- b. Child-centred lessons:

5a.4. In how many lessons did the respective teacher used group teaching methods?

5a.5 What is the percentage of students who are able to participate fully in the lessons, to contribute and to receive feedback from the teacher during one class (choral answers to teachers 'questions are not considered)?

5a.6 What is the percentage of lessons where the interaction between children is encouraged or required e.g. through pair and/or group work?

5a.7 Does the teacher know and use the students' names?

5a.8 In which percentage of lessons do more able children get extra exercises, material or activities?

5a.9 Who is working the most in the lesson, the teacher or the children?

5a.10 Does the teacher monitor the children while they are doing individual work and provide additional support for less able children?

*Lesson planning*

5a.11 How many teachers had a written lesson planning? And how many did not have it?

5a.12 In how many cases, does the written lesson planning correspond with actual teaching? In how many cases, the written lesson planning did not correspond with actual teaching?

5a.13 In how many cases does the lesson planning contain:

- a. any description of what the students would actually be asked to do: \_\_\_
- b. a mere summary of the contents of the text book: \_\_\_

*School management*

5a. 14 Is there a written protocol that describes how to deal with students absence? In positive case, attach the document.

5a. 15 Is there a written protocol that describes how to deal with students delay? In positive case, attach the document.

5a.16 Does the school have extra-curricular activities? How many?

**Sub-criterion 7a. Staff satisfaction.**

After question 1, the following questions could be added:

7a.2 What is the average number of lost periods per week due to teachers absence?

7a.3 How many teachers left the school for another job last year?

**Sub-criterion 7b. Staff performance.**

After question 1, the following questions could be added:

7b.2 The quality team will appoint an observer, or more than one, different from the teacher who is teaching. This/these observer(s) will review the corrections of the homework made every teacher. How many teachers:

- a. limited themselves to acknowledge that something written on the blackboard was copied properly?
- b. used codes or abbreviations to indicate different types of errors were seen?
- c. Just marked if the exercise was wrong or right?

7b.3 How many teachers covered the whole of the syllabus?

**Sub-criterion 8b. Social responsibility.**

The following questions could be added before the self-assessment Lickert scale on the social responsibility level:

8b1. Does the school render any service to the community in addition to the education of the students?

a. Yes. b. No.

8b.2 List those services:

**Sub-criterion 9b. Academic Performance.**

After question 1, the following question could be added:

9b.2 What is the percentage of repeaters in every year?

## CHAPTER V. CONCLUSIONS AND RECOMMENDATIONS

### 5.1 Introduction

This final chapter summarizes the conclusions and recommendations for every school and for further research.

### 5.2 Conclusions and Recommendations for School 1

According to the Self-Assessment of the criterion “Leadership”, the employees of this school are able to explain the vision and mission based upon what they see and live, but there is no a well-known written statement that defines them. In fact, the Improvement Plan prepared by the Quality Team includes the elaboration of such a text based upon the fact of having qualified it as the sub-criteria with most urgent need of improvement and most easily available resources.

Being this a positive step to improve the quality of the school, it would not be enough if it was not accompanied by a communication plan.

As for the second quality criterion, Strategy and Planning, the School has a strong Catholic identity. Nonetheless, they lack of a strategic plan. In fact, this one has been identified by the Quality Team as second area of improvement and second one in urgency. Given the availability of resources to implement it (second place), it was included in the Improvement Plan.

The chosen approach to compose this Strategic Plan is a top-bottom one that starts from the Principal. There is the consideration of a process that would start during the ongoing academic year and would conclude in the following one. The administrative style of this school was self-assessed close to managerial (6 over 7), but it would be important that this process involves parents, staff and even students.

Linked to this strategic Planning, the Quality Team identified the need of elaborating a continuous improvement and self-assessment plan. The chosen approach is also top-bottom and starts from the school administration. This aspect was identified as one with a great impact on the key results. Even though, it was considered the seventh one in the order of availability of resources. It was included as third area for improvement.

As it was suggested in relation to the strategic plan, this self-assessment process could also include parents and students. The consideration of parents' and students' needs and expectations, in fact, appears as a weak point of the school.

As for the third quality criterion, the management of personnel, the school looks strong. The form that the school uses for the selection of new teaching staff is a sign of care for the issue.

It is also worth mentioning the high percentage of teachers who are holders of a Bachelor's Degree (89%).

A weak point that was not considered among the sub-criteria more in need of improvement is the competence development of staff. According to the researcher, this aspect should be included in the strategic plan of the school.

As for the fourth criterion of quality, School 1 looks strong in the management of material resources, premises and equipment and weak in the management of technology. This aspect is considered as the second weakest sub-criterion with a greater impact on the key results of the school. Nonetheless, the problem to improve it is the availability of resources. In fact, this sub-criterion is located in the last position, the eighth, among the selected sub-criteria. In spite of this, and considering the above mentioned impact, the Quality Team decided to include it in the Improvement Plan. They propose to create a computer lab next academic year and to provide a computer

for the teachers. They would visit the computer lab of Comboni College of Science and Technology in order to have a point of reference.

The introduction of computers in the schools is a great challenge. The institutions where many Primary School students will end up working one day (banks, hospitals, universities, telecommunications companies..) use computers. The issue is not easy at all as in addition to the financial implications of introducing computers, there is the fact that most teachers are not used to work with them.

As for the fifth criterion of quality (processes, products and services), School 1 looks strong in the design of the evaluation processes of students. They do it through periodical assignments and tests. The school is also strong in the administrative and financial management. Instead, the school is weak concerning the responsiveness of these processes according to students and parents needs and expectations. This fact is related with the self-assessment of the school concerning leadership, where they recognize to be weak in the relation with the parents (sub-criterion 1c) and is also related to the lack of consideration of parents' satisfaction (criterion 2b).

As for the results of students and parents, it is worth mentioning the continuity of students in the school and the low number of complaints as signs of customer satisfaction.

As for key results, the team preferred to focus on data rather than on the identification of their performance level according to the scale proposed by the researcher.

Among the key results, it is worth mentioning the fact that the school collects 96.18% of the fees, which is a very high percentage in the Sudanese context.

In a country with a very high dropout rate, as already mentioned, the fact that just five students left the school before the end of the year is a very outstanding indicator.

The number of students who did not register for the following year, 70, considering that the total number of students is about 1,185, is quite low (0.06%). Instead, the percentage of students who did not pass the General Primary School

Certificate in 2018 looks quite high (15%). The Principal was asked about that and he explained that some South Sudanese students with a very low academic background entered the school coming from the South in the middle of the school journey and sat for that exam without having the necessary minimum level. According to him, they should have been deviated towards the Evening School (Transcript E, par. 1). In fact, the General Primary School Certificate results improved meaningfully in 2019 after having cared for this aspect.

The Principal was asked about the possibility of having a preparation camp before the GPSC as the other two schools did. The problem for the school is that Sudanese students have the financial capacity to pay private lessons and therefore they prefer to prepare the exam at home. As for South Sudanese students, they cannot pay neither private lessons nor the fees to make a preparation camp self-reliant (Transcript E, par. 4).

The analysis of the General Primary School Certificate results of the last three years shows that Sudanese perform better than South Sudanese students, which may demand special attention to this group.

It is also important to underline that students of the Arabic stream perform better than students of the English stream.

As for the number of Christian celebrations with Catholic students, School 1 is particularly strong. It is the only Catholic School where Catholic students can pray the Mass in the school chapel every week. This fact is important for Christian students and staff in a school with a high percentage of Muslim students (802 out of 1,185).

There is also a care for Christian students and about 20 receive catechism and Sacraments of Christian Initiation inside or through the school.

### 5.3 Conclusions and Recommendations for School 2

The Quality Team of School 2 chose the sub-criterion 1a, the development of mission and vision, as the first one for their Improvement Plan like School 1 also did. The Quality Team had stated that the employees were able to explain the vision and mission but in fact there was no any written document with the statement of mission, vision and values. Therefore they identified this aspect as the most urgent, the most important and the one with more available resources to improve it.

The team was invited to write the necessary actions to improve this area. There is a certain difficulty to define the “how”. The described action is “to make people understand the mission and the vision”, which is not a clear action.

The second area for improvement identified by the Quality Team is the sub-criterion 1b, Continuous Improvement of Management Systems. The team stated that there were self-assessment periods and procedures in view of producing an improvement plan. Nonetheless, this area was identified as the second one in order of importance and in order of impact on the key results of the school.

The designed action to improve this area is presented in terms of awareness rather than in practical ones that could lead to revision and requalification of the management systems that boost continuous improvement.

The Quality Team identified another sub-criterion for their Improvement Plan among those related to leadership, the 1d: Leadership and Motivation. The proposed action (“to encourage morally and materially”) reflects a desire but does not look a well-defined process easy to apply. In fact, this area had been considered in the seventh position out of eight as for the availability of resources to improve it.

The team had chosen one sub-criterion related to leadership as needed of improvement. But then it was not included in the Improvement Plan: “leadership and external relations (1c)”. It was considered non urgent (seventh position) nor meaningful for the key results of the school (eighth and last position).

As for the second quality criterion, planning and strategy, the results of the self-assessment identify the “implementation of policies and strategy and updating the strategic plan” (2d) as a strong point of the school. At the same time, the school does not have a strategic plan. Nonetheless, the team preferred to improve the Catholic identity of the school (2e) through teaching “Catholic doctrine and symbols and catechism”.

In the same line, two sub-criteria of the second quality criterion were identified as weak but they were not included in the Improvement Plan: “performance indicator input to strategic plan” (2b) and “designing, communication and validating strategic plan” (2c). This decision was taken like this even if they were considered the second and the third most urgent areas in need of improvement and in terms of availability of resources. Instead their impact on key results was not so meaningful for the team (sixth and seventh position).

As for the need of teaching “Catholic doctrine and symbols and catechism”, there would be need to define how to organize this teaching.

Like School 1, School 2 is strong as for human resources management (criterion 3) is concerned. It is instead weak in the competence development of staff. Nonetheless, the team did not focus on this aspect.

In relation to criterion 4, partnerships and material resources management, the school is weak as far as technology management is concerned and in fact they identified this area as the third one with a greater impact on the key results of the school. The problem to improve this aspect is the availability of resources. Nevertheless they include it in their Improvement Plan, which implies the purchase of computers and other “modern materials”. It is not specified how the school will get the necessary funds to buy these items.

As for the involvement of parents, other experiences of government schools of South Kordofan, from where most of the students come, look contradictory. On the one hand, parents do not feel the need of being involved in the school governance. “Some believe that it is not their responsibility to support schools but mostly they felt that they

had little experience and skills to contribute” (EU et al., 2015, p. 326). But at the same time, the same study states that in some places:

local communities and parents in the communities visited are increasingly playing a role in educational finance especially with regard to operational cost for electricity, water, teacher support (breakfast and/or transport), for extra-curricular activities and for the support to voluntary teachers. In addition they make efforts to support the maintenance, rehabilitation and school construction (EU et al., 2015, p. 327).

This experience could encourage this school and School 3 that have fewer resources than School 1 and have so many students from that geographic area. The development of the “relationship between the community and the school” is always a challenge for any school in Sudan (EU et al., 2015, p. 328).

In relation to school results, it is worth mentioning that the continuity of students and the lack of complaints are a sign of the good performance of customers’ results. Something similar can be said about staff satisfaction and the commitment of the teaching staff with the homework.

As for the key results, the school has an intermediate self-perception. They did not provide objective data or documents to support their views as School 1 did. This school is the weakest one as for key results concerns.

Their Improvement Plan shows certain difficulty to be concrete and realistic in the design of actions that may lead to improve the areas that need it.

#### **5.4 Conclusions and Recommendations for School 3**

In relation to the first criterion, leadership, two members of the Quality Team stated that the school had a document that defined its mission, vision and mission. Instead it was verified that there was no such a document. In fact, the team chose the

preparation of this document as one of the points for their Improvement Plan. Therefore, the two members of the team that considered the school at the level of “Process Awakening” look the most realistic ones.

The quality Team also identified “Leadership and external relations (1c)” as sub-criterion where there is need of improvement. This point was also included in their Improvement Plan. In this case, the chosen actions for the improvement of the situation look too generic and therefore not easy to implement unless further concretizations and operational strategies are defined. The useful point is the list of possible partners: transport companies, Italian Agency for Development Cooperation, school buffet company, municipality, parents, other schools and the Popular Committee.

The Quality Team also identified the sub-criterion “Leadership and motivation” as a weak one and was included in the Improvement Plan, even if it was considered the sixth one in the order availability of resources. Two sources of motivation were identified: staff professional development and financial compensation. The challenge that the team did not face was the concrete way of developing these two items considering also the financial implications.

Some nonfinancial incentives that can increase the motivation are the improvement of the teachers standing in the local community, a good work environment and student/parent appreciation (World Bank, 2012, pp. 154-155).

The need of improving the school planning and strategy was considered the most urgent and important criterion in need of improvement.

The team did not write the promotion of continuous development as a strong point on their analysis of strengths and weak points (Table IV-186), but they considered it like this in their self-assessment. In the interview with the Quality Team Director, he appreciated this aspect as he sees that the school is in continuous growth (Transcript D, par. 1).

The criterion that was considered more in need of improvement, both in terms of importance and in terms of urgency, was the planning and strategy of the school in general terms. The Project Manager commented that they usually think in the short term and they needed to enlarge horizons (Transcript D, par. 2). Therefore, the team included

the definition of the school vision, mission and goals in their Improvement Plan. In this sense, the Team identified two sub-criteria among the weak points: “Performance indicator input to strategic planning” (2b) and “designing, communicating and validating the strategic planning” (2c).

It is also worth mentioning that while two members of the Quality Team affirmed that the school had a document that defined its mission, vision and values (Question 1 inside sub-criterion 1a), in the first question of the sub-criterion 2c, just one member stated that the school had a Strategic Plan that in addition to its mission, vision and values, defines some priorities or goals to be realized in the coming years and the strategies to achieve them. Moreover, no member of the team dared to define the level of the School in relation to this sub-criterion. Similarly, four out of five members of the team did not express themselves concerning the implementation of policies and strategies and updating the strategic plan.

From the questionnaire as filled by the Quality Team, Catholic identity looks a strong point of the school. Nonetheless, the researcher could verify in his visit to the school that there is no any picture of the current Pope or Archbishop displayed and visible (question 10, sub-criterion 2e) and that there are no Christian symbols visible in the school (question 4, sub-criterion 2e).

As for the third quality criterion, “Persons”, the Quality Team considered that “competence development of the staff” (3b) was one of their strengths. Nonetheless, the school did not organize any internal workshop (Table IV-70). Instead they sent the headmaster to a workshop organized by the Education Office of the Archdiocese, five teachers to another one organized by the Education Office and three to complete the Diploma in Teaching Techniques and Methods offered by Comboni College of Science and Technology as continuous education course for teachers approved by the Ministry of Higher Education and Scientific Research. These facts have created the self-perception of being strong in this regard.

As for the fourth criterion, partnerships and resources, the team considered “External partnerships management” (4a) as a strong point, which looks contradictory with the fact of having considered “Leadership and external relations” (1c) as a weak point. From the interviews with the Parish Priest and the Parish Education Supervisor,

the researcher came to know that the School is receiving support from the Italian Agency for Cooperation Development to have a daily lunch for the students (Transcript C, par. 3) and has an agreement with a transport company that organizes the transport of the students (Transcript B, par. 3). During the respective workshop, the Quality Team had not been able of mentioning these two partnerships.

The team considered “Material resources, premises and equipment management” (4c) and “Technology management” (4d) as weak points. The first one was included in the Improvement Plan while the second one was not included as it was considered the last one in the order of urgency, importance and availability of resources.

The School declared not to have a person in charge of the maintenance. During the preparation of the Improvement Plan, the Headmaster and his Deputy were appointed for such purpose.

The results also show that the School is weak as for “Information and knowledge management” (4e) is concerned. Nonetheless, the Team did not give importance to this weak point.

As for the fifth criterion, “Processes, products and services”, the team considered that the school is strong in the definition of processes (5a) and in the management of process that lead to continuous improvement (5b). Nonetheless, it is necessary to mention that the team unanimously considered that the administrative and financial management depended solely on the individual.

As for criterion sixth, students and parents results, the team considered “Indicators performance” (6b) as a strength based upon the students’ continuity in the school in a country with a very high drop-out rate and upon the absence of complaints.

Like “Personnel results” (criterion 7), the team also considered “Staff performance” (sub-criterion 7b) as a strong point. The team stated that teachers were committed with the homework.

Concerning “Society results” (criterion 8), the team considered “Image” (sub-criterion 8a) and “Sustainability” (sub-criterion 8c) as strong points of the schools. This assessment is based upon self-perception as there were no objective indicators. But it is

objective the fact that the school got very good results in the General Primary School Certificate which surely creates a positive image of the school. Moreover, the location of the school in a peripheral area populated by displaced populations is a sign of its social responsibility. Nonetheless, the team considered their image at the level of “Process Awakening”.

The team considered instead that the financial performance is weak. The self-assessment of “Percentage of school fees collected” (sub-criterion 9a) was the lowest one: results are not measured and/or no information is available. In fact, in 2016/2017 they just collected 61% of the school fees and 52.1% in 2017/2018. Nevertheless, the total collected amount was bigger than last year. It is worth mentioning that the area is quite poor and many families are displaced. This weak point was considered the third one in the order of urgency and importance and the first one according to the availability of resources. Being so, the team included it in the first place in the Improvement Plan. With that purpose, the team decided to increase the academic fees, to test a new way of distributing the payments in instalments and to set a collection committee to follow up the issue with the goal of reaching 70% of the total amount.

In the interview with the Parish Priest, the researcher came to know that the School covers the deficit with the surplus of another Parish School (Transcript C, par. 4). In that one, according to this interview, there is a better follow up from the school administration on the fees collection with a more direct contact with the parents.

The expenditure per students diminished from 1,910 SDG to 1,613 SDG. The presented reason is the increase in the number of students (Transcript B, par. 4). Nonetheless, the school had 221 students on 25-10-2017 according to the Diocesan Office and 185 according to the data presented on 26-04-2018 by the school administration.

As for the academic results, the most remarkable one is the success in the Primary School General Certificate. In 2018 nobody failed while in 2017, 56% of the students had done it. According to the information provided by the Parish Schools Supervisor, the students who sat for the exam in 2017 were 21 and the students who sat in 2018 were 16 (Transcript B, par. 1). In the view of the Parish Priest, the factor that caused this improvement in the performance was the one month camp organized by the

Parish in which a daily breakfast was offered to the students (Transcript C, par. 5). It is also worth underlining that the small number of students facilitates a more personalized follow-up.

As for strategic results, the team has a high self-perception concerning the number of celebrations with Catholic students. Nevertheless, the Parish Priest commented in the interview that there are a 75% of Christian students, but they come from different churches and not just from the Catholic one. This fact conditions the celebration of kinds of prayer like the Mass that are particular to Catholics (Transcript c, par. 6).

## **5.5 Limitations and Recommendations for Further Research**

In this section we list some limitations of this research and some recommendations for further research.

### **5.5.1 Sample Size and Data Availability**

The number of studied schools was just three, which is coherent with the case study methodology. Nonetheless, in some questions it would have more enriching to have data from a bigger number of Comboni schools even if it is always a great challenge to get data from any school.

This difficulty have to do with different factors: mistrust towards the motivations behind any external person who asks for information; lack of training to collect concrete data and facts; and a mentality that tends to answer to questions according to the way things should be rather than according to the objective reality.

It is also difficult to get updated data from government institutions for comparison.

For instance, the official website of the Central Bureau of Statistics cannot be opened properly and technical problems occur when accessing data. Another website called *Knoema* has data from official sources; however, the most recent data are from 2009, which are presented in a table format that cannot be easily used.

According to the World Bank's DataBank, whose data are originally drawn from UNESCO/UIS, there are essential education indicators available from 2013, including 1) government expenditure on education as a percentage of GDP, 2) gross enrolment ratios, 3) the gender parity index, 4) net enrolment rates, 5) primary completion rates, and 6) out-of-school children. However, more disaggregated and micro-level data, which could explain details about classifications by state, sex, age, locations and socio-economic status, are not available (World Bank, 2017; quoted by Unesco, 2018, p. 129).

A further research could include government and international schools present in Khartoum State. Benchmarking could also be established with Comboni Schools present in other states.

### **5.5.2 Strange Variables**

The analysis of the results in the GPSC exams showed that the variables nationality (Sudanese or South Sudanese) and stream for the case of school 1 (Arabic or English) are statistically meaningful. Comboni schools usually have a greater percentage of South Sudanese students than government or other private schools.

Any further study or comparison should consider this fact.

### **5.5.3 Full School Involvement**

The researcher worked with the quality teams of the three schools. Therefore, not all the school staff was directly involved in the process, which is something

important when applying the EFQM Model. In this sense, this research should be a starting point for a more comprehensive and contextualized application of the model to the whole of the school. In fact, once the tool was tested and modified as a result of this research, the model could be better applied to primary schools.

#### 5.5.4 School Curriculum

One fundamental factor for quality education is the curriculum. But since this element is outside schools' control, it has not been dealt with in this research.

We just notice here that some criticism to the current curriculum comes from the rural Sudan where it is felt that “religious, technical and life skills education should complement the academic subjects to create individuals who can contribute professionally/technically to improved family and community lives” (EU et al., 2015, p. 392).

Many communities of the peripheries of the country instead complaint about the impossibility of having their children educated during the first years in their mother language when this is other than Arabic. Moreover:

it is internationally recognised that education systems that cater for or accommodate the child's home language in the early years tend to have better outcomes than school systems which insist on use of the official language from the start (EU et al., 2015, p. 237).

Another source of criticism comes from secularist and non-Muslim groups that criticize the presence of religion in every subject of the syllabus.

The only way the school could face this challenges was with extra-curricular activities that may demand extraordinary funding that could be collected from the community if those activities were really important for them.

The Ministry of General Education of the Transitional Government has prepared a new education system that includes new curricula. The new text books were gradually introduced from the end of 2020.

### **5.5.5 History of Comboni Schools in Sudan**

There is no any published history of Comboni Schools in Sudan. This history was not the object of this research, but it was convenient to consider it in the literature review in order to identify the characteristics of these schools. Quality is not an abstract concept but has to do with the identity, mission and vision of the assessed institution. Therefore, the historical journey was necessary for the contextualization of the assessment model.

In doing this revision, the author used some primary sources never published. Therefore the summarized history of these schools that forms part of this thesis could be the starting point for further research.

### **5.5.6 The 2020 EFQM Model**

When this research started the version of the EFQM Model in force was the 2013. On October 23-24, 2019 the EFQM presented the 2020 version of the Model during a Forum held in Helsinki.

The new version takes inspiration from the three rings of the “Golden Circle” of Simon Sinek (2009): Why, How, What. The nine criteria become seven and instead of being divided into enablers (what the organization does) and results (what the organization achieves), they pass to be divided into three blocks.

The first block is related to the ring “Why” and is called “direction”. It has to do with the organization purpose, vision, values, culture and strategy.

The second block is related to the ring “How” and is called “execution”. It has to do with how the organization intends “to deliver on its purpose and its strategy” (EFQM, 2019, p. 9), how it executes through its stakeholders the creation of sustainable value and its transforming capacity.

The third block is related to the ring “what” and is called “results”. It has to do with the results the organization achieves.

Future self-assessments based upon the EFQM Model could be based upon the 2020 Model, even if rather than a simple assessment tool, the new version is “a vital framework and methodology to help with the changes, transformation, and disruption that individuals and organisations face every day” (EFQM, 2019, p. 3).

Without entering here into details, questionnaires and conclusions of this research could be adapted to the last version of the Model with the help of this table:

Table V-1. Transition from the 2013 EFQM Model to the 2020 Model (Own elaboration).

<b>Block</b>	<b>2020 EFQM Model</b>	<b>2013 EFQM Model</b>
Direction	Purpose, vision and strategy	School Strategy
Why	Organizational Culture and Leadership	School Leadership
Execution	Engaging Stakeholders	Partnerships and Resources
		School staff
How	Creating sustainable value	Society Results
	Driving performance and transformation management	Teaching, learning, assessing, orienting
Results	Stakeholders perceptions	Students and Parents Results
What	Stratetegic and Operational Performance	Personnel Results
		Key Results

## 5.6 Final Conclusions

This study has shown that the EFQM Model really offers a holistic approach to quality management and to the self-assessment of that quality applicable to Comboni Primary Schools of Khartoum State.

In the questionnaire for the selection of schools, five schools stated to have a strategic plan. Two of these schools were later selected for the case study and it was verified that they did not have it. The researcher found that members of the school administrations often answer based upon how things should be done rather than on what reality is.

For this reason, the researcher decided to add more questions to the self-assessment tool based upon the EFQM Model in order to verify the answers of the quality teams members. Nonetheless, this addition did not produce a statistically meaningful change in the criteria scores as the application of the Wilcoxon Signed Ranks Test showed.

The self-assessment tool based upon the EFQM Model was built and applied to a sample of three Comboni Schools and their quality teams were able to produce an improvement plan for the school based upon a deeper and more objective self-knowledge in relation to the previous one. This improvement could be verified by comparison with the previous information that the administrations were able to provide about their respective schools (Table IV-7 and Table IV-9).

Nevertheless, the improvement plans revealed that the members of the quality teams found it difficult to connect basic strategic goals with the necessary strategies that should be designed to achieve them.

At the end of the process, the members of the quality teams found the process helpful (Table IV-197) and expressed their readiness to repeat it after one year (Table IV-201), which would be fundamental for the full assimilation of the Model. The process also enlarged their understanding of the concept of quality (Table IV-205 and Table IV-206).

The research also showed some particular characteristics of quality of Comboni schools: the stress on continuous evaluation of the students through homework and periodical tests in addition to the final exams; their open and dynamic concept of identity that makes them welcoming to diversity; the care for quality of the premises and their Catholic identity.

Their identity, mission and contribution to education in Sudan were also deepened through a reconstruction of their history included in the literature review. This reconstruction used some primary sources in addition to secondary literature, which gives an added value to the study.

The Catholic Church opened schools in Sudan in the XIX century as alternative for the small Christian minority to the Quranic schools (*halāwī*). They were conceived as instruments for the education of local catechists and for the so called “civilization” of the continent. But from the beginning of the twentieth century, the Sudanese population searched for those schools as they represented a qualified way of achieving an integral and complete education for their children when the offer was so scarce. This mixing of Christian and Muslim students became a laboratory of interreligious tolerance and mutual understanding and esteem that has shaped Sudanese society. This dialogic relation enlarged the target and mission of these schools beyond their initial limited ones.

While in the first decades of the XX century those schools were mainly associated with the concept of quality education, from the eighties onward, the stress fell on the dimension of equity as their number multiplied to provide instruction to refugees, displaced and marginalized people of the outskirts of the main cities of Sudan.

The study also identified some variables that explain the different quality between the schools of the sample: pre-service teachers training (Table IV-192 and Table IV-193); in-service staff training (Table IV-189); average salary (Table IV-190 and Table IV-191) and number of students (Table IV-192 and Table IV-193).

The organization of camps to help finalists to prepare the GPSC exams had an extraordinary impact on the results. In one school the percentage of success in that exam

passed from 44% to 100%. In those camps the students receive a daily meal and find suitable conditions and support to prepare the exam.

This fact is an example of an element that was not present in the first version of the self-assessment questionnaire, as it came out in the interviews carried out by the researcher in order to triangulate data, and should be included in an improved version that results from this research.

Therefore, the production-function research that focuses on input characteristics makes sense in the Sudanese context as in other developing countries. The reason, as already mentioned by Scheerens may be “the larger variance in the independent as in the dependent variables” in relation to similar studies that are done in developed countries (2004, p.19). Nonetheless, this research also dealt with process variables that are usually neglected in the studies carried out in developing countries.

Social factors like nationality have also a strong impact on the results as the analysis of the General Primary School Certificate marks during the last three years showed. Sudanese (mean = 203,10) performed much better than South Sudanese students at School 1 (mean = 164,08).

Considering the difficulty for the members of the quality teams to assess a performance based upon concrete facts, which is a fundamental pillar of the EFQM Excellence Model, the researcher suggested adding a series of indicators for direct observation of complete lessons to assess the teaching methods and classroom life. This recommendation is valid to improve the self-assessment tool but also for future research.

Finally, another necessary step to make use of this research in the future will be to reshape it within the new framework of the 2020 version of the EFQM Model.

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## APPENDICES

### **Appendix 1. Letter to the Diocesan Director of Education – Archdiocese of Khartoum-Catholic Church**

Dear Director of the Education Office of the Archdiocese of Khartoum,

I am currently undertaking a PhD research under the supervision of Professor Abdel Rahman Al-Khangi at the Sudan University of Science and Technology. The research aims at elaborating a model of self-assessment to help the schools of the Archdiocese of Khartoum enter a process of continuous improvement.

The researcher has prepared a questionnaire for the schools of the Archdiocese with the aim of collecting data for the Education Office of the Archdiocese and this research. By assessing the organizational culture of the school and their suitability to be introduced into the Quality Management Model of the European Foundation for Quality Management, three schools will be chosen as pilot schools for a process that may extend to other schools of the Archdiocese in the future.

The commitment of the selected schools implies:

- the participation to a meeting with the other headmasters of the selected schools to have a deeper understanding of the Self-Assessment Model and agree on a calendar of implementation of the process;
- the readiness to have five staff members of the school (Quality Team) participating in the five workshops that will explain the model of Self-Assessment and carrying out the process in their respective school;
- the readiness to realize the mentioned Self-Assessment and evaluate the process at the end.

The researcher by his side will:

- introduce the Quality Teams to the Model of Assessment and will facilitate their work;

- collect the results;
- include these results in the research as cases 1, 2, and 3 without mentioning the name of the school, nor the names of the providers of information;
- not share the documents provided by the school with anyone and will keep in a secure place until the defence of the PhD Thesis.
- also share the conclusions of the research with the Director of the Education Office also respecting the confidentiality of the information provided.

The data collection for the self-assessment will be made up of these elements:

- Questionnaire of Self-Assessment.
- Self-Assessment matrix to summarize the data of the questionnaire.
- Documents to support the answers of the questionnaire.
- Form for the identification of Strengths and Improvement Areas in view of elaborating an Improvement Plan.
- Meta-evaluation of the Self-Assessment Process.
- Interview to the Quality Team Director appointed by the school or other key persons of the school.

Thanks a lot for your collaboration.

Fr. Jorge Naranjo

## **Appendix 2. Letter to School Headmasters**

Dear Headmaster,

I am currently undertaking a PhD research under the supervision of Professor Abdel Rahman Al-Khangy at the Sudan University of Science and Technology. The research aims at elaborating a model of self-assessment to help the schools of the Archdiocese of Khartoum enter a process of continuous improvement.

The researcher has prepared a questionnaire for the schools of the Archdiocese with the aim of collecting data for the Education Office of the Archdiocese and this research. By assessing the organizational culture of the school, three schools will be chosen as pilot schools for a process that may extend to other schools of the Archdiocese in the future.

In case of being selected, a written commitment will be proposed to your school headmaster that implies:

- the participation to a meeting with the other headmasters of the selected schools to have a deeper understanding of the Self-Assessment Model and agree on a calendar of implementation of the process;
- the readiness to have five staff members of the school (Quality Team) participating in the five workshops that will explain the model of Self-Assessment and carrying out the process in your school;
- the readiness to realize the mentioned Self-Assessment and evaluate the process at the end.

The researcher by his side will:

- introduce the Quality Teams to the Model of Assessment and will facilitate their work;
- collect the results;
- include these results in the research as cases 1, 2 and 3 without mentioning the name of the school, nor the names of the providers of information;

- not share the documents provided by the school with anyone and will keep in a secure place until the defence of the PhD Thesis.
- also share the conclusions of the research with the Director of the Education Office also respecting the confidentiality of the information provided.

The data collection for the self-assessment will be made up of these elements:

- Questionnaire of Self-Assessment.
- Self-Assessment matrix to summarize the data of the questionnaire.
- Documents to support the answers of the questionnaire.
- Form for the identification of Strengths and Improvement Areas in view of elaborating an Improvement Plan.
- Meta-evaluation of the Self-Assessment Process.
- Interview to the Quality Team Director appointed by the school and other key persons of the school if needed.

Thanks a lot for your collaboration.

Fr. Jorge Naranjo

### Appendix 3. Questionnaires for Arbitration Panel

The panel of authorities that examined the different questionnaires was formed by:

No.	Name	Position	Academic degree and specialization field
1	Prof. Abdel Rahman Abdallah Al-Khangi	Dean of Comboni College of Science and Technology (CCST)	Professor Education
2	Dr. Hassan Hamadallah	Head of Department of Education at CCST Training Director of the Ministry of General Education – Khartoum State	PhD Evaluation and Measurement
3	Dr. Fr. Norberto Stonfer	Principal of Comboni College Khartoum – Secondary School	PhD Theology (Liturgy)
4	Fr. Diego Dalle Carbonare	Director of the Diocesan Office of Catholic Schools – Khartoum Archdiocese - Principal of Comboni College Khartoum – Primary School	Master Arts School Administration (American University in Cairo)
5	Dr. Fr. Peter Basilio	Parish Priest of Banat and Umbedda (Omdurman) Coordinator for the Parish Community Schools	PhD Christian Spirituality

**Appendix 4a. Questionnaire for the Selection of the Schools (before revision by arbitration panel)**

**I- DATA ON THE SCHOOL**

Name of the School:

Contact person: \_\_\_\_\_ Phone number: \_\_\_\_\_

Date:

**1.1 Size of the school.**

- Number of students in the last academic year:
- Number of full time teachers:
- Number of part time teachers:
- Number of administrative staff:
- Number of neither non-teaching nor administrative staff (cleaners, watchman...):
- Number of classrooms:
- Number of offices:
- Ratio of students per class:
- Ratio of students per teacher:
- Last year income of the school:

**1.2 Organization of the school.**

- The School is owned by:
  1. Religious Congregation ; 2. Archdiocese ; 3. Parish .
  
- The schools is run by:
  1. Religious Congregation ; 2. Group of local teachers.

Please design the organization chart of your school, where you show the academic and administrative management posts, their relation and the relation between the administration of the school and the owner (Religious Congregation, Archdiocese, and Parish).

## **II- INITIAL DECISION**

- 1- Knowing that to participate in this process of self-assessment will imply the commitment to take part in five workshops and the work of filling the questionnaires of self-assessment, would you like to have the school participating in this project?
- 2- Why?

- 3- Describe the current way of self-assessment, if any.

- 4- Prior to undertaking this exercise, did you ever hear about Total Quality Management or the European Foundation for Quality Management?
- 5- If yes, what did you hear about it?

### III- ORGANIZATIONAL CULTURE

- 1- How would you describe the management style of your school? Circle the number that better represents your management style according to its closeness to a collegial style (major decisions are always taken in groups, teams or boards) or a managerial style (major decisions are taken by the persons in charge).

Collegial						Managerial

- 2- Which characteristics would a high quality school have?

3- How would you describe your school?

4- Which are the values that are important for the staff of your school? Are they shared by all or just by the school administration?

5- What patterns of behaviour are employed routinely that might be indicative of the culture of your school?

6- How are students perceived by the school administration?

7- Which celebrations do you make along the school year?

8- Does your school have a written Strategic Planning?

Please answer as many questions as you can and send your filled questionnaires to the Education Office or e-mail them to [naranjoalcaide@hotmail.com](mailto:naranjoalcaide@hotmail.com)

**Appendix 4b. Questionnaire for the Selection of the Schools (after revision by arbitration panel)**

**I- DATA ON THE SCHOOL**

Name of the School:

Contact person: \_\_\_\_\_ Phone number: \_\_\_\_\_

Date:

**1.1 Size of the school.**

- Number of students in the last academic year:
- Number of full time teachers:
- Number of part time teachers:
- Number of administrative staff:
- Number of neither non-teaching nor administrative staff (cleaners, watchman...):
- Square meters of the school building:
- Square meters of the school plot:
- Number of classrooms:
- Number of offices:
- Ratio of students per class:
- Ratio of students per teacher:
- Last year income of the school:

**1.2 History of the school**

Year of foundation of the school:

**1.3 Organization of the school.**

- The School is owned by:

2. Religious Congregation ; 2. Archdiocese ; 3. Parish .

- The schools is run by:

2. Religious Congregation ; 2. Group of local teachers.

Please design the organization chart of your school, where you show the academic and administrative management posts, their relation and the relation between the administration of the school and the owner (Religious Congregation, Archdiocese, and Parish).

## **II- INITIAL DECISION**

1- Knowing that to participate in this process of self-assessment will imply the commitment to take part in five workshops and the work of filling the questionnaires of self-assessment, would you like to have the school participating in this project?

2- Why?

3- What are the expected benefits of entering this process?

4- Describe the current way of self-assessment, if any.

5- Prior to undertaking this exercise, did you ever hear about Total Quality Management or the European Foundation for Quality Management?

6- If yes, what did you hear about it?

### III- ORGANIZATIONAL CULTURE

1- How would you describe the management style of your school? Circle the number that better represents your management style according to its closeness to a collegial style (major decisions are always taken in groups, teams or boards) or a managerial style (major decisions are taken by the persons in charge).

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Collegial Managerial

2- Which characteristics would a high quality school have?

3- How would you describe your school?

4- Which are the values that are important for the staff of your school? Are they shared by all or just by the school administration?

5- What patterns of behaviour are employed routinely that might be indicative of the culture of your school?

6- How are students perceived by the school administration?

7- Which celebrations do you make along the school year?

8- Does your school have a written Strategic Planning?

9- If yes, how was it done?

Please answer as many questions as you can and send your filled questionnaires to the Education Office or e-mail them to [naranjoalcaide@hotmail.com](mailto:naranjoalcaide@hotmail.com)

**Appendix 5a. Questionnaire for Self-assessment Based upon the EFQM Excellence Model (before revision).**

**1. LEADERSHIP**

Excellent schools have leaders who carry on and facilitate the realization of the mission and vision, acting as role models for its values and ethics and inspiring trust at all times.

**Sub-criterion 1a. Development of mission and vision**

The school has developed and articulated the mission, vision and values which align with the vision and mission of the Catholic Church and guide the decision-making of the organization at all levels.

1. Has the school any document that defines its mission, vision and values?

Yes  No .

2. If there is, is this document well known by:

a. All the staff ; b. only the school administration ; c. the school administration and some teachers ; d. just the headmaster .

3. In which level does your school find itself?

<b>Definitions of levels</b>				
<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Level 4</b>	<b>Level 5</b>
<b>Quality depends solely on the individual (no processes)</b>	<b>Process awakening (basic processes)</b>	<b>Vision through processes, professionalization and a guarantee of quality (intermediate processes)</b>	<b>Systematic assessment and improvement of processes (sophisticated processes)</b>	<b>Aiming for external excellence (excellent processes)</b>
The vision and mission are not defined, or are so	The management has defined the vision and	The vision and mission are coordinated with	The vision and mission are communicated	The formulation of the vision and mission is

<p>general that they do not guide the work of the school. The activities are disconnected and/or without relation to the policies defined by the governing body (Education Office/Religious Congregation/Parish). The operations depend on the will of the individuals who carry them out.</p>	<p>mission of the school. It is explained to staff, but not necessarily operational. The values are defined, but are vague or are not systematically agreed upon by the staff. There are no follow-up procedures in place.</p>	<p>staff and understood within the school in general. This definition allows the development of strategies for the school to be formulated along with tactics and actions. The possibility of redefining strategies and goals is accepted with reluctance.</p>	<p>to, and approved by, the management of the institution. There is wide consensus on the definition of goals, thus making it easier to carry out the associated tactics and actions and build strategic partnerships. Processes defining and implementing the vision and mission are reviewed and readjusted regularly.</p>	<p>performed by the management of the school and by the governing board of the institution. The staff assumes the vision and mission as their own and transmits them from their position. The adaptation of values is assumed to be essential and obligatory. The definition and establishment of the vision and mission serve as a reference point for other schools.</p>
<p>Tick (√) the level of the school on this sub-criterion</p>				

**Sub-criterion 1b: Continuous improvement of management systems**

The management of the school promotes and guarantees the development, implementation, and continuous improvement of the management system.

1. Has the school well determined periods and procedures for its self-evaluation?  
Yes  No .
  
2. Does the school produce an Improvement Plan as a consequence of the self-evaluation? Yes  No .
  
3. In which level does your school find itself?

Definitions of levels				
Level 1	Level 2	Level 3	Level 4	Level 5
<b>Quality depends solely on the individual (no processes)</b>	<b>Process awakening (basic processes)</b>	<b>Vision through processes, professionalization and a guarantee of quality (intermediate processes)</b>	<b>Systematic assessment and improvement of processes (sophisticated processes)</b>	<b>Aiming for external excellence (excellent processes)</b>
The management of the school has not systematically defined the management system. The director is more an administrator than a leader of the work culture and educational processes.	The management of the school possesses the know-how and will to adapt the organizational structure and the management system to function effectively. As a consequence, the management promotes the adaptation of a management system to the work of the school staff.	The school's management has clearly defined and implemented strategic processes. The operating procedures are developed and implemented. Support procedures are set in line with, and directed toward, strategic processes.	The management carries out a systematic follow up of the key results of the school, communicating and discussing the results achieved with the work teams. Improvements and innovations are promoted.	The Management and Leadership Model of the school is a reference for other schools. It functions properly from the point of view of different internal and external actors. The administration is invited to congresses and events to explain their model of management.
Tick (√) the level of the school on this sub-criterion				

### Sub-criterion 1c: Leadership and external relations

The school has systematic interaction with the parents of the students, the municipality, the Ministry, the providers of transport and other strategic partners and important stakeholder groups in order to operate for common interests and goals.

1. Is there an association for the parents of the students?

Yes  No . If the answer is yes, go ahead with question 2. Otherwise, skip directly to question 3.

2. How often does the school administration meet with the parents association?

a. Once a year ; b. Twice a year ; c. Three times a year or more ; d.

Just when problems arise .

3. In which level does your school find itself?

Definitions of levels				
Level 1	Level 2	Level 3	Level 4	Level 5
<b>Quality depends solely on the individual (no processes)</b>	<b>Process awakening (basic processes)</b>	<b>Vision through processes, professionalization and a guarantee of quality (intermediate processes)</b>	<b>Systematic assessment and improvement of processes (sophisticated processes)</b>	<b>Aiming for external excellence (excellent processes)</b>
The school's leaders do not take initiative in terms of external relations. Relationships between the school and external players are incidental and not planned. There is no direct contact between leaders and students, teachers, parents or external entities (municipality, Ministry...).	The school's leaders regularly participate with other schools, the municipality, the Ministry and institutions in the identification of common needs and solutions. The leaders propose that the school carry out joint projects with other institutions. The initiative is developed on a non-institutional basis but is tolerated by the administration of the school.	The school's management maintains direct links with the parents, the municipality, the Ministry, public and private institutions. Agreements generated are the result of the effective action of the leaders. Leaders occupy representative positions which allow the establishment of links with the school. Meetings are held periodically with other school directors.	The management systematically assesses external networks to improve strategic collaboration. External links and their results are valued in order to redefine the policies undertaken. The management systematically participates in meetings with other schools.	The school's management is considered a reference. The leaders are able to establish partnerships in order to create joint projects with other institutions. Their leadership extends beyond the internal environment and reaches international levels. The school actively participates in the formulation of development plans and solutions to resolve basic problems at national level.
Mark (√) the level of the school on this sub-criterion				

### Sub-criterion 1d: Leadership and motivation

The school has processes for motivation and recognition of the staff.

1. How often does all the staff of the School hold general meetings?

- a. Once a year ; b. Twice a year ; c. Three times a year or more ; d. Just when problems arise .

2. Are the employees able to explain the vision and mission of their school?

Yes  No .

3. In which level does your school find itself?

Definitions of levels				
Level 1	Level 2	Level 3	Level 4	Level 5
<b>Quality depends solely on the individual (no processes)</b>	<b>Process awakening (basic processes)</b>	<b>Vision through processes, professionalization and a guarantee of quality (intermediate processes)</b>	<b>Systematic assessment and improvement of processes (sophisticated processes)</b>	<b>Aiming for external excellence (excellent processes)</b>
The management of the school pays little attention to the initiatives of staff and has no direct contact with them. There are no formally established communication channels. There are no periodic meetings with the staff members. There are no fundamental criteria regarding staff recognition.	Random meetings and informal channels of communication are generated. Decisions taken in coordinating meetings are not executed. The administrative ways has the last word. Teachers and employees may make suggestions, but the ones considered are the only ones the director is interested in.	There are defined channels of communication and regular meetings between staff and administration. The school's administration establishes recognition policies based on clear criteria. There is an annual staff award or similar positive achievement recognition system. Professional development for	The establishment of agreed objectives, as well as teams for continuous and systematic improvement is proposed. Delegation of responsibilities is staff-promoted. Innovative contributions of employees are recognized. Meetings, to check targets and how they are achieved, are held by leaders with administration	Regular dialogues with individual employees are held to define work objectives and development plans. People who hold positions requiring innovation can use part of their time to independently use and improve educational innovation. There is a communication plan which allows management to maintain

		staff is promoted at no cost to them.	and staff.	constant communication with school staff.
Tick (√) the level of the school on this sub-criterion				

## 2. PLANNING AND STRATEGY

Excellent schools implement their mission, vision and values by developing a strategy focused on students, staff, parents and all stakeholders that leads to continuous improvement. Policies and strategies are based upon current and future needs and expectations and upon the data of performance indicators. These policies and strategies are developed, revised and refined and are coherent with the Catholic identity of the school.

### Sub-criterion 2a: Stakeholder input into strategic planning

The needs and expectations of stakeholders (teachers, students, parents, municipality, Ministry, staff and society) are taken into account in the process of strategic planning.

1. In which level does your school find itself?

Definitions of levels				
Level 1	Level 2	Level 3	Level 4	Level 5
<b>Quality depends solely on the individual (no processes)</b>	<b>Process awakening (basic processes)</b>	<b>Vision through processes, professionalization and a guarantee of quality (intermediate processes)</b>	<b>Systematic assessment and improvement of processes (sophisticated processes)</b>	<b>Aiming for external excellence (excellent processes)</b>
There is no analysis of the stakeholders' needs (students, parents...)	Some studies of the needs of stakeholders have been made. These studies are not systematic. The information obtained is only	There is a formal, though non-systematic process which takes needs and expectations of stakeholders into account in the	There is a systematic methodology in place to observe and identify stakeholder needs. Meeting objectives based	Systematic monitoring of needs and expectations of stakeholders leads to changes in the school organisation, in

	partially used in the school's operations.	creation of strategies for the school.	on identified needs and expectations of stakeholders is systematically assessed, and society is included as one stakeholder of the school.	accordance with the results to be achieved. Indicators are systematically compared with those obtained by other institutions of reference. The indicator data is accurate, reliable and available.
Tick (√) the level of the school on this sub-criterion				

### Sub-criterion 2b: Performance indicator input to strategic planning

The assessment of performance and satisfaction indicators regarding student and parents' satisfaction, staff, society and other core stakeholders serves as a key input to strategic planning.

1. How does your school measure the satisfaction of the students and parents with the school?

a. Through questionnaires ; b. Through informal exchange of opinions ; c.

Never thought about it ; d. Through periodical meetings .

2. In which level does your school find itself?

Definitions of levels				
Level 1	Level 2	Level 3	Level 4	Level 5
Quality depends solely on the individual (no processes)	Process awakening (basic processes)	Vision through processes, professionalization and a guarantee of quality (intermediate processes)	Systematic assessment and improvement of processes (sophisticated processes)	Aiming for external excellence (excellent processes)
There is a casual and non-systematic	There is an incomplete, systematic	Information referring to the mentioned	The data collection system for	The results are gathered in real-time and

awareness of the mentioned indicators. The information is based on the individual performance of persons. Decisions are based on opinions rather than facts.	process carried out by the school's administration for periodic collection of information regarding the afore mentioned indicators. Indicators are observed with interest, but not analysed in detail. Preventive measures are not taken concerning the results obtained.	indicators is collected periodically to adopt strategic actions in the short term.	indicators is systematic and complete. Giving information about the results is part of the communication plan. The indicators are analysed in depth and preventive measures are taken based on the results obtained.	required resources are used as economically as possible to obtain indicator data for future planning. Indicators are systematically compared with those obtained by other schools of reference. The indicator data is accurate, reliable and available.
Tick (√) the level of the school on this sub-criterion				

### **Sub-criterion 2c: Designing, communicating and validating the strategic plan**

The strategic plan is defined, shared, implemented, assessed, and validated to ensure its effective implementation and follow-up. If the school doesn't have a strategic plan, you can jump to the following criterion.

1. Has the school a Strategic Plan that, in addition to its mission, vision and values, defines some priorities or goals to be realized in the coming years?

Yes  No . If the answer is yes, please attach a copy of the document. If it is no, you can skip to criterion 3.

2. In which level does your school find itself?

Definitions of levels				
Level 1	Level 2	Level 3	Level 4	Level 5
<b>Quality depends solely on the individual (no processes)</b>	<b>Process awakening (basic processes)</b>	<b>Vision through processes, professionalization and a guarantee of quality (intermediate processes)</b>	<b>Systematic assessment and improvement of processes (sophisticated processes)</b>	<b>Aiming for external excellence (excellent processes)</b>
The school has a strategic plan, but it does not guide operational activities. There is little connection between the strategic plan and actions taken in different school activities.	The school has a strategic plan, but it does not guide operational activities. There is little connection between the strategic plan and actions taken in different school activities.	Systematic communication exists, but there is no discussion or improvement. In coordination meetings, decisions are taken regarding whether the training programs correspond to the policies and strategy. There are indicators and assessment, as well as systematic planning and comparisons made with policy and strategy.	There are systematic activities covering documentation, presentation, communication, and discussion to improve the processes. Attempts are made to creatively adapt proposals to the school's policies and strategy, seeking innovation rather than the same old way of operating. The importance of assessment and innovation in planning is highly valued.	Policy is developed in conjunction with the school's staff. Such a process is used as a benchmark by other schools. Training plans are based on the school's policy and strategy, and used as a base for the development of new educational methodologies. Periodic meetings are held, with both internal and external representatives, to reflect on whether the strategic plan is being executed effectively.
Tick (√) the level of the school on this sub-criterion				

**Sub-criterion 2d: Implementation of policies and strategy and updating the strategic plan**

The administration of the school communicates and executes defined strategies and policies, as well as provides continuous updates to the plan.

1. In which level does your school find itself?

Definitions of levels				
Level 1	Level 2	Level 3	Level 4	Level 5
<b>Quality depends solely on the individual (no processes)</b>	<b>Process awakening (basic processes)</b>	<b>Vision through processes, professionalization and a guarantee of quality (intermediate processes)</b>	<b>Systematic assessment and improvement of processes (sophisticated processes)</b>	<b>Aiming for external excellence (excellent processes)</b>
There is no clear and complete communication of policies and strategies. Planning of activities depends on personal initiative, and there is no consultation with other persons; thus preventing the execution of coherent tactics. A strategic plan cannot be executed because it does not exist. There is no assessment of policies and strategy.	There is documentation available, but no effort is made to communicate or share it. People consult colleagues regarding undefined situations. They do not consult policy or strategy, because they do not identify with it. Employees must personally consult management to get information about policy and strategy.	A strategic planning process has been defined with due awareness of the competitive advantages available. The implementation process of this plan is characterized by tactics, actions, priorities, timetables for execution, responsibilities, methods and assessment periods with defined documents and follow-up indicators.	There is a dynamic and systematic process for the assessment and improvement of the Strategic Plan based on continuous analysis of indicators and the environment. The process is deployed with the coordinators and school administrators.	The Strategic Plan is completely aligned with the Vision and Mission of the school. The Strategic Plan is implemented at all levels of the school and is reviewed and improved in accordance with systematic procedures. The methodology employed for its development is a benchmark for other schools.
Tick (√) the level of the school on this sub-criterion				

### Sub-criterion 2e: School Catholic identity

The school expresses its Catholic identity in a clear way:

1. Is there a census of the students of Catholic families who have not received the Sacraments of initiation?

Yes ; No .

2. Are there catechism classes for children of Catholic families who have not received the sacraments of initiation?

Yes ; No .

3. Are there pastoral activities for Catholic students of the school (Eucharistic celebrations, retreats, catechesis...)?

Yes ; No .

4. Are Catholic symbols visible in the school? Yes ; No .

5. Does the school prepare appropriate Christmas decoration? Yes ; No .

6. There is a strategic planning that includes the care for the Catholic identity: Yes ; No .

7. Does the academic calendar include Christian celebrations? Yes ; No .

8. Does the Parish priest or the competent ecclesiastical authority regularly visit the school? Yes ; No .

9. Does the school day start with prayer? Yes ; No .

10. Are a picture of the current Pope and Archbishop displayed and visible? Yes ; No .

11. Is the staff ethnically diverse? Yes ; No .

12. Is the student body socio-economically and ethnically diverse? Yes ; No .

13. In which level does your school find itself?

<b>Definitions of levels</b>				
<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Level 4</b>	<b>Level 5</b>
<b>Quality depends solely on the individual (no processes)</b>	<b>Process awakening (basic processes)</b>	<b>Vision through processes, professionalization and a guarantee of quality (intermediate processes)</b>	<b>Systematic assessment and improvement of processes (sophisticated processes)</b>	<b>Aiming for external excellence (excellent processes)</b>
<p>There are few visible Christian symbols in the school. The celebrations of prayer, retreats, Sacraments and liturgy are rare or inconsistent. There are limited opportunities for the spiritual formation of students and staff. Collaboration between parents, Parish and school is inconsistent and has variable benefit to the students and to the life of the Church. The school rarely engages the parish in its mission to be a dynamic faith community. The school rarely initiates collaborative activities with the local Parish.</p>	<p>Staff members have a limited understanding of Catholic social teaching. The Christian understanding of the innate dignity of the human person is rarely reflected in all policies and practices of the school. The effectiveness of the school's prayer and liturgical life is rarely reflected upon and evaluated. The school provides only limited opportunities for students to become aware of being called into a personal relationship with God. The school provides few opportunities for the students to participate in the sacraments, especially in Eucharist and Reconciliation.</p>	<p>The school recognizes and appreciates the diversity of cultures among students and staff. There is an ad hoc approach to helping students to learn how to pray both formally and informally. The school is proactive in working to ensure that Catholic faith, tradition and culture are actively fostered and celebrated. Catholic symbols and icons are visible and meaningful throughout the school. The school is involved in key celebrations of the local Parish.</p>	<p>The school has a census of the children of Catholic families who have not received the Sacraments of initiation and organize catechism for them or refer them to the Parish Priest. The celebration of the Eucharist, Sacraments and prayer is central to the religious life of the school. The school fosters collaboration with parents, Parish and school, which contributes to the life of the local Church and is a direct benefit to students. The school complements and engages with the Parish in its mission to be a dynamic faith community. The school provides regular opportunities for the students to participate in the sacraments,</p>	<p>Jesus Christ and His teachings are central and clearly articulated in the school's vision and mission statement and permeate nearly all communications and aspects of policy, planning and action in the school. The school incorporates Gospel teachings and values in all communications, policy documents and future planning. The school has a systematic approach to supporting the spiritual formation of staff. Students effectively learn about the close connection between Gospel, faith and life through well integrated learning experiences. Christian students are provided with many well</p>

			especially in Eucharist and Reconciliation.	focused opportunities to critique the relationship between their culture and Christian values.
Tick (√) the level of the school on this sub-criterion				

### 3. PEOPLE

Excellent schools value their people and create a culture that allows the mutually beneficial achievement of organizational and personal goals. They develop the capabilities of their people and promote fairness and equality. They care for, communicate, reward and recognize, in a way that motivates people, builds commitment and enables them to use their skills and knowledge for the benefit of the school. This criterion includes: planning, management and development of human resources; implication and assumption of responsibilities; importance of dialogue; appreciation and attention to the persons.

#### Sub-criterion 3a: Human resource management

The school has processes to recruit and manage its human resources.

1. Does the school have a written procedure for the recruitment of new staff?

Yes  No .

2. In which level does your school find itself?

Definitions of levels				
Level 1	Level 2	Level 3	Level 4	Level 5
Quality depends solely on the individual (no processes)	Process awakening (basic processes)	Vision through processes, professionalization and a guarantee of quality (intermediate processes)	Systematic assessment and improvement of processes (sophisticated processes)	Aiming for external excellence (excellent processes)
The recruitment	The recruitment	There is	The school has	The school

of new personnel is based upon family bonds or personal relations of the administration.	of new administrative staff is based upon family bonds or personal relations of the administration while the recruitment of teaching staff involves a Committee of selection.	documentation which outlines the staff policy of the school (recruitment of new staff and management) and the job description of every position.	defined tasks for each employee. Management's processes include necessary competencies required for the tasks and their development. Staff policy is considered within the context of the strategic plan. The staff policy is agreed upon by the management and work teams and reviewed regularly.	defines competency profiles for the future. It has a diverse, multidisciplinary, innovative, and international combination of human resources. Innovation is a shared value of the school. People are seen as an investment. There is consensus among the staff, management, and the governing board on human resource management policy. The staffing policy is used as a benchmark, and becomes a national and international point of reference.
Tick (√) the level of the school on this sub-criterion				

**Sub-criterion 3b: Competence development of the staff**

The school has policies and processes to improve its intellectual capital and its individual and organisational competencies.

1. What is the percentage of teachers who are holders of a university diploma:

A. Intermediate Diploma:

B. Bachelor's Degree:

C. Post graduate Diploma:

D. Master's Degree:

E. PhD:

2. What is the percentage of teachers who, in the subject they teach, are no holders of any university diploma in that specific field of knowledge?

3. What is the average of years of experience of the full time teachers of the school?

1.  $5 \leq$ ; b.  $\geq 6 \leq 10$ ; c.  $\geq 11 \leq 20$ ; d.  $\geq 20$ ;

4. In which level does your school find itself?

<b>Definitions of levels</b>				
<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Level 4</b>	<b>Level 5</b>
<b>Quality depends solely on the individual (no processes)</b>	<b>Process awakening (basic processes)</b>	<b>Vision through processes, professionalization and a guarantee of quality (intermediate processes)</b>	<b>Systematic assessment and improvement of processes (sophisticated processes)</b>	<b>Aiming for external excellence (excellent processes)</b>
If the school staff is specialized in any area, it is because they have done it of their own initiative. The functional areas of the school may be unattended due to lack of training or because they have not been identified.	The required occupational profiles have been identified for the functional areas of the school to meet every day needs in the short term. Development needs are defined, however training initiatives are random. Staff members participate in training on an individual basis. There is no follow-up on the training and it is not systematically implemented in work processes.	There is identification and classification of skills and competencies of staff, and the needs of the school. Functional areas are considered when defining the training plans for employees. Development and training are part of the strategic plan and its implementation. The results of individual training are shared and implemented within the school.	Improvement of personal skills is encouraged and seen as an essential part of the work. There are systematic actions which assess, review, update, and balance skills and competencies of the staff and the needs of the school. The effectiveness of training programmes is assessed	The school operates as a learning organization. Staff members receive specialized training based on individual Professional development plans. The plans are focused on the development needs of different tasks and sufficiently cover functional areas of the organization. Members of the staff, in a process of continuous improvement of intellectual capital, are given initiative to develop new competencies needed for a systematic organizational development. Employees are trainers and mentors of other employees.
Tick (√) the level of the school on this sub-criterion				

**Sub-criterion 3c: Staff commitment and involvement**

The school has material and moral incentives and processes to boost employee commitment, involvement and responsibility.

1. What are the:

- Lowest salary of a full time teacher \_\_\_\_\_
- Highest salary of a full time teacher \_\_\_\_\_
- Average salary of a full time teacher \_\_\_\_\_

2. In which level does your school find itself?

<b>Definitions of levels</b>				
<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Level 4</b>	<b>Level 5</b>
<b>Quality depends solely on the individual (no processes)</b>	<b>Process awakening (basic processes)</b>	<b>Vision through processes, professionalization and a guarantee of quality (intermediate processes)</b>	<b>Systematic assessment and improvement of processes (sophisticated processes)</b>	<b>Aiming for external excellence (excellent processes)</b>
Staff responsibilities at the school are ambiguously defined but are not communicated to staff. Each one carries out the task without a global vision of the existing processes. People are limited to carrying out those tasks assigned by a superior in an attempt to follow the chain of command.	The school has included Work Groups with defined responsibilities. The staff begins to form part of a group and a process, and they acquire delegated functions and responsibilities. The focus is on the daily tasks of the school, which helps to identify needs of the organisation.	The organisation of each group's work facilitates the active the staff, promoting creativity, innovation and team work. The staff understands and accepts the tasks of their group. Staff members make decisions and are responsible for the results. This process allows different groups to work similarly, based on the strategy of the school.	The school has planned and defined tools which stimulate innovation and creativity of the people and groups. The people identify with the strategic goals of the organisation. There are periodic presentations of innovations conceived by each group. There is a delegation of functions in the organisational structure.	The assessment strategy permits the identification of individual and group contributions for later improvement and recognition. These innovations have a positive effect on the work of the school, inspire confidence, and encourage comparisons with other schools - serving as a benchmark for many of them. The school opts to reward investments in the staff. The work place atmosphere is a benchmark for the entire school.

Tick (✓) the level of the school on this sub-criterion				

### Sub-criterion 3d: Internal communications

The school has effective processes for staff communication.

1. How does the school administration usually communicate decisions or information to the staff?

- a. By phone ; b. Through meetings ; c. through letters ; d. Through written announcements on a board ; e. Through personal encounters.

2. In which level does your school find itself?

Definitions of levels				
Level 1	Level 2	Level 3	Level 4	Level 5
<b>Quality depends solely on the individual (no processes)</b>	<b>Process awakening (basic processes)</b>	<b>Vision through processes, professionalization and a guarantee of quality (intermediate processes)</b>	<b>Systematic assessment and improvement of processes (sophisticated processes)</b>	<b>Aiming for external excellence (excellent processes)</b>
Communication between staff and management is informal and random. This generates disinformation and does not promote sharing of objectives and results in each work area. There are either no reports or, if there are reports, they are not shared. Some staff works in isolation, causing mistakes to be repeated.	There are channels of communication, but they are not connected. The responsibilities and accountability for managing these channels are vague. Information is diligently collected, but not distributed in all necessary directions. There are reports – many of which are shared horizontally, but not vertically.	There is a communication system using modern Information and Technologies (ICT), completed with people who are responsible for making it work and for updating it. There is a programme of informative meetings at all levels. There are defined objectives, goals, deadlines, prerequisites of	There is optimization of work teams through systematic dialogue and communication; which in turn, allows experiences and best practises to be shared and improves the workplace environment. Ideas arise for ways to improve systems and forms of communication. Communication	The channels of communication facilitate creation of innovative proposals at all levels of the school, and promote visionary teams focused on continuous improvement. There is an internal and external assessment of innovative ideas, regardless of origination. The communication

		action, etc.	between staff and management is respectful and honest, and not strictly defined by the hierarchy.	management model serves as a reference point for other organisation/programmes.
Tick (√) the level of the school on this sub-criterion				

#### 4. PARTNERSHIPS AND RESOURCES

Excellent schools plan and manage external partnerships, suppliers and internal resources in order to support their strategy, policies and the effective operation of processes. External partners may be the Educational Inspection of the municipality, the State Ministry of Education, etc. Excellent schools ensure that they effectively manage their environmental and societal impact. This criterion includes these elements: management of partnerships; management of financial resources; management of premises, equipment and material resources; management of technology; management of information and knowledge.

##### Sub-criterion 4a: External partnerships management

The school develops and manages its external partnerships (with other schools, universities, municipality, Ministry, public and private institutions, cooperation networks, NGO's, Language Institutes, etc.) to strengthen its activities.

1. Mention external partners of your school:
2. In which level does your school find itself?

Definitions of levels				
Level 1	Level 2	Level 3	Level 4	Level 5
Quality depends solely on the individual (no processes)	Process awakening (basic processes)	Vision through processes, professionalization and a guarantee of quality (intermediate processes)	Systematic assessment and improvement of processes (sophisticated processes)	Aiming for external excellence (excellent processes)

There are no existing policies or strategies for our school to establish external partnerships. Existing partnerships are only the result of casual agreements.	Our school has policies and strategies to establish external partnerships. However, these policies are not always in line with our strategic plan. No individual is specifically responsible for the development and implementation of policies and strategies.	External partnerships are systematically related to policies and strategies of our school. Responsibility for the development and implementation of policies and strategies within the school has been assigned.	Projects resulting from external partnerships are assessed to determine results, with regard to planned objectives and established goals of the school. These results are used within the school to improve procedures and existing activities. New partnerships are continually pursued.	Development projects are undertaken in collaboration with other institutions. Successful results of external partnerships make the school a prestigious international reference for other schools seeking this type of cooperation.
Tick (√) the level of the school on this sub-criterion				

#### **Sub-criterion 4b: Economic and financial management**

The school has developed its management of economic and financial resources, and processes to strive for growth and sustainability.

1. Does the school have a budget?

Yes  No .

2. Who is involved in the preparation of the budget?

3. When and how is the budget compared with the financial situation? \_\_\_\_\_

How many times a year?

- a. Once a year ; b. Twice a year ; c. Never ; d. Three or more times a year .

4. In which level does your school find itself?

<b>Definitions of levels</b>				
<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Level 4</b>	<b>Level 5</b>
<b>Quality depends solely on the individual (no processes)</b>	<b>Process awakening (basic processes)</b>	<b>Vision through processes, professionalization and a guarantee of quality (intermediate processes)</b>	<b>Systematic assessment and improvement of processes (sophisticated processes)</b>	<b>Aiming for external excellence (excellent processes)</b>
The school spends money from the school fees as far as cash remains without clear reference to any overall programme or budget. Towards the end of the academic year there are delays and difficulties in paying the staff.	There are established and defined programming and budgetary structures in place. There are overall financial goals for the school, but this plans are not respected and there is no continuous confrontation between the ongoing status and the budgetary plans.	A financial plan is defined annually. This plan does not include just financial goals for the following year, but also aims at guaranteeing the future sustainability of the school on the long term.	There is continuous assessment of the success in meeting internal goals and targets, and partnerships permitting reorganisation as required. Results are assessed to better develop projects and select strategic partners. The school grows from the financial point of view.	Additional projects are generated beyond the normal activities involving national and international institutions. The school is considered a leading and strategic partner for other institutions, Generating income to fund and develop innovative programmes. The school can be considered a sustainable reality.
Tick (√) the level of the school on this sub-criterion				

#### **Sub-criterion 4c: Material resources, premises and equipment management**

The material resources are inventoried, renewed, cared for, etc.

1. Does the school have a written inventory of the furniture and equipment?

Yes  No .

2. Is there a full time responsible for the maintenance of the building?

Yes  No .

3. In which level does your school find itself?

<b>Definitions of levels</b>				
<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Level 4</b>	<b>Level 5</b>
<b>Quality depends solely on the individual (no processes)</b>	<b>Process awakening (basic processes)</b>	<b>Vision through processes, professionalization and a guarantee of quality (intermediate processes)</b>	<b>Systematic assessment and improvement of processes (sophisticated processes)</b>	<b>Aiming for external excellence (excellent processes)</b>
The school does not have any inventory of furniture and material resources. There is not a well-defined plan for the material development of the school. There is a continuous deterioration of the premises.	There are old inventories that are not periodically checked and updated. Repairs are done sporadically.	The inventory is checked and renewed every year. Repairs are done when needed.	There is continuous follow up of the functioning of devices and status of furniture and equipment. Results are assessed to better develop projects in order to improve the resources according to a defined plan.	Additional projects are generated beyond the normal activities involving national and international institutions. The school is an example in its care for equipment and premises.
Tick (√) the level of the school on this sub-criterion				

#### **Sub-criterion 4d: Technology management**

The integration of ICT serves the management, staff, operations, products, and learners of the school.

1. How many computers does the school have?
  - a. 0 ; b.  $\geq 1 \leq 2$  ; c.  $\geq 3 \leq 7$  ; d.  $\geq 8 \leq 12$  ; e.  $\geq 13$  .
  
2. How many multimedia projectors does the school have?
  - a. 0 ; b.  $\geq 1 \leq 2$  ; c.  $\geq 3 \leq 4$  ; d.  $\geq 5 \leq 7$  ; e.  $\geq 8$  .
  
3. In which level does your school find itself?

<b>Definitions of levels</b>				
<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Level 4</b>	<b>Level 5</b>
<b>Quality depends solely on the individual (no processes)</b>	<b>Process awakening (basic processes)</b>	<b>Vision through processes, professionalization and a guarantee of quality (intermediate processes)</b>	<b>Systematic assessment and improvement of processes (sophisticated processes)</b>	<b>Aiming for external excellence (excellent processes)</b>
Staff in the school work without any support of technology. The school does not provide technological support to staff, teachers or learners. There are no standards for the exchange and systematisation of information.	The school has technological systems which partially facilitate financial, administrative and academic tasks. Some routines and processes are computerised. The organisation has ICT applications, and information on training activities is introduced with the help of ICT.	The school is equipped with appropriate technology to support management. The internal system is structured, and capable of exchanging information with no individual applications. All data gathered is transformed into information.	Internal processes of the school are monitored using appropriate ICT facilities. The school's users provide continuous improvement, which the information system incorporates as necessary.	Technology is used in an optimal, efficient way to meet students' and parents' needs. The quality of information is constantly improved. This facilitates the relationship between the school and the parents, and improves employee performance. The quality of all processes is fully controlled. The system is a benchmark for other schools
Tick (✓) the level of the school on this sub-criterion				

### Sub-criterion 4e: Information and knowledge management

The school collects, keeps and manages information and knowledge to support its policies and strategy.

1. List the kind of files contained in the school archives (bills, payment sheets, students' records....)?

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2. Are these files updated?

Yes  No .

3. In which level does your school find itself?

Definitions of levels				
Level 1	Level 2	Level 3	Level 4	Level 5
<b>Quality depends solely on the individual (no processes)</b>	<b>Process awakening (basic processes)</b>	<b>Vision through processes, professionalization and a guarantee of quality (intermediate processes)</b>	<b>Systematic assessment and improvement of processes (sophisticated processes)</b>	<b>Aiming for external excellence (excellent processes)</b>
The school does not have well-ordered and updated archives.	Some aspects are well recorded and some others remain neglected.	There is a person responsible for the collection and study of relevant documents. The school has a website or a page in the social media to inform staff, students, parents and different stakeholders.	The school has well-ordered and updated archives available for the staff. The web is user-friendly and interactive.	The information systems of the school are a point of reference for other schools.

Mark (√) the level of the school on this sub-criterion				

## 5. PROCESSES, PRODUCTS AND SERVICES

Excellent schools design, manage and improve processes and services to generate increasing value for students, parents and other stakeholders. In a school there are some processes that should be designed and followed up with care like:

- The organization of the school (time table, appointment of personnel, grouping of students, transport management...);
- School climate (relations, insertion of new students, control of attendance, school entrance and exit of students...);
- Teaching and learning (application of strategies and plans...);
- Students evaluation (design and execution of evaluation);
- Orientation and coaching (application of objectives defined for the coaching of students and their families).

Therefore this criterion includes: identification of the needs of different stakeholders, design of the school educational project, plan for the evaluation of students and teaching-learning process, management of new students, follow-up of the evolution of results, definition of indicators to assess the results of processes and objectives for improvement; management and support to the implementation of changes, revision of key processes to ensure their progress and success (EFQM, 2017; Martinez Median and Rioperez, 2005; Aragón Marin, 2001).

### Sub-criterion 5a: Well-designed processes

The school identifies the processes that take place in it and defines their persons in charge, the procedures for their management and assessment.

1. How would you define the teaching-learning method at your school?

a. Memorization and repetition ; b. Critical thinking ; c. Participation and interaction ; d. Discovery learning .

2. How does the school evaluate the progress of its students?

a. Just with the final exams ; b. It depends on the teacher ; c. With periodical assignments and tests in addition to the final exams .

3. In which level does your school find itself?

<b>Definitions of levels</b>				
<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Level 4</b>	<b>Level 5</b>
<b>Quality depends solely on the individual (no processes)</b>	<b>Process awakening (basic processes)</b>	<b>Vision through processes, professionalization and a guarantee of quality (intermediate processes)</b>	<b>Systematic assessment and improvement of processes (sophisticated processes)</b>	<b>Aiming for external excellence (excellent processes)</b>
The organization of the school (time table, appointment of personnel, grouping of students, management of the transport...) depends on the initiative of single persons. There is no awareness on the characteristics of the school climate (relations, insertion of new students, control of attendance, school entrance and exit of students...); there is not any common policy for the evaluation of	The basic school processes previously described are executed even if there is no written planning nor well defined in charge persons for them.	Every process has a well-defined person in charge of starting the process and follows it up. There are written documents that define clearly who is the responsible for every process and how the process should be managed and assessed.	The different processes are assessed with defined indicators, reviewed every year and modified according to the needs of the students, the educational project of the school and its policies and strategies.	The way the processes is designed, executed and assessed is a point of reference for other schools.

neither students nor persons in charge of orientation and coaching.				
Tick (√) the level of the school on this sub-criterion				

### **Sub-criterion 5b: The management of processes leads to continuous improvement**

Processes are improved, as needed, using innovation and development of certain priorities in order to fully satisfy and generate increasing value for students and their families.

1. How much impact do workshops on teaching methods have on the teachers of your school?

- a. No impact at all ; b. Just for a short time after the workshop. Then every teacher continues doing as he/she was doing before ; c. Some teachers have really changed after the workshops. Others continue teaching in the same way ; d. The workshops caused a real and lasting renewal in the methods of the teaching staff .

2. In which level does your school find itself?

<b>Definitions of levels</b>				
<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Level 4</b>	<b>Level 5</b>
<b>Quality depends solely on the individual (no processes)</b>	<b>Process awakening (basic processes)</b>	<b>Vision through processes, professionalization and a guarantee of quality (intermediate processes)</b>	<b>Systematic assessment and improvement of processes (sophisticated processes)</b>	<b>Aiming for external excellence (excellent processes)</b>
There is no systematic revision of the processes and any	After having reviewed the different processes of the school, some	After having reviewed different school processes, some priorities of	There are well defined procedures to improve the processes that	The way the school monitors, assesses and renews its processes is a

improvement is due to individual initiatives.	priorities of processes to be improved have been identified but no well-organized plans have been designed to implement such improvement.	areas to be improved have been identified. A plan was designed to apply the necessary improvement, but this was not monitored. There is a certain improvement but there is no true renewal in the teaching methods.	have been identified. These procedures are properly monitored and assessed. There is a continuous renewal in the teaching methods and the evaluation processes.	point of reference for other schools.
Tick (√) the level of the school on this sub-criterion				

**Sub-criterion 5c: Processes are responsive according to students and parents needs and expectations**

The school has defined procedures to identify the needs and expectation of students, parents and other stakeholders and improve its processes accordingly.

1. Does your school systematically identify the needs and expectations of the students and parents?

Yes  No .

2. How does the school identify the needs and expectations of the students and parents?

- a. Through personal encounters ; b. In formal meetings ; c. Through written letters (Suggestions' Box) ; d. Through questionnaires or surveys. .

3. In which level does your school find itself?

<b>Definitions of levels</b>				
<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Level 4</b>	<b>Level 5</b>
<b>Quality depends solely on the individual (no processes)</b>	<b>Process awakening (basic processes)</b>	<b>Vision through processes, professionalization and a guarantee of quality (intermediate processes)</b>	<b>Systematic assessment and improvement of processes (sophisticated processes)</b>	<b>Aiming for external excellence (excellent processes)</b>
There are no determined procedures to identify the needs and expectations of students and parents. This fact remains a personal initiative of staff members willing to listen to them.	The parents have the possibility of express their expectations and needs in formal meetings.	The school holds regular meetings with the parents and students class delegates where these ones express their expectations and needs that are taken into account by the school administration to improve the processes of the school (evaluation, teaching-learning...)	The administration prepares questionnaires or surveys to identify the needs and expectations of students, parents and other stakeholders, analyses the results, assesses the different processes and elaborates a plan to improve them based upon this analysis. The application of this plan is also evaluated.	The way the school involves students, parents and other stakeholders through the consideration of their needs and expectations in reshaping the processes of the school and improving constantly becomes a point of reference for other schools.
Tick (√) the level of the school on this sub-criterion				

### **Sub-criterion 5d: Administrative and financial management**

The school is equipped with an efficient, effective system for administrative and financial management.

1. In which level does your school find itself?

<b>Definitions of levels</b>				
<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Level 4</b>	<b>Level 5</b>
<b>Quality depends solely on the individual (no processes)</b>	<b>Process awakening (basic processes)</b>	<b>Vision through processes, professionalization and a guarantee of quality (intermediate processes)</b>	<b>Systematic assessment and improvement of processes (sophisticated processes)</b>	<b>Aiming for external excellence (excellent processes)</b>
The way of carrying out the financial administration remains a choice of few persons in charge.	The school has planned procedures for internal management. Administrative and financial systems are partially implemented.	All administrative and financial tasks are defined, systemised and procedural. The procedures are transparent, clear and verifiable. There is a person responsible for each administrative and technical procedure. Budgeting and accounts management are defined through common procedures and known throughout the school organisation.	Indicators have been established to assess and improve the administrative and financial procedures in place. The terms for registration and payment of school fees or other school items are continuously assessed and reviewed to systemise improvements.	The administration is continuously involved in the improvement of its procedures and processes. It voluntarily submits to external auditing of its management systems. The school receives requests from managers of other schools to compare and improve their internal procedures. Its practices are considered the best in its immediate area.
Tick (√) the level of the school on this sub-criterion				

## **6. STUDENTS AND PARENTS (CUSTOMERS) RESULTS**

Excellent schools achieve and sustain outstanding results that meet or exceed the needs and expectations of students and their parents.

### Sub-criterion 6a: Students and parents satisfaction

Here the school evaluates the perception of students and parents in relation to the school work. Information can be obtained through surveys, compliments and complaints, etc.

1. In which level does your school find itself?

Definitions of levels				
Level 1	Level 2	Level 3	Level 4	Level 5
Quality depends solely on the individual (no processes)	Process awakening (basic processes)	Vision through processes, professionalization and a guarantee of quality (intermediate processes)	Systematic assessment and improvement of processes (sophisticated processes)	Aiming for external excellence (excellent processes)
No information is gathered regarding the satisfaction of parents and students with the school.	Consistent measurements of satisfaction are gathered, but parents and students keep showing dissatisfaction with the school.	Collected measures show satisfaction with the school.	Collected measures show a high level of satisfaction with the school.	The school is considered a model for others.
Tick (√) the level of the school on this sub-criterion				

### Sub-criterion 6b: Indicators of performance.

These indicators predict perceptions of students and parents.

1. Which percentage of students leaves your school every year before reaching their final class (class 8) and move to other schools?
  - a. Not known ; b.  $\geq 30\%$  ; c.  $\geq 16\% \leq 30\%$  ; d.  $\geq 6\% \leq 15\%$  ; e.  $\leq 5\%$  ;
2. How many written complaints per year are received?

- a.  $\leq 2$  □; b.  $\geq 3 \leq 10$  □; c.  $\geq 11 \leq 20$  □; d.  $\geq 21$  □;

## 7. PERSONNEL RESULTS

Excellent schools achieve and sustain outstanding results that meet or exceed the needs and expectations of their staff.

These CRITERIA should address the results of the work and satisfaction of school staff. They should also link to the human resource management criteria.

Measurement should focus on the areas over which the school has freedom to act. It is important for all kinds of organisations to directly record results concerning the employees' perception of: the school and its mission; the working environment; the school's management and management systems; career development; the development of personal skills; and the products and services the school provides.

### Sub-criterion 7a: Staff satisfaction

School staff members consistently exhibit satisfaction with their being employed in the organisation, as well as with their specific roles and responsibilities. They are consistently satisfied with the support that the administration provides regarding motivation, recognition, training, atmosphere, health, etc.

1. An indicator of satisfaction is the absence rate. How many staff members have a one day absence per week in a normal week?
  - a. Not known □; b.  $\geq 30\%$  □; c.  $\geq 16 \leq 30$  □; d.  $\geq 6 \leq 15$  □; e.  $\leq 5\%$  □.
2. In which level does your school find itself?

Definitions of levels				
Level 1	Level 2	Level 3	Level 4	Level 5
Quality depends solely on the individual (no processes)	Process awakening (basic processes)	Vision through processes, professionalization and a guarantee of quality (intermediate processes)	Systematic assessment and improvement of processes (sophisticated processes)	Aiming for external excellence (excellent processes)
Staff satisfaction is not measured and/or no information is available.	Staff satisfaction is measured and shows negative trends and/or results that do not meet relevant targets.	Staff satisfaction shows improving trends and/or most relevant targets are met.	Staff satisfaction shows substantial progress and/or all relevant targets are met.	Staff satisfaction is excellent and sustained results are achieved. All relevant targets are met. Positive comparisons with relevant schools for all key results are made.
Tick (✓) the level of the school on this sub-criterion				

### Sub-criterion 7b: Staff performance

The school has enough staff to respond to the needs and expectations of students and parents productively and efficiently. School staff members are measured through performance evaluations, feedback from students and parents, and contributions to school goals.

1. What is the frequency of the homework asked by every teacher?

a. Daily ; b. Weekly ; c. Monthly ; d. Rarely .

2. In which level does your school find itself?

Definitions of levels				
Level 1	Level 2	Level 3	Level 4	Level 5
<b>Quality depends solely on the individual (no processes)</b>	<b>Process awakening (basic processes)</b>	<b>Vision through processes, professionalization and a guarantee of quality (intermediate processes)</b>	<b>Systematic assessment and improvement of processes (sophisticated processes)</b>	<b>Aiming for external excellence (excellent processes)</b>
Performance of the staff is not assessed.	The performance of the staff is below average and there is evidence that the majority of staff do not support the school's goals.	The performance of the majority of staff members meets minimum requirements.	The performance of the majority of staff members is above the expected level, and staff collaborates effectively to achieve the school's goals.	School staff serves as a model for other schools. They operate at a highly effective work level based on collaboration, knowledge sharing and team learning, regularly exceeding the expectations of their positions, and consistently achieving the school's goals.
Tick (√) the level of the school on this sub-criterion				

## 8. SOCIETY RESULTS

Excellent schools achieve and sustain outstanding results that meet or exceed the needs and expectations of relevant stakeholders within society.

### Key Implications

This CRITERION will measure the school's impact on society and community. These measures cover both measures of perception and, where available, quantitative indicators.

The assessment considers what the school is achieving with regard to impact on society and the needs of society.

### Sub-criterion 8a: Image

The school's visibility, engagement and reputation are recognised as a result of its programmes, extra-curricular activities, and the role of its personnel in society.

Definitions of levels				
Level 1	Level 2	Level 3	Level 4	Level 5
<b>Quality depends solely on the individual (no processes)</b>	<b>Process awakening (basic processes)</b>	<b>Vision through processes, professionalization and a guarantee of quality (intermediate processes)</b>	<b>Systematic assessment and improvement of processes (sophisticated processes)</b>	<b>Aiming for external excellence (excellent processes)</b>
There is no recognition or good fame for the school.	There is some recognition or good fame for the school.	The name of the school is good in all fields. The staff of the school participates in many collaborative development activities in society.	The school influences the development policies of the municipality or the Ministry.	The name of the school is outstanding as an initiator of important developments in society.
Tick (✓) the level of the school on this sub-criterion				

### Sub-criterion 8b: Social responsibility

As part of its routine activities, the school takes a proactive role in developing socially-oriented awareness, and concrete activities which are relevant to its own staff and the external community.

Definitions of levels				
Level 1	Level 2	Level 3	Level 4	Level 5
<b>Quality depends solely on the individual (no processes)</b>	<b>Process awakening (basic processes)</b>	<b>Vision through processes, professionalization and a guarantee of quality (intermediate processes)</b>	<b>Systematic assessment and improvement of processes (sophisticated processes)</b>	<b>Aiming for external excellence (excellent processes)</b>
Social responsibility is not recognised as	There is some social responsibility	Social responsibility is recognised as	Social responsibility is recognised as a	The school is very good as an initiator of

a part of the work and role of the school.	recognised in the work and role of the school.	part of the work and role of the school.	vital part of the work and role of the school. The school is often involved in development of society.	important developments in society.
Tick (√) the level of the school on this sub-criterion				

### Sub-criterion 8c: Sustainability

The school demonstrates environmental awareness by being proactive in sustainability, reducing its own energy consumption and waste, and including environmental education as part of its programs.

Definitions of levels				
Level 1	Level 2	Level 3	Level 4	Level 5
<b>Quality depends solely on the individual (no processes)</b>	<b>Process awakening (basic processes)</b>	<b>Vision through processes, professionalization and a guarantee of quality (intermediate processes)</b>	<b>Systematic assessment and improvement of processes (sophisticated processes)</b>	<b>Aiming for external excellence (excellent processes)</b>
The organisation has no environmental or sustainability awareness.	There is some environmental and sustainability awareness. Some active staff members are involved in sustainability activities.	Sustainability is a part of the school's processes and programs.	The school has received awards and/or certification stating that it meets sustainability requirements.	The school is a recognised developer and initiator of concepts and models of sustainability.
Tick (√) the level of the school on this sub-criterion				

## 9. KEY RESULTS

Excellent schools achieve and sustain outstanding results that meet or exceed the needs and expectations of students, parents and other stakeholders and are expected to meet the key goals of their policies and strategies (EFQM, 2017; Martinez Median and Rioperez, 2005; Aragón Marin, 2001).

For every question the following aspects should be considered:

- The magnitude: degree of excellence of the results.
- The tendencies: What has been achieved in the last years (three or more)? An excellent organization will have positive tendencies and a sustained performance.
- The goals: the objectives should be suitable.
- The performance of an excellent school will be the result of the approaches and benchmarking.
- The reach: the results have an impact on relevant areas previously identified. The results are relevant for the students, their families and the staff.

These measures will be both financial and non-financial, and many will be closely linked to strategy and planning (CRITERION 2) and critical processes (CRITERION 5). Results relate to measurement of the school's performance, with regard to achievement of goals, the outcomes of key activities (effectiveness), and the internal functioning of the school. Furthermore, they involve measurements of the performance of the school in making rational and economic use of its financial resources (economy).

### **Sub-criterion 9a: Financial**

Your average score will be the average of all the scores recorded for your key financial results.

	Definitions of levels				
Key financial results	Level 1	Level 2	Level 3	Level 4	Level 5
		Results are not measured and/or no information is available.	Results are measured and show negative trends and/or results do not meet relevant targets.	Results show improving trends and/or most relevant targets are met.	Results show substantial progress and / or all relevant targets are met.
1.% of school fees collected					
2.Annual surplus					
3.Expenditure per student					
4.					
5.					
Average			Fr= Average *5		

### Sub-criterion 9b: Academic

Your average score will be the average of all the scores recorded for your key academic results.

	Definitions of levels				
Key academic results	Level 1	Level 2	Level 3	Level 4	Level 5
		Results are not measured and/or no information is available.	Results are measured and show negative trends and/or results do not meet relevant targets.	Results show improving trends and/or most relevant targets are met.	Results show substantial progress and /or all relevant targets are met.
1.Number of students who left the school before the end of the year					
2.Number of students who left the school and did not register for the following year					
3. % of failures in the GPSC					
Average			Ar= Average *5		

### Sub-criterion 9c: Strategic goals

This sub-criterion deals with results related to the mission of Comboni Schools and therefore is related to sub-criterion 2e. Your average score will be the average of all the scores recorded for your key strategic results.

	Definitions of levels				
Key strategic results	Level 1	Level 2	Level 3	Level 4	Level 5
		Results are not measured and/or no information is available.	Results are measured and show negative trends and/or results do not meet relevant targets.	Results show improving trends and/or most relevant targets are met.	Results show substantial progress and /or all relevant targets are met.
1. Number of Christian celebrations with Catholic students (Masses, Christmas Carols...)					
2. Number of students from Catholic families who received catechism and Sacraments of Christian Initiation inside or through the school					
Average			Sr= Average *5		

**Appendix 5b. Questionnaire for Self-assessment Based upon the EFQM Excellence Model (after revision).**

**1. LEADERSHIP**

Excellent schools have leaders who carry on and facilitate the realization of the mission and vision, acting as role models for its values and ethics and inspiring trust at all times.

**Sub-criterion 1a. Development of mission and vision**

The school has developed and articulated the mission, vision and values which align with the vision and mission of the Catholic Church and guide the decision-making of the organization at all levels.

1. Has the school any document that defines its mission, vision and values?

Yes  No . If the answer is yes, please attach a copy of the document.

2. If there is, is this document well known by:

a. All the staff ; b. only the school administration ; c. the school administration and some teachers ; d. just the headmaster .

3. In which level does your school find itself?

Definitions of levels				
Level 1	Level 2	Level 3	Level 4	Level 5
Quality depends solely on the individual (no processes)	Process awakening (basic processes)	Vision through processes, professionalization and a guarantee of quality (intermediate processes)	Systematic assessment and improvement of processes (sophisticated processes)	Aiming for external excellence (excellent processes)
The vision and mission are not defined, or are so	The management has defined the vision and	The vision and mission are coordinated with	The vision and mission are communicated	The formulation of the vision and mission is

<p>general that they do not guide the work of the school. The activities are disconnected and/or without relation to the policies defined by the governing body (Education Office/Religious Congregation/Parish). The operations depend on the will of the individuals who carry them out.</p>	<p>mission of the school. It is explained to staff, but not necessarily operational. The values are defined, but are vague or are not systematically agreed upon by the staff. There are no follow-up procedures in place.</p>	<p>staff and understood within the school in general. This definition allows the development of strategies for the school to be formulated along with tactics and actions. The possibility of redefining strategies and goals is accepted with reluctance.</p>	<p>to, and approved by, the management of the institution. There is wide consensus on the definition of goals, thus making it easier to carry out the associated tactics and actions and build strategic partnerships. Processes defining and implementing the vision and mission are reviewed and readjusted regularly.</p>	<p>performed by the management of the school and by the governing board of the institution. The staff assumes the vision and mission as their own and transmits them from their position. The adaptation of values is assumed to be essential and obligatory. The definition and establishment of the vision and mission serve as a reference point for other schools.</p>
<p>Tick (√) the level of the school on this sub-criterion</p>				

**Sub-criterion 1b: Continuous improvement of management systems**

The management of the school promotes and guarantees the development, implementation, and continuous improvement of the management system.

1. Has the school well determined periods and procedures for its self-evaluation?  
 Yes  No . If the answer is yes, write the day of the last self-evaluation and attach a copy of it.
2. Does the school produce an Improvement Plan as a consequence of the self-evaluation? Yes  No . If the answer is yes, attach a copy of this Improvement Plan.
3. In which level does your school find itself?

<b>Definitions of levels</b>				
<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Level 4</b>	<b>Level 5</b>
<b>Quality depends solely on the individual (no processes)</b>	<b>Process awakening (basic processes)</b>	<b>Vision through processes, professionalization and a guarantee of quality (intermediate processes)</b>	<b>Systematic assessment and improvement of processes (sophisticated processes)</b>	<b>Aiming for external excellence (excellent processes)</b>
The management of the school has not systematically defined the management system. The director is more an administrator than a leader of the work culture and educational processes.	The management of the school possesses the know-how and will to adapt the organizational structure and the management system to function effectively. As a consequence, the management promotes the adaptation of a management system to the work of the school staff.	The school's management has clearly defined and implemented strategic processes. The operating procedures are developed and implemented. Support procedures are set in line with, and directed toward, strategic processes.	The management carries out a systematic follow up of the key results of the school, communicating and discussing the results achieved with the work teams. Improvements and innovations are promoted.	The Management and Leadership Model of the school is a reference for other schools. It functions properly from the point of view of different internal and external actors. The administration is invited to congresses and events to explain their model of management.
Tick (√) the level of the school on this sub-criterion				

### **Sub-criterion 1c: Leadership and external relations**

The school has systematic interaction with the parents of the students, the municipality, the Ministry, the providers of transport and other strategic partners and important stakeholder groups in order to operate for common interests and goals.

1. Is there an association for the parents of the students?

Yes  No . If the answer is yes, go ahead with question 2. Otherwise, skip directly to question 3.

2. How often does the school administration meet with the parents association?

a. Once a year ; b. Twice a year ; c. Three times a year or more ; d.

Just when problems arise .

3. In which level does your school find itself?

<b>Definitions of levels</b>				
<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Level 4</b>	<b>Level 5</b>
<b>Quality depends solely on the individual (no processes)</b>	<b>Process awakening (basic processes)</b>	<b>Vision through processes, professionalization and a guarantee of quality (intermediate processes)</b>	<b>Systematic assessment and improvement of processes (sophisticated processes)</b>	<b>Aiming for external excellence (excellent processes)</b>
The school's leaders do not take initiative in terms of external relations. Relationships between the school and external players are incidental and not planned. There is no direct contact between leaders and students, teachers, parents or external entities (municipality, Ministry...).	The school's leaders regularly participate with other schools, the municipality, the Ministry and institutions in the identification of common needs and solutions. The leaders propose that the school carry out joint projects with other institutions. The initiative is developed on a non-institutional basis but is tolerated by the administration of the school.	The school's management maintains direct links with the parents, the municipality, the Ministry, public and private institutions. Agreements generated are the result of the effective action of the leaders. Leaders occupy representative positions which allow the establishment of links with the school. Meetings are held periodically with other school directors.	The management systematically assesses external networks to improve strategic collaboration. External links and their results are valued in order to redefine the policies undertaken. The management systematically participates in meetings with other schools.	The school's management is considered a reference. The leaders are able to establish partnerships in order to create joint projects with other institutions. Their leadership extends beyond the internal environment and reaches international levels. The school actively participates in the formulation of development plans and solutions to resolve basic problems at national level.
Mark (√) the level of the school on this sub-criterion				

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### Sub-criterion 1d: Leadership and motivation

The school has processes for motivation and recognition of the staff.

1. How often does all the staff of the School hold general meetings?

a. Once a year ; b. Twice a year ; c. Three times a year or more ; d. Just when problems arise .

2. Are the employees able to explain the vision and mission of their school?

Yes  No .

3. In which level does your school find itself?

Definitions of levels				
Level 1	Level 2	Level 3	Level 4	Level 5
<b>Quality depends solely on the individual (no processes)</b>	<b>Process awakening (basic processes)</b>	<b>Vision through processes, professionalization and a guarantee of quality (intermediate processes)</b>	<b>Systematic assessment and improvement of processes (sophisticated processes)</b>	<b>Aiming for external excellence (excellent processes)</b>
The management of the school pays little attention to the initiatives of staff and has no direct contact with them. There are no formally established communication channels. There are no periodic meetings with the staff members. There are no fundamental criteria regarding	Random meetings and informal channels of communication are generated. Decisions taken in coordinating meetings are not executed. The administrative ways has the last word. Teachers and employees may make suggestions, but the ones considered are	There are defined channels of communication and regular meetings between staff and administration. The school's administration establishes recognition policies based on clear criteria. There is an annual staff award or similar positive	The establishment of agreed objectives, as well as teams for continuous and systematic improvement is proposed. Delegation of responsibilities is staff-promoted. Innovative contributions of employees are recognized. Meetings, to check targets and	Regular dialogues with individual employees are held to define work objectives and development plans. People who hold positions requiring innovation can use part of their time to independently use and improve educational innovation. There is a

staff recognition.	the only ones the director is interested in.	achievement recognition system. Professional development for staff is promoted at no cost to them.	how they are achieved, are held by leaders with administration and staff.	communication plan which allows management to maintain constant communication with school staff.
Tick (✓) the level of the school on this sub-criterion				

## 2. PLANNING AND STRATEGY

Excellent schools implement their mission, vision and values by developing a strategy focused on students, staff, parents and all stakeholders that leads to continuous improvement. Policies and strategies are based upon current and future needs and expectations and upon the data of performance indicators. These policies and strategies are developed, revised and refined and are coherent with the Catholic identity of the school.

### Sub-criterion 2a: Stakeholder input into strategic planning

The needs and expectations of stakeholders (teachers, students, parents, municipality, Ministry, staff and society) are taken into account in the process of strategic planning.

1. In which level does your school find itself?

Definitions of levels				
Level 1	Level 2	Level 3	Level 4	Level 5
Quality depends solely on the individual (no processes)	Process awakening (basic processes)	Vision through processes, professionalization and a guarantee of quality (intermediate processes)	Systematic assessment and improvement of processes (sophisticated processes)	Aiming for external excellence (excellent processes)
There is no analysis of the stakeholders'	Some studies of the needs of stakeholders	There is a formal, though non-systematic	There is a systematic methodology in	Systematic monitoring of needs and

needs (students, parents...)	have been made. These studies are not systematic. The information obtained is only partially used in the school's operations.	process which takes needs and expectations of stakeholders into account in the creation of strategies for the school.	place to observe and identify stakeholder needs. Meeting objectives based on identified needs and expectations of stakeholders is systematically assessed, and society is included as one stakeholder of the school.	expectations of stakeholders leads to changes in the school organisation, in accordance with the results to be achieved. Indicators are systematically compared with those obtained by other institutions of reference. The indicator data is accurate, reliable and available.
Tick (√) the level of the school on this sub-criterion				

### **Sub-criterion 2b: Performance indicator input to strategic planning**

The assessment of performance and satisfaction indicators regarding student and parents' satisfaction, staff, society and other core stakeholders serves as a key input to strategic planning.

1. How does your school measure the satisfaction of the students and parents with the school?
  - a. Through questionnaires ; b. Through informal exchange of opinions ; c. Never thought about it ; d. Through periodical meetings .
2. In addition to the marks of the students, which indicators does the school use to assess its performance? List them.
3. In which level does your school find itself?

Definitions of levels				
Level 1	Level 2	Level 3	Level 4	Level 5
<b>Quality depends solely on the individual (no processes)</b>	<b>Process awakening (basic processes)</b>	<b>Vision through processes, professionalization and a guarantee of quality (intermediate processes)</b>	<b>Systematic assessment and improvement of processes (sophisticated processes)</b>	<b>Aiming for external excellence (excellent processes)</b>
There is a casual and non-systematic awareness of the mentioned indicators. The information is based on the individual performance of persons. Decisions are based on opinions rather than facts.	There is an incomplete, systematic process carried out by the school's administration for periodic collection of information regarding the afore mentioned indicators. Indicators are observed with interest, but not analysed in detail. Preventive measures are not taken concerning the results obtained.	Information referring to the mentioned indicators is collected periodically to adopt strategic actions in the short term.	The data collection system for indicators is systematic and complete. Giving information about the results is part of the communication plan. The indicators are analysed in depth and preventive measures are taken based on the results obtained.	The results are gathered in real-time and required resources are used as economically as possible to obtain indicator data for future planning. Indicators are systematically compared with those obtained by other schools of reference. The indicator data is accurate, reliable and available.
Tick (√) the level of the school on this sub-criterion				

### **Sub-criterion 2c: Designing, communicating and validating the strategic plan**

The strategic plan is defined, shared, implemented, assessed, and validated to ensure its effective implementation and follow-up. If the school doesn't have a strategic plan, you can jump to the following criterion.

1. Has the school a Strategic Plan that, in addition to its mission, vision and values, defines some priorities or goals to be realized in the coming years and the strategies to achieve them?

Yes  No . If the answer is yes, please attach a copy of the document. If it is no, you can skip to criterion 3.

2. In which level does your school find itself?

<b>Definitions of levels</b>				
<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Level 4</b>	<b>Level 5</b>
<b>Quality depends solely on the individual (no processes)</b>	<b>Process awakening (basic processes)</b>	<b>Vision through processes, professionalization and a guarantee of quality (intermediate processes)</b>	<b>Systematic assessment and improvement of processes (sophisticated processes)</b>	<b>Aiming for external excellence (excellent processes)</b>
The school has a strategic plan, but it does not guide operational activities. There is little connection between the strategic plan and actions taken in different school activities.	The school has a strategic plan, but it does not guide operational activities. There is little connection between the strategic plan and actions taken in different school activities.	Systematic communication exists, but there is no discussion or improvement. In coordination meetings, decisions are taken regarding whether the training programs correspond to the policies and strategy. There are indicators and assessment, as well as systematic planning and comparisons made with policy and strategy.	There are systematic activities covering documentation, presentation, communication, and discussion to improve the processes. Attempts are made to creatively adapt proposals to the school's policies and strategy, seeking innovation rather than the same old way of operating. The importance of assessment and innovation in planning is highly valued.	Policy is developed in conjunction with the school's staff. Such a process is used as a benchmark by other schools. Training plans are based on the school's policy and strategy, and used as a base for the development of new educational methodologies. Periodic meetings are held, with both internal and external representatives, to reflect on whether the strategic plan is being executed effectively.
Tick (✓) the level of the school on this sub-criterion				

**Sub-criterion 2d: Implementation of policies and strategy and updating the strategic plan**

The administration of the school communicates and executes defined strategies and policies, as well as provides continuous updates to the plan.

1. In which level does your school find itself?

<b>Definitions of levels</b>				
<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Level 4</b>	<b>Level 5</b>
<b>Quality depends solely on the individual (no processes)</b>	<b>Process awakening (basic processes)</b>	<b>Vision through processes, professionalization and a guarantee of quality (intermediate processes)</b>	<b>Systematic assessment and improvement of processes (sophisticated processes)</b>	<b>Aiming for external excellence (excellent processes)</b>
There is no clear and complete communication of policies and strategies. Planning of activities depends on personal initiative, and there is no consultation with other persons; thus preventing the execution of coherent tactics. A strategic plan cannot be executed because it does not exist. There is no assessment of policies and strategy.	There is documentation available, but no effort is made to communicate or share it. People consult colleagues regarding undefined situations. They do not consult policy or strategy, because they do not identify with it. Employees must personally consult management to get information about policy and strategy.	A strategic planning process has been defined with due awareness of the competitive advantages available. The implementation process of this plan is characterized by tactics, actions, priorities, timetables for execution, responsibilities, methods and assessment periods with defined documents and follow-up indicators.	There is a dynamic and systematic process for the assessment and improvement of the Strategic Plan based on continuous analysis of indicators and the environment. The process is deployed with the coordinators and school administrators.	The Strategic Plan is completely aligned with the Vision and Mission of the school. The Strategic Plan is implemented at all levels of the school and is reviewed and improved in accordance with systematic procedures. The methodology employed for its development is a benchmark for other schools.
Tick (√) the level of the school on this sub-criterion				

**Sub-criterion 2e: School Catholic identity**

The school expresses its Catholic identity in a clear way:

1. Is there a census of the students of Catholic families who have not received the Sacraments of initiation?

Yes ; No . Attach a copy in case of positive answer.

2. Are there catechism classes for children of Catholic families who have not received the sacraments of initiation?

Yes ; No .

3. Are there pastoral activities for Catholic students of the school (Eucharistic celebrations, retreats, catechesis...)?

Yes ; No .

4. Are Catholic symbols visible in the school? Yes ; No .

5. Does the school prepare appropriate Christmas decoration? Yes ; No .

6. There is a strategic planning that includes the care for the Catholic identity: Yes ; No .

7. Does the academic calendar include Christian celebrations? Yes ; No .

8. Does the Parish priest or the competent ecclesiastical authority regularly visit the school? Yes ; No .

9. Does the school day start with prayer? Yes ; No .

10. Are a picture of the current Pope and Archbishop displayed and visible? Yes ; No .

11. Is the staff ethnically diverse? Yes ; No .

12. Is the student body socio-economically and ethnically diverse? Yes ; No .

13. In which level does your school find itself?

<b>Definitions of levels</b>				
<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Level 4</b>	<b>Level 5</b>
<b>Quality depends solely on the individual (no processes)</b>	<b>Process awakening (basic processes)</b>	<b>Vision through processes, professionalization and a guarantee of quality (intermediate processes)</b>	<b>Systematic assessment and improvement of processes (sophisticated processes)</b>	<b>Aiming for external excellence (excellent processes)</b>
<p>There are few visible Christian symbols in the school. The celebrations of prayer, retreats, Sacraments and liturgy are rare or inconsistent. There are limited opportunities for the spiritual formation of students and staff. Collaboration between parents, Parish and school is inconsistent and has variable benefit to the students and to the life of the Church. The school rarely engages the parish in its mission to be a dynamic faith community. The school rarely initiates collaborative activities with the local Parish.</p>	<p>Staff members have a limited understanding of Catholic social teaching. The Christian understanding of the innate dignity of the human person is rarely reflected in all policies and practices of the school. The effectiveness of the school's prayer and liturgical life is rarely reflected upon and evaluated. The school provides only limited opportunities for students to become aware of being called into a personal relationship with God. The school provides few opportunities for the students to participate in the sacraments, especially in Eucharist and Reconciliation.</p>	<p>The school recognizes and appreciates the diversity of cultures among students and staff. There is an ad hoc approach to helping students to learn how to pray both formally and informally. The school is proactive in working to ensure that Catholic faith, tradition and culture are actively fostered and celebrated. Catholic symbols and icons are visible throughout the school. The school is involved in key celebrations of the local Parish.</p>	<p>The school has a census of the children of Catholic families who have not received the Sacraments of initiation and organize catechism for them or refer them to the Parish Priest. The celebration of the Eucharist, Sacraments and prayer is central to the religious life of the school. The school fosters collaboration with parents, Parish and school, which contributes to the life of the local Church and is a direct benefit to students. The school complements and engages with the Parish in its mission to be a dynamic faith community. The school provides regular opportunities for the students to</p>	<p>Jesus Christ and His teachings are central and clearly articulated in the school's vision and mission statement and permeate nearly all communications and aspects of policy, planning and action in the school. The school incorporates Gospel teachings and values in all communications, policy documents and future planning. The school has a systematic approach to supporting the spiritual formation of staff. Students effectively learn about the close connection between Gospel, faith and life through well integrated learning experiences. Christian students are</p>

			participate in the sacraments, especially in Eucharist and Reconciliation.	provided with many well focused opportunities to critique the relationship between their culture and Christian values.
Tick (√) the level of the school on this sub-criterion				

### 3. PEOPLE

Excellent schools value their people and create a culture that allows the mutually beneficial achievement of organizational and personal goals. They develop the capabilities of their people and promote fairness and equality. They care for, communicate, reward and recognize, in a way that motivates people, builds commitment and enables them to use their skills and knowledge for the benefit of the school. This criterion includes: planning, management and development of human resources; implication and assumption of responsibilities; importance of dialogue; appreciation and attention to the persons.

#### **Sub-criterion 3a: Human resource management**

The school has processes to recruit and manage its human resources.

1. Does the school have a written procedure for the recruitment of new staff?

Yes  No . If the answer is yes, please attach a copy of the document.

2. In which level does your school find itself?

<b>Definitions of levels</b>				
<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Level 4</b>	<b>Level 5</b>
<b>Quality depends solely on the individual (no processes)</b>	<b>Process awakening (basic processes)</b>	<b>Vision through processes, professionalization and a guarantee of quality (intermediate processes)</b>	<b>Systematic assessment and improvement of processes (sophisticated processes)</b>	<b>Aiming for external excellence (excellent processes)</b>
The recruitment of new personnel is based upon family bonds or personal relations of the administration.	The recruitment of new administrative staff is based upon family bonds or personal relations of the administration while the recruitment of teaching staff involves a Committee of selection.	There is documentation which outlines the staff policy of the school (recruitment of new staff and management) and the job description of every position.	The school has defined tasks for each employee. Management's processes include necessary competencies required for the tasks and their development. Staff policy is considered within the context of the strategic plan. The staff policy is agreed upon by the management and work teams and reviewed regularly.	The school defines competency profiles for the future. It has a diverse, multidisciplinary, innovative, and international combination of human resources. Innovation is a shared value of the school. People are seen as an investment. There is consensus among the staff, management, and the governing board on human resource management policy. The staffing policy is used as a benchmark, and becomes a national and international point of reference.
Tick (√) the level of the school on this sub-criterion				

### Sub-criterion 3b: Competence development of the staff

The school has policies and processes to improve its intellectual capital and its individual and organisational competencies.

1. What is the percentage of teachers who are holders of a university diploma:
  - i. Intermediate Diploma:
  - ii. Bachelor's Degree:
  - iii. Post graduate Diploma:
  - iv. Master's Degree:
  - v. PhD:
  
2. What is the percentage of teachers who, in the subject they teach, are no holders of any university diploma in that specific field of knowledge?
  
3. What is the average of years of experience of the full time teachers of the school?
  - a.  $5 \leq$ ; b.  $\geq 6 \leq 10$ ; c.  $\geq 11 \leq 20$ ; d.  $\geq 20$ ;
  
4. In which level does your school find itself?

Definitions of levels				
Level 1	Level 2	Level 3	Level 4	Level 5
<b>Quality depends solely on the individual (no processes)</b>	<b>Process awakening (basic processes)</b>	<b>Vision through processes, professionalization and a guarantee of quality (intermediate processes)</b>	<b>Systematic assessment and improvement of processes (sophisticated processes)</b>	<b>Aiming for external excellence (excellent processes)</b>
If the school staff is specialized in any area, it is because they have done it of their own initiative. The functional areas of the school may be unattended due to lack of training or	The required occupational profiles have been identified for the functional areas of the school to meet every day needs in the short term. Development needs are defined, however training initiatives are	There is identification and classification of skills and competencies of staff, and the needs of the school. Functional areas are considered when defining the training plans for employees.	Improvement of personal skills is encouraged and seen as an essential part of the work. There are systematic actions which assess, review, update, and balance skills and competencies of the staff and the	The school operates as a learning organization. Staff members receive specialized training based on individual Professional development plans. The plans are focused on the development

because they have not been identified.	random. Staff members participate in training on an individual basis. There is no follow-up on the training and it is not systematically implemented in work processes.	Development and training are part of the strategic plan and its implementation. The results of individual training are shared and implemented within the school.	needs of the school. The effectiveness of training programmes is assessed	needs of different tasks and sufficiently cover functional areas of the organization. Members of the staff, in a process of continuous improvement of intellectual capital, are given initiative to develop new competencies needed for a systematic organizational development. Employees are trainers and mentors of other employees.
Tick (√) the level of the school on this sub-criterion				

### Sub-criterion 3c: Staff commitment and involvement

The school has material and moral incentives and processes to boost employee commitment, involvement and responsibility.

1. What are the:

- Lowest salary of a full time teacher \_\_\_\_\_
- Highest salary of a full time teacher \_\_\_\_\_
- Average salary of a full time teacher \_\_\_\_\_

2. In which level does your school find itself?

<b>Definitions of levels</b>				
<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Level 4</b>	<b>Level 5</b>
<b>Quality depends solely on the individual (no processes)</b>	<b>Process awakening (basic processes)</b>	<b>Vision through processes, professionalization and a guarantee of quality (intermediate processes)</b>	<b>Systematic assessment and improvement of processes (sophisticated processes)</b>	<b>Aiming for external excellence (excellent processes)</b>
Staff responsibilities at the school are ambiguously defined but are not communicated to staff. Each one carries out the task without a global vision of the existing processes. People are limited to carrying out those tasks assigned by a superior in an attempt to follow the chain of command.	The school has included Work Groups with defined responsibilities. The staff begins to form part of a group and a process, and they acquire delegated functions and responsibilities. The focus is on the daily tasks of the school, which helps to identify needs of the organisation.	The organisation of each group's work facilitates the active the staff, promoting creativity, innovation and team work. The staff understands and accepts the tasks of their group. Staff members make decisions and are responsible for the results. This process allows different groups to work similarly, based on the strategy of the school.	The school has planned and defined tools which stimulate innovation and creativity of the people and groups. The people identify with the strategic goals of the organisation. There are periodic presentations of innovations conceived by each group. There is a delegation of functions in the organisational structure.	The assessment strategy permits the identification of individual and group contributions for later improvement and recognition. These innovations have a positive effect on the work of the school, inspire confidence, and encourage comparisons with other schools - serving as a benchmark for many of them. The school opts to reward investments in the staff. The work place atmosphere is a benchmark for the entire school.
Tick (✓) the level of the school on this sub-criterion				

### **Sub-criterion 3d: Internal communications**

The school has effective processes for staff communication.

1. How does the school administration usually communicate decisions or information to the staff? (Here you can tick more than once).

a. By phone ; b. Through meetings ; c. through letters ; d. Through

written announcements on a board ; e. Through personal encounters.

b. In which level does your school find itself?

<b>Definitions of levels</b>				
<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Level 4</b>	<b>Level 5</b>
<b>Quality depends solely on the individual (no processes)</b>	<b>Process awakening (basic processes)</b>	<b>Vision through processes, professionalization and a guarantee of quality (intermediate processes)</b>	<b>Systematic assessment and improvement of processes (sophisticated processes)</b>	<b>Aiming for external excellence (excellent processes)</b>
Communication between staff and management is informal and random. This generates disinformation and does not promote sharing of objectives and results in each work area. There are either no reports or, if there are reports, they are not shared. Some staff works in isolation, causing mistakes to be repeated.	There are channels of communication, but they are not connected. The responsibilities and accountability for managing these channels are vague. Information is diligently collected, but not distributed in all necessary directions. There are reports – many of which are shared horizontally, but not vertically.	There is a communication system using modern Information and Communication Technologies (ICT), completed with people who are responsible for making it work and for updating it. There is a programme of informative meetings at all levels. There are defined objectives, goals, deadlines, prerequisites of action, etc.	There is optimization of work teams through systematic dialogue and communication; which in turn, allows experiences and best practises to be shared and improves the workplace environment. Ideas arise for ways to improve systems and forms of communication. Communication between staff and management is respectful and honest, and not strictly defined by the hierarchy.	The channels of communication facilitate creation of innovative proposals at all levels of the school, and promote visionary teams focused on continuous improvement. There is an internal and external assessment of innovative ideas, regardless of origination. The communication management model serves as a reference point for other organisation/programmes.
Tick (√) the level of the school on this sub-criterion				

## 4. PARTNERSHIPS AND RESOURCES

Excellent schools plan and manage external partnerships, suppliers and internal resources in order to support their strategy, policies and the effective operation of processes. External partners may be the Educational Inspection of the municipality, the State Ministry of Education, etc. Excellent schools ensure that they effectively manage their environmental and societal impact. This criterion includes these elements: management of partnerships; management of financial resources; management of premises, equipment and material resources; management of technology; management of information and knowledge.

### Sub-criterion 4a: External partnerships management

The school develops and manages its external partnerships (with other schools, universities, municipality, Ministry, public and private institutions, cooperation networks, NGO's, Language Institutes, etc.) to strengthen its activities.

1. Mention external partners of your school:
2. In which level does your school find itself?

<b>Definitions of levels</b>				
<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Level 4</b>	<b>Level 5</b>
<b>Quality depends solely on the individual (no processes)</b>	<b>Process awakening (basic processes)</b>	<b>Vision through processes, professionalization and a guarantee of quality (intermediate processes)</b>	<b>Systematic assessment and improvement of processes (sophisticated processes)</b>	<b>Aiming for external excellence (excellent processes)</b>
There are no existing policies or strategies for our school to establish external partnerships. Existing partnerships are only the result of casual agreements.	Our school has policies and strategies to establish external partnerships. However, these policies are not always in line with our strategic plan. No individual is	External partnerships are systematically related to policies and strategies of our school. Responsibility for the development and implementation of policies and	Projects resulting from external partnerships are assessed to determine results, with regard to planned objectives and established goals of the school.	Development projects are undertaken in collaboration with other institutions. Successful results of external partnerships make the school a prestigious

	specifically responsible for the development and implementation of policies and strategies.	strategies within the school has been assigned.	These results are used within the school to improve procedures and existing activities. New partnerships are continually pursued.	international reference for other schools seeking this type of cooperation.
Tick (√) the level of the school on this sub-criterion				

### **Sub-criterion 4b: Economic and financial management**

The school has developed its management of economic and financial resources, and processes to strive for growth and sustainability.

1. Does the school have a budget?

Yes  No . If the answer is yes, please attach a copy of the document.

2. Who is involved in the preparation of the budget?

3. When and how is the budget compared with the financial situation? \_\_\_\_\_

How many times a year?

a. Once a year ; b. Twice a year ; c. Never ; d. Three or more times a year .

4. In which level does your school find itself?

Definitions of levels				
Level 1	Level 2	Level 3	Level 4	Level 5
<b>Quality depends solely on the individual (no processes)</b>	<b>Process awakening (basic processes)</b>	<b>Vision through processes, professionalization and a guarantee of quality (intermediate processes)</b>	<b>Systematic assessment and improvement of processes (sophisticated processes)</b>	<b>Aiming for external excellence (excellent processes)</b>
The school spends money from the school fees as far as cash remains without clear reference to any overall programme or budget. Towards the end of the academic year there are delays and difficulties in paying the staff.	There are established and defined programming and budgetary structures in place. There are overall financial goals for the school, but this plans are not respected and there is no continuous confrontation between the ongoing status and the budgetary plans.	A financial plan is defined annually. This plan does not include just financial goals for the following year, but also aims at guaranteeing the future sustainability of the school on the long term.	There is continuous assessment of the success in meeting internal goals and targets, and partnerships permitting reorganisation as required. Results are assessed to better develop projects and select strategic partners. The school grows from the financial point of view.	Additional projects are generated beyond the normal activities involving national and international institutions. The school is considered a leading and strategic partner for other institutions, Generating income to fund and develop innovative programmes. The school can be considered a sustainable reality.
Tick (√) the level of the school on this sub-criterion				

#### **Sub-criterion 4c: Material resources, premises and equipment management**

The material resources are inventoried, renewed, cared for, etc.

1. Does the school have a written inventory of the furniture and equipment?

Yes  No . If the answer is yes, please attach a copy of the inventory.

2. Is there a full time responsible for the maintenance of the building?

Yes  No .

3. In which level does your school find itself?

<b>Definitions of levels</b>				
<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Level 4</b>	<b>Level 5</b>
<b>Quality depends solely on the individual (no processes)</b>	<b>Process awakening (basic processes)</b>	<b>Vision through processes, professionalization and a guarantee of quality (intermediate processes)</b>	<b>Systematic assessment and improvement of processes (sophisticated processes)</b>	<b>Aiming for external excellence (excellent processes)</b>
The school does not have any inventory of furniture and material resources. There is not a well-defined plan for the material development of the school. There is a continuous deterioration of the premises.	There are old inventories that are not periodically checked and updated. Repairs are done sporadically.	The inventory is checked and renewed every year. Repairs are done when needed.	There is continuous follow up of the functioning of devices and status of furniture and equipment. Results are assessed to better develop projects in order to improve the resources according to a defined plan.	Additional projects are generated beyond the normal activities involving national and international institutions. The school is an example in its care for equipment and premises.
Tick (√) the level of the school on this sub-criterion				

#### **Sub-criterion 4d: Technology management**

The integration of ICT serves the management, staff, operations, products, and learners of the school.

1. How many computers does the school have?

a. 0 ; b.  $\geq 1 \leq 2$  ; c.  $\geq 3 \leq 7$  ; d.  $\geq 8 \leq 12$  ; e.  $\geq 13$  .

2. How many multimedia projectors does the school have?

a. 0 ; b.  $\geq 1 \leq 2$  ; c.  $\geq 3 \leq 4$  ; d.  $\geq 5 \leq 7$  ; e.  $\geq 8$  .

3. In which level does your school find itself?

Definitions of levels				
Level 1	Level 2	Level 3	Level 4	Level 5
<b>Quality depends solely on the individual (no processes)</b>	<b>Process awakening (basic processes)</b>	<b>Vision through processes, professionalization and a guarantee of quality (intermediate processes)</b>	<b>Systematic assessment and improvement of processes (sophisticated processes)</b>	<b>Aiming for external excellence (excellent processes)</b>
Staff in the school work without any support of technology. The school does not provide technological support to staff, teachers or learners. There are no standards for the exchange and systematisation of information.	The school has technological systems which partially facilitate financial, administrative and academic tasks. Some routines and processes are computerised. The organisation has ICT applications, and information on training activities is introduced with the help of ICT.	The school is equipped with appropriate technology to support management. The internal system is structured, and capable of exchanging information with no individual applications. All data gathered is transformed into information.	Internal processes of the school are monitored using appropriate ICT facilities. The school's users provide continuous improvement, which the information system incorporates as necessary.	Technology is used in an optimal, efficient way to meet students' and parents' needs. The quality of information is constantly improved. This facilitates the relationship between the school and the parents, and improves employee performance. The quality of all processes is fully controlled. The system is a benchmark for other schools
Tick (✓) the level of the school on this sub-criterion				

**Sub-criterion 4e: Information and knowledge management**

The school collects, keeps and manages information and knowledge to support its policies and strategy.

1. List the kind of files contained in the school archives (bills, payment sheets, students' records....)?

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2. Are these files updated?

Yes  No .

3. In which level does your school find itself?

Definitions of levels				
Level 1	Level 2	Level 3	Level 4	Level 5
<b>Quality depends solely on the individual (no processes)</b>	<b>Process awakening (basic processes)</b>	<b>Vision through processes, professionalization and a guarantee of quality (intermediate processes)</b>	<b>Systematic assessment and improvement of processes (sophisticated processes)</b>	<b>Aiming for external excellence (excellent processes)</b>
The school does not have well-ordered and updated archives.	Some aspects are well recorded and some others remain neglected.	There is a person responsible for the collection and study of relevant documents. The school has a website or a page in the social media to inform staff, students, parents and different stakeholders.	The school has well-ordered and updated archives available for the staff. The web is user-friendly and interactive.	The information systems of the school are a point of reference for other schools.
Mark (√) the level of the school on this sub-criterion				

## 5. PROCESSES, PRODUCTS AND SERVICES

Excellent schools design, manage and improve processes and services to generate increasing value for students, parents and other stakeholders. In a school there are some processes that should be designed and followed up with care like:

- The organization of the school (time table, appointment of personnel, grouping of students, transport management...);
- School climate (relations, insertion of new students, control of attendance, school entrance and exit of students...);
- Teaching and learning (application of strategies and plans...);
- Students evaluation (design and execution of evaluation);
- Orientation and coaching (application of objectives defined for the coaching of students and their families).

Therefore this criterion includes: identification of the needs of different stakeholders, design of the school educational project, plan for the evaluation of students and teaching-learning process, management of new students, follow-up of the evolution of results, definition of indicators to assess the results of processes and objectives for improvement; management and support to the implementation of changes, revision of key processes to ensure their progress and success (EFQM, 2017; Martinez Median and Rioperez, 2005; Aragón Marin, 2001).

### **Sub-criterion 5a: Well-designed processes**

The school identifies the processes that take place in it and defines their persons in charge, the procedures for their management and assessment.

1. How would you define the teaching-learning method at your school?
  - a. Memorization and repetition ; b. Critical thinking ; c. Participation and interaction ; d. Discovery learning .
2. How does the school evaluate the progress of its students?
  - a. Just with the final exams ; b. It depends on the teacher ; c. With periodical assignments and tests in addition to the final exams .
3. In which level does your school find itself?

<b>Definitions of levels</b>				
<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Level 4</b>	<b>Level 5</b>
<b>Quality depends solely on the individual (no processes)</b>	<b>Process awakening (basic processes)</b>	<b>Vision through processes, professionalization and a guarantee of quality (intermediate processes)</b>	<b>Systematic assessment and improvement of processes (sophisticated processes)</b>	<b>Aiming for external excellence (excellent processes)</b>
The organization of the school (time table, appointment of personnel, grouping of students, management of the transport...) depends on the initiative of single persons. There is no awareness on the characteristics of the school climate (relations, insertion of new students, control of attendance, school entrance and exit of students...); there is not any common policy for the evaluation of neither students nor persons in charge of orientation and coaching.	The basic school processes previously described are executed even if there is no written planning nor well defined in charge persons for them.	Every process has a well-defined person in charge of starting the process and follows it up. There are written documents that define clearly who is the responsible for every process and how the process should be managed and assessed.	The different processes are assessed with defined indicators, reviewed every year and modified according to the needs of the students, the educational project of the school and its policies and strategies.	The way the processes is designed, executed and assessed is a point of reference for other schools.
Tick (√) the level of the school on this sub-criterion				

### **Sub-criterion 5b: The management of processes leads to continuous improvement**

Processes are improved, as needed, using innovation and development of certain priorities in order to fully satisfy and generate increasing value for students and their families.

1. How much impact do workshops on teaching methods have on the teachers of your school?

a. No impact at all ; b. Just for a short time after the workshop. Then every teacher continues doing as he/she was doing before ; c. Some teachers have really changed after the workshops. Others continue teaching in the same way ; d. The workshops caused a real and lasting renewal in the methods of the teaching staff .

2. In which level does your school find itself?

<b>Definitions of levels</b>				
<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Level 4</b>	<b>Level 5</b>
<b>Quality depends solely on the individual (no processes)</b>	<b>Process awakening (basic processes)</b>	<b>Vision through processes, professionalization and a guarantee of quality (intermediate processes)</b>	<b>Systematic assessment and improvement of processes (sophisticated processes)</b>	<b>Aiming for external excellence (excellent processes)</b>
There is no systematic revision of the processes and any improvement is due to individual initiatives.	After having reviewed the different processes of the school, some priorities of processes to be improved have been identified but no well-organized plans have been designed to implement such improvement.	After having reviewed different school processes, some priorities of areas to be improved have been identified. A plan was designed to apply the necessary improvement, but this was not monitored. There is a certain improvement but there is no true renewal in the teaching methods.	There are well defined procedures to improve the processes that have been identified. These procedures are properly monitored and assessed. There is a continuous renewal in the teaching methods and the evaluation processes.	The way the school monitors, assesses and renews its processes is a point of reference for other schools.
Tick (✓) the level of the school on this sub-criterion				

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**Sub-criterion 5c: Processes are responsive according to students and parents needs and expectations**

The school has defined procedures to identify the needs and expectation of students, parents and other stakeholders and improve its processes accordingly.

1. Does your school systematically identify the needs and expectations of the students and parents?

Yes  No .

2. How does the school identify the needs and expectations of the students and parents?

- a. Through personal encounters ; b. In formal meetings ; c. Through written letters (Suggestions' Box) ; d. Through questionnaires or surveys. .

3. In which level does your school find itself?

<b>Definitions of levels</b>				
<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Level 4</b>	<b>Level 5</b>
<b>Quality depends solely on the individual (no processes)</b>	<b>Process awakening (basic processes)</b>	<b>Vision through processes, professionalization and a guarantee of quality (intermediate processes)</b>	<b>Systematic assessment and improvement of processes (sophisticated processes)</b>	<b>Aiming for external excellence (excellent processes)</b>
There are no determined procedures to identify the needs and expectations of students and parents. This fact remains a personal initiative of staff	The parents have the possibility of express their expectations and needs in formal meetings.	The school holds regular meetings with the parents and students class delegates where these ones express their expectations and needs that are taken into account by the	The administration prepares questionnaires or surveys to identify the needs and expectations of students, parents and other stakeholders,	The way the school involves students, parents and other stakeholders through the consideration of their needs and expectations in reshaping the processes of the

members willing to listen to them.		school administration to improve the processes of the school (evaluation, teaching-learning...)	analyses the results, assesses the different processes and elaborates a plan to improve them based upon this analysis. The application of this plan is also evaluated.	school and improving constantly becomes a point of reference for other schools.
Tick (√) the level of the school on this sub-criterion				

### Sub-criterion 5d: Administrative and financial management

The school is equipped with an efficient, effective system for administrative and financial management.

1. In which level does your school find itself?

Definitions of levels				
Level 1	Level 2	Level 3	Level 4	Level 5
<b>Quality depends solely on the individual (no processes)</b>	<b>Process awakening (basic processes)</b>	<b>Vision through processes, professionalization and a guarantee of quality (intermediate processes)</b>	<b>Systematic assessment and improvement of processes (sophisticated processes)</b>	<b>Aiming for external excellence (excellent processes)</b>
The way of carrying out the financial administration remains a choice of few persons in charge.	The school has planned procedures for internal management. Administrative and financial systems are partially implemented.	All administrative and financial tasks are defined, systemised and procedural. The procedures are transparent, clear and verifiable. There is a person responsible for each administrative and technical procedure.	Indicators have been established to assess and improve the administrative and financial procedures in place. The terms for registration and payment of school fees or other school items are continuously assessed and reviewed to	The administration is continuously involved in the improvement of its procedures and processes. It voluntarily submits to external auditing of its management systems. The school receives requests from managers

		Budgeting and accounts management are defined through common procedures and known throughout the school organisation.	systemise improvements.	of other schools to compare and improve their internal procedures. Its practices are considered the best in its immediate area.
Tick (√) the level of the school on this sub-criterion				

## 6. STUDENTS AND PARENTS (CUSTOMERS) RESULTS

Excellent schools achieve and sustain outstanding results that meet or exceed the needs and expectations of students and their parents.

### Sub-criterion 6a: Students and parents satisfaction

Here the school evaluates the perception of students and parents in relation to the school work. Information can be obtained through surveys, compliments and complaints, etc.

1. In which level does your school find itself?

<b>Definitions of levels</b>				
<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Level 4</b>	<b>Level 5</b>
<b>Quality depends solely on the individual (no processes)</b>	<b>Process awakening (basic processes)</b>	<b>Vision through processes, professionalization and a guarantee of quality (intermediate processes)</b>	<b>Systematic assessment and improvement of processes (sophisticated processes)</b>	<b>Aiming for external excellence (excellent processes)</b>
No information is gathered regarding the satisfaction of	Consistent measurements of satisfaction are gathered, but	Collected measures show satisfaction with the school.	Collected measures show a high level of satisfaction with	The school is considered a model for others.

parents and students with the school.	parents and students keep showing dissatisfaction with the school.		the school.	
Tick (✓) the level of the school on this sub-criterion				

### **Sub-criterion 6b: Indicators of performance.**

These indicators predict perceptions of students and parents.

1. Which percentage of students leaves your school every year before reaching their final class (class 8) and move to other schools?

- a. Not known ; b.  $\geq 30\%$  ; c.  $\geq 16\% \leq 30\%$  ; d.  $\geq 6\% \leq 15\%$  ; e.  $\leq 5\%$  .

2. How many written complaints per year are received?

- a.  $\leq 2$  ; b.  $\geq 3 \leq 10$  ; c.  $\geq 11 \leq 20$  ; d.  $\geq 21$  .

## **7. PERSONNEL RESULTS**

Excellent schools achieve and sustain outstanding results that meet or exceed the needs and expectations of their staff.

These CRITERIA should address the results of the work and satisfaction of school staff. They should also link to the human resource management criteria.

Measurement should focus on the areas over which the school has freedom to act. It is important for all kinds of organisations to directly record results concerning the employees' perception of: the school and its mission; the working environment; the school's management and management systems; career development; the development of personal skills; and the products and services the school provides.

### Sub-criterion 7a: Staff satisfaction

School staff members consistently exhibit satisfaction with their being employed in the organisation, as well as with their specific roles and responsibilities. They are consistently satisfied with the support that the administration provides regarding motivation, recognition, training, atmosphere, health, etc.

1. An indicator of satisfaction is the absence rate. How many staff members have a one day absence per week in a normal week?

a. Not known ; b.  $\geq 30\%$  ; c.  $\geq 16 \leq 30$  ; d.  $\geq 6 \leq 15$  ; e.  $\leq 5\%$  ;

Attach a sample of the staff attendance records, if present.

2. In which level does your school find itself?

Definitions of levels				
Level 1	Level 2	Level 3	Level 4	Level 5
<b>Quality depends solely on the individual (no processes)</b>	<b>Process awakening (basic processes)</b>	<b>Vision through processes, professionalization and a guarantee of quality (intermediate processes)</b>	<b>Systematic assessment and improvement of processes (sophisticated processes)</b>	<b>Aiming for external excellence (excellent processes)</b>
Staff satisfaction is not measured and/or no information is available.	Staff satisfaction is measured and shows negative trends and/or results that do not meet relevant targets.	Staff satisfaction shows improving trends and/or most relevant targets are met.	Staff satisfaction shows substantial progress and/or all relevant targets are met.	Staff satisfaction is excellent and sustained results are achieved. All relevant targets are met. Positive comparisons with relevant schools for all key results are made.
Tick (✓) the level of the school on this sub-criterion				

### Sub-criterion 7b: Staff performance

The school has enough staff to respond to the needs and expectations of students and parents productively and efficiently. School staff members are measured through

performance evaluations, feedback from students and parents, and contributions to school goals.

1. What is the frequency of the homework asked by every teacher?

a. Daily ; b. Weekly ; c. Monthly ; d. Rarely .

A questionnaire could be distributed among the teaching staff

2. In which level does your school find itself?

<b>Definitions of levels</b>				
<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Level 4</b>	<b>Level 5</b>
<b>Quality depends solely on the individual (no processes)</b>	<b>Process awakening (basic processes)</b>	<b>Vision through processes, professionalization and a guarantee of quality (intermediate processes)</b>	<b>Systematic assessment and improvement of processes (sophisticated processes)</b>	<b>Aiming for external excellence (excellent processes)</b>
Performance of the staff is not assessed.	The performance of the staff is below average and there is evidence that the majority of staff do not support the school's goals.	The performance of the majority of staff members meets minimum requirements.	The performance of the majority of staff members is above the expected level, and staff collaborates effectively to achieve the school's goals.	School staff serves as a model for other schools. They operate at a highly effective work level based on collaboration, knowledge sharing and team learning, regularly exceeding the expectations of their positions, and consistently achieving the school's goals.
Tick (√) the level of the school on this sub-criterion				

## 8. SOCIETY RESULTS

Excellent schools achieve and sustain outstanding results that meet or exceed the needs and expectations of relevant stakeholders within society.

### Key Implications

This CRITERION will measure the school's impact on society and community. These measures cover both measures of perception and, where available, quantitative indicators.

The assessment considers what the school is achieving with regard to impact on society and the needs of society.

### Sub-criterion 8a: Image

The school's visibility, engagement and reputation are recognised as a result of its programmes, extra-curricular activities, and the role of its personnel in society.

Definitions of levels				
Level 1	Level 2	Level 3	Level 4	Level 5
<b>Quality depends solely on the individual (no processes)</b>	<b>Process awakening (basic processes)</b>	<b>Vision through processes, professionalization and a guarantee of quality (intermediate processes)</b>	<b>Systematic assessment and improvement of processes (sophisticated processes)</b>	<b>Aiming for external excellence (excellent processes)</b>
There is no recognition or good fame for the school.	There is some recognition or good fame for the school.	The name of the school is good in all fields. The staff of the school participates in many collaborative development activities in society.	The school influences the development policies of the municipality or the Ministry.	The name of the school is outstanding as an initiator of important developments in society.
Tick (√) the level of the school on this sub-criterion				

### Sub-criterion 8b: Social responsibility

As part of its routine activities, the school takes a proactive role in developing socially-oriented awareness, and concrete activities which are relevant to its own staff and the external community.

Definitions of levels				
Level 1	Level 2	Level 3	Level 4	Level 5
<b>Quality depends solely on the individual (no processes)</b>	<b>Process awakening (basic processes)</b>	<b>Vision through processes, professionalization and a guarantee of quality (intermediate processes)</b>	<b>Systematic assessment and improvement of processes (sophisticated processes)</b>	<b>Aiming for external excellence (excellent processes)</b>
Social responsibility is not recognised as a part of the work and role of the school.	There is some social responsibility recognised in the work and role of the school.	Social responsibility is recognised as part of the work and role of the school.	Social responsibility is recognised as a vital part of the work and role of the school. The school is often involved in development of society.	The school is very good as an initiator of important developments in society.
Tick (✓) the level of the school on this sub-criterion				

### Sub-criterion 8c: Sustainability

The school demonstrates environmental awareness by being proactive in sustainability, reducing its own energy consumption and waste, and including environmental education as part of its programs.

Definitions of levels				
Level 1	Level 2	Level 3	Level 4	Level 5
<b>Quality depends solely on the individual (no processes)</b>	<b>Process awakening (basic processes)</b>	<b>Vision through processes, professionalization and a guarantee of quality (intermediate processes)</b>	<b>Systematic assessment and improvement of processes (sophisticated processes)</b>	<b>Aiming for external excellence (excellent processes)</b>
The organisation has no	There is some environmental	Sustainability is a part of the	The school has received awards	The school is a recognised

environmental or sustainability awareness.	and sustainability awareness. Some active staff members are involved in sustainability activities.	school's processes and programs.	and/or certification stating that it meets sustainability requirements.	developer and initiator of concepts and models of sustainability.
Tick (√) the level of the school on this sub-criterion				

#### 4. KEY RESULTS

Excellent schools achieve and sustain outstanding results that meet or exceed the needs and expectations of students, parents and other stakeholders and are expected to meet the key goals of their policies and strategies (EFQM, 2017; Martinez Median and Rioperez, 2005; Aragón Marin, 2001).

For every question the following aspects should be considered:

- The magnitude: degree of excellence of the results.
- The tendencies: What has been achieved in the last years (three or more)? An excellent organization will have positive tendencies and a sustained performance.
- The goals: the objectives should be suitable.
- The performance of an excellent school will be the result of the approaches and benchmarking.
- The reach: the results have an impact on relevant areas previously identified. The results are relevant for the students, their families and the staff.

These measures will be both financial and non-financial, and many will be closely linked to strategy and planning (CRITERION 2) and critical processes (CRITERION 5). Results relate to measurement of the school's performance, with regard to achievement of goals, the outcomes of key activities (effectiveness), and the internal functioning of the school. Furthermore, they involve measurements of the performance of the school in making rational and economic use of its financial resources (economy).

### Sub-criterion 9a: Financial

Your average score will be the average of all the scores recorded for your key financial results.

Key financial results	Definitions of levels				
	Level 1	Level 2	Level 3	Level 4	Level 5
	Results are not measured and/or no information is available.	Results are measured and show negative trends and/or results do not meet relevant targets.	Results show improving trends and/or most relevant targets are met.	Results show substantial progress and / or all relevant targets are met.	Excellent and sustained results are achieved. All relevant targets are met. Positive comparisons with relevant schools for all key results are made.
1.% of school fees collected					
2. Annual surplus					
3. Expenditure per student					
4.					
5.					
Average			Fr= Average *5		

### Sub-criterion 9b: Academic

Your average score will be the average of all the scores recorded for your key academic results.

Key academic results	Definitions of levels				
	Level 1	Level 2	Level 3	Level 4	Level 5
	Results are not measured and/or no information is available.	Results are measured and show negative trends and/or results do not meet relevant targets.	Results show improving trends and/or most relevant targets are met.	Results show substantial progress and /or all relevant targets are met.	Excellent and sustained results are achieved. All relevant targets are met. Positive Comparisons with relevant schools for all key results are made.
1.Number of students who left the school before the end of the year					
2.Number of students who left the school and did not register for the following year					
3. % of failures in the GPSC					
Average			Ar= Average *5		

### Sub-criterion 9c: Strategic goals

This sub-criterion deals with results related to the mission of Comboni Schools and therefore is related to sub-criterion 2e. Your average score will be the average of all the scores recorded for your key strategic results.

Key strategic results	Definitions of levels				
	Level 1	Level 2	Level 3	Level 4	Level 5
	Results are not measured and/or no information is available.	Results are measured and show negative trends and/or results do not meet relevant targets.	Results show improving trends and/or most relevant targets are met.	Results show substantial progress and /or all relevant targets are met.	Excellent and sustained results are achieved. All relevant targets are met. Positive Comparisons with relevant schools for all key results are made.
1. Number of Christian celebrations with Catholic students (Masses, Christmas Carols...)					
2. Number of students from Catholic families who received catechism and Sacraments of Christian Initiation inside or through the school					
Average			Sr= Average *5		

## Appendix 6. Self-assessment Matrix

The mark for every question should be calculated as the arithmetic mean of the different answers of the members of the quality teams considering the values of the table (“way of marking” column). These averages should be calculated on the number of answers and not on the number of members of the team.

As for the questions where the possible answers were “yes” or “not”, the answer to be taken is the one with more frequency (called mode in statistics). Just in the case of having a tie (two “yes” and two “no”), the arithmetic mean is the value that is transferred to the self-assessment matrix.

Criterion	Sub-criterion or question	Question	Way of marking	Mark	
1 LEADERSHIP	Development of mission and vision	1	Yes = 5; No = 0		
		2	a = 3; b= 2; c= 1; d= 0		
		3	Level 1= 1; Level 2= 3; Level 3= 6; Level 4= 10; Level 5= 12		
	Continuous improvement of management systems	1	Yes = 5; No = 0		
		2	Yes = 5; No = 0		
		3	Level 1= 1; Level 2= 3; Level 3= 6; Level 4= 10; Level 5= 12		
	Leadership and external relations	1	Yes = 5; No = 0		
		2	a = 1; b= 2; c= 3; d= 0		
		3	Level 1= 1; Level 2= 3; Level 3= 6; Level 4= 10; Level 5= 12		
	Leadership and motivation	1	a = 1; b= 2; c= 3; d= 0		
		2	Yes = 5; No = 0		
		3	Level 1= 1; Level 2= 3; Level 3= 6; Level 4= 10; Level 5= 12		
	Maximum Total = 82. 10% of the total Score. Maximum Score = 100			TOTAL	
				SCORE = TOTAL × 1.22	
		Stakeholder input into strategic planning	1	Level 1= 1; Level 2= 3; Level 3= 6; Level 4= 10; Level 5= 12	
	Performance indicator input to strategic planning	1	a = 3; b= 1; c= 0; d= 2		
		2	0 to 5		
		3	Level 1= 1; Level 2= 3; Level		

2 PLANNING AND STRATEGY			3= 6; Level 4= 10; Level 5= 12	
	Designing, communicating and validating the strategic plan	1	Yes = 5; No = 0	
		2	Level 1= 1; Level 2= 3; Level 3= 6; Level 4= 10; Level 5= 12	
	Implementation of policies and strategy and updating the strategic plan	1	Level 1= 1; Level 2= 3; Level 3= 6; Level 4= 10; Level 5= 12	
	School Catholic identity	1	(Yes = 5; No = 0)*0.92	
		2	(Yes = 5; No = 0)*0.92	
		3	(Yes = 5; No = 0)*0.92	
		4	(Yes = 5; No = 0)*0.92	
		5	(Yes = 5; No = 0)*0.92	
		6	(Yes = 5; No = 0)*0.92	
		7	(Yes = 5; No = 0)*0.92	
		8	(Yes = 5; No = 0)*0.92	
		9	(Yes = 5; No = 0)*0.92	
		10	(Yes = 5; No = 0)*0.92	
11		(Yes = 5; No = 0)*0.92		
12		(Yes = 5; No = 0)*0.92		
	13	(Level 1= 1; Level 2= 3; Level 3= 6; Level 4= 10; Level 5= 12) *0.92		
Maximum Total = 128. 10% of the total Score. Maximum Score = 100			TOTAL	
			SCORE = TOTAL × 0.78	
3 PEOPLE	Human resource management	1	Yes = 5; No = 0	
		2	Level 1= 1; Level 2= 3; Level 3= 6; Level 4= 10; Level 5= 12	
	Competence development of the staff	1	a= (nA/Total)*1 b= (nA/Total)*2 c= (nA/Total)*3 d= (nA/Total)*4 e= (nA/Total)*5	
		2	1= >41%; 2= 31-40%; 3= 21-30%; 4= 11-20%; 5= 0-10%	
		3	a. 5≤; b. ≥6≤10; c. ≥11≤20; d. ≥20;	
		4	Level 1= 1; Level 2= 3; Level 3= 6; Level 4= 10; Level 5= 12	
	Staff commitment and involvement	1	Non markable	
		2	Level 1= 1; Level 2= 3; Level 3= 6; Level 4= 10; Level 5= 12	
	Internal communications	1	Non markable	
		2	Level 1= 1; Level 2= 3; Level 3= 6; Level 4= 10; Level 5= 12	
Maximum Total = 68. 10% of the total Score.			TOTAL	

Maximum Score = 100			SCORE = TOTAL × 1.47	
4 PARTNERSHIPS AND RESOURCES	External partnership management	1	Non markable	
		2	Level 1= 1; Level 2= 3; Level 3= 6; Level 4= 10; Level 5= 12	
	Economic and financial management	1	Yes = 5; No = 0	
		2	Non markable	
		3	a = 1; b= 2; c= 0; d= 3	
		4	Level 1= 1; Level 2= 3; Level 3= 6; Level 4= 10; Level 5= 12	
	Material resources, premises and equipment management	1	Yes = 5; No = 0	
		2	Yes = 5; No = 0	
		3	Level 1= 1; Level 2= 3; Level 3= 6; Level 4= 10; Level 5= 12	
	Technology management	1	a = 0; b= 1; c= 2; d= 3; e= 4	
		1	a = 0; b= 1; c= 2; d= 3; e= 4	
		3	Level 1= 1; Level 2= 3; Level 3= 6; Level 4= 10; Level 5= 12	
	Information and knowledge management	1	Non markable	
		2	Yes = 5; No = 0	
3		Level 1= 1; Level 2= 3; Level 3= 6; Level 4= 10; Level 5= 12		
Maximum Total = 91. 10% of the total Score. Maximum Score = 100			TOTAL =	
			SCORE = TOTAL × 1.1	
5 PROCESSES, PRODUCTS AND SERVICES	Well-designed processes	1	Non markable	
		2	a = 1; b= 2; c= 3	
		3	Level 1= 1; Level 2= 3; Level 3= 6; Level 4= 10; Level 5= 12	
	The management of process leads to continuous improvement	1	a = 0; b= 1; c= 2; d= 3	
		2	Level 1= 1; Level 2= 3; Level 3= 6; Level 4= 10; Level 5= 12	
	Processes are responsive according to students and parents needs and expectations	1	Yes = 5; No = 0	
		2	a = 0; b= 2; c= 1; d= 3	
3		Level 1= 1; Level 2= 3; Level 3= 6; Level 4= 10; Level 5= 12		
Administrative and financial management	1	Level 1= 1; Level 2= 3; Level 3= 6; Level 4= 10; Level 5= 12		
Maximum Total = 64. 10% of the total Score. Maximum Score = 100			TOTAL =	
			SCORE = TOTAL × 1.56	
6 RESULTS ON	Students and parents satisfaction	1	Level 1= 1; Level 2= 3; Level 3= 6; Level 4= 10; Level 5= 12	

STUDENTS AND PARENTS (CUSTOMERS)	Indicators of performance.	1	a = 0; b= 1; c= 2; d= 3; e=4	
		2	a = 3; b= 2; c= 1; d= 0	
Maximum Total = 19. 15% of the total Score. Maximum Score = 150			TOTAL	
			SCORE = TOTAL × 7.89	
7  RESULTS ON PERSONNEL	Staff satisfaction	1	a = 0; b= 1; c= 2; d= 3; e=4	
		2	Level 1= 1; Level 2= 3; Level 3= 6; Level 4= 10; Level 5= 12	
	Staff performance	1	a = 3; b= 2; c= 1; d= 0	
		2	Level 1= 1; Level 2= 3; Level 3= 6; Level 4= 10; Level 5= 12	
Maximum Total = 31. 11% of the total Score. Maximum Score = 110			TOTAL	
			SCORE = TOTAL × 3.55	
8  SOCIETY RESULTS	Image	1	Level 1= 1; Level 2= 3; Level 3= 6; Level 4= 10; Level 5= 12	
	Social responsibility	2	Level 1= 1; Level 2= 3; Level 3= 6; Level 4= 10; Level 5= 12	
	Sustainability	3	Level 1= 1; Level 2= 3; Level 3= 6; Level 4= 10; Level 5= 12	
Maximum Total = 36. 10% of the total Score. Maximum Score = 100			TOTAL	
			SCORE = TOTAL × 2.78	
9  KEY RESULTS	Financial		Fr	
	Academic		Ar	
	Strategic goals		Sr	
Maximum Total = 75. 14% of the total Score. Maximum Score = 140			TOTAL	
			SCORE = TOTAL × 1.87	

## Appendix 7. Selection of Improvement Areas

After having filled the Questionnaire for Self-Assessment and the Self-Assessment Matrix, discuss the results with the other members of your Quality Team and identify Strengths and Improvement Areas in view of elaborating an Improvement Plan.

### 1. Strengths and Improvement Areas:

<b>Criterion</b>	<b>Strengths</b>	<b>Areas for improvement</b>
Leadership		
Planning and strategy		
People		
Partnership and resources		
Processes, products and services		
Students and parents results		
Personnel results		
Society results		
Key results		

**2. Selection of Improvement Areas and their classification:**

	Which sub-criteria are more in need of improvement?	Order them according to		
		the urgency	their importance and impact on the key results of the school	the availability of resources to implement them
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
...				

**3. After having analysed their urgency, importance and the availability of resources, select the five areas of improvement you want to develop in the Improvement Plan of your school:**

	Areas for improvement	Action
1		
2		
3		
4		
5		

## Appendix 8. Meta-evaluation of the Self-Assessment Process

1. Which difficulties did you find during the process of self-assessment?
2. Was the process helpful? Why?
3. Were there some sub-criteria non meaningful or difficult to apply to your school?
4. Did you identify any sub-criteria or aspect that was not mentioned and should be considered in the Self-Assessment?
5. Is your Team ready to repeat the process after one year? Up to which extent do you support a new self-assessment with this model in one year time?

<b>Disagree We will not repeat it</b>	<b>No idea We do not know</b>	<b>Partially agree</b>	<b>Agree</b>	<b>Full support Surely we will repeat it</b>

## Appendix 9. Notes for Interviews with Quality Team Directors for Assessment of the Implementation Process

**Person Interviewed:**

**Case Study School:**

**Position in the school:**

**Date:**

### Part I. About the process of implementation of the Excellence Model.

1. Did you have previous experience of Total Quality Management, ISO or the EFQM (European Foundation Quality Management) Excellence Model?
2. Did you feel that doing this process was of value:
  - a) To you (score for 1 to 7)?
  - b) To the school (score from 1 to 7)?
3. Did you find an open acceptance in the school to enter into the process of self-assessment?
4. If you had to assess the level of acceptance, which degree from 1 to seven would you choose?

<b>Opposition and resistance</b>						<b>Enthusiastic acceptance and full collaboration and involvement</b>
1	2	3	4	5	6	7

5. List the positive aspects of the process you have gone through:
6. List the main challenges or weak points of the process:
7. Did the results of the process meet your expectations? How?
8. If you could remake the process, what would you have done in a different way?
9. How did you find the language/terminology used in the Model?

10. Would you change the criterion weighting proposed by the researcher? If yes, in which way?
11. Do you feel that the school should proceed implementing the Model as an ordinary tool for continuous improvement?

## **Part II. About the criteria of quality**

12. How would you describe the leadership of your school, their relation with the staff and their way of managing your school?
13. What does it mean for your school to be a Catholic School?
14. What would you say about the strategic plan of the school?
15. How do you describe the management of school staff and their engagement?
16. How would you describe the management of school financial and material resources?
17. How would you describe in general terms the organization of the school?
18. How would you describe the relation of the school with the parents of the students?
19. How would you define students' performance?
20. How would you define teaching staff performance?
21. How would you describe the relation between your school and the community?

## Appendix 10. List of Documents Provided by the Schools.

Document reference	Document Name	Date	Case study
1	2017-2018 Budget		1
2	Interview form for new teachers		1
3	Assessment of Students 2017-2018 Results	1-4-2018	
4	List of Teaching Staff with their academic degree and specialization and the subject they teach	15-01-2019	2
5	Inventory	15-01-2019	2
6	Interview form for new teachers		3
7	Inventory		3

### Document 1. School 1 2017-2018 Budget

#### Revenues

##### Income

Bookshop SDG500,000.00

##### Extraordinary Income

Project Grants SDG525,000.00

##### Institutional Activities

Cafeteria SDG5,000.00

Christian Religion Evening SDG3,000.00

Special Programs SDG90,000.00

Various Income SDG5,000.00

##### Registration Fees

Books & Uniforms SDG800,000.00

Fees SDG3,500,000.00

#### Total Revenue

**SDG5,428,000.00**

#### Expenses

##### Expenses

##### Aids & Materials

Books SDG260,000.00

Computer & Photocopy Equip SDG64,000.00

Printings & Translations SDG290,000.00

Sport & School Equipmnt SDG20,000.00

Stationary Bookshop SDG3,000.00

Uniforms SDG600,000.00

##### Employees Costs

Administration SDG100,000.00

Charity SDG25,000.00

Contribution to CCK community SDG100,000.00

Extra works & Incentives SDG83,000.00

Full Allowance

Gratuities SDG35,000.00

Help to students

Income Tax SDG65,000.00

Lawyer & Cases SDG16,000.00

<u>Loan not refunded</u>	SDG2,000.00
<u>Partimers</u>	SDG23,000.00
<u>Salaries Teachers</u>	SDG970,000.00
<u>Salaries Workers</u>	SDG135,000.00
<u>Social Insurance</u>	SDG290,000.00
<u>Taxes MoF &amp; Locality</u>	SDG65,000.00
<u>Extraordinary Expenses:</u>	
<u>Extraordinary Maintenance</u>	SDG800,000.00
<u>Leasing</u>	
<u>Savings for Future Projects, Leasing</u>	SDG690,000.00
<u>Maintenance</u>	
<u>Computer &amp; Photocopy Repair</u>	SDG4,000.00
<u>Furniture</u>	SDG10,000.00
<u>Ordinary Maintenance</u>	SDG230,000.00
<u>Running &amp; Activities</u>	
<u>Celebrations &amp; Picnic</u>	SDG18,000.00
<u>Christian Religion Evening</u>	SDG5,000.00
<u>Electricity</u>	SDG30,000.00
<u>Medicines &amp; First Aid</u>	SDG3,000.00
<u>Meetings</u>	SDG5,000.00
<u>Playground</u>	SDG15,000.00
<u>Rent to Province</u>	SDG250,000.00
<u>Sewage - Rubbish - Services</u>	SDG120,000.00
<u>Telephone &amp; Internet</u>	SDG2,500.00
<u>Various</u>	SDG11,500.00
<u>Water</u>	SDG7,000.00
<u>Teachers' course / help</u>	SDG20,000.00
<u>Office &amp; Teaching Material</u>	SDG20,000.00
<u>Food/Beverages</u>	SDG8,000.00
<u>Cars Repairs/Fuel/Licences</u>	SDG17,000.00
<u>Cleaning - Hygiene</u>	SDG16,000.00

**Total Expenses**

**SDG5,428,000.00**

Net income for Budget 2017-2018

SDG0.00

**Document 2. School 1 Interview Form for New Teachers**

*Interview for new teachers*

*Teacher's Name:*.....

<i>Particulars</i>	<i>Full marks</i>	<i>Marks scored</i>
<i>Qualification</i>	20 %	
<i>Physical Appearance</i>	10 %	
<i>Experience</i>	20 %	
<i>General Knowledge</i>	10 %	
<i>Performance</i>	20 %	
<i>Test / Writing</i>	20 %	
<i>Total</i>	100 %	%

*Team of interviewers:*

*Name:*.....

*Signature:*.....

*Date:*.....

## Document 7. School 3 Inventory

١ الموضوع : حصر العهد

رقم	العدد الكلي	محتاجة للصيانة	التالفة	السليم	الملاحظات
١	المباني	—	—	٨ مقبول ٤ مكاتب	حزب مطبخ
٢	الكتب	٣٣٠	—	٧٠	
٣	المقاعد	—	—	٢٤	
٤	الكراسي	٢	—	٢٧	
٥	الترابيز	—	—	١٤	
٦	الدواليب	١	—	١٢	
٧	الأجهزة	—	—	١	
٨	كمبيوتر	—	—	١	
٩	جهاز التصوير	—	—	١	
١٠	المكيفات	—	—	١	
١١	المخزن	—	—	١	
١٢	التغذية	أ ب ج د هـ			
١٣					

## Appendix 11. List of Interviewees

Table 1-Appendix 11. List of Interviewees

<b>Transcript</b>	<b>Position</b>	<b>School</b>	<b>Date</b>	<b>Content</b>
A	Headmaster and Quality Team Director	2	15-1- 2019	Completion of missed data and Guidelines for the” Interview with the Quality Team Director for assessment of the implementation process” (Appendix 9)
B	Parish Schools Supervisor	3	5-1-2019	Triangulation of data and completion of missed data
C	Parish Priest	3	5-1-2019	Triangulation of data
D	Headmaster and Quality Team Director	3	5-1-2019	Triangulation of data
E	Principal	1	26-1- 2019	Triangulation of data

## LIST OF PUBLICATIONS

NARANJO, J.C. (2019) The Development of Catholic Schools in the Republic of Sudan. *Social and Education History*, 8(1), pp. 83-111. doi: 10.17583/hse.2019.3611.

NARANJO ALCAIDE, J.C. (2019) The European Foundation for Quality Management Model Applied to Catholic Primary Schools of Khartoum State. *International Journal of Social Science and Economic Research*, 4(10), pp. 6641-6668. Available from: [ijsser.org/more2019.php?id=510](http://ijsser.org/more2019.php?id=510).

NARANJO ALCAIDE, J.C. (2021) Identity and Quality of Catholic Schools in Sudan. *International Studies in Catholic Education*. doi: 10.1080/19422539.2020.1858650.