CHAPTER ONE
INTRODUCTION

1.1 Overview:

Abu Dhabi Educational Council (ADEC) has been established with the sole mandate of developing education and educational institutions in the Emirate of Abu Dhabi (EAD), United Arab Emirates (UAE). Implementing innovative educational policies, plans and programmes to improve education, supporting educational institutions and staff were seen as essential in achieving the goals of Abu Dhabi 2030 vision which has set as its objective moving the emirate economy from being oil dependent to becoming a knowledge-based one (Abu Dhabi Council for Economic Development, 2009).

One basic element of the change is for schools to prepare lifelong learners who are capable of practicing reflection rather than rote learning (Abu Dhabi Educational Council, 2011). This new orientation in education has had its implications for both the English as a Medium of Instruction (EMI) teachers and the EMI teachers on equal footing.

The Emirates College for Advanced Education (ECAE) was established in 2006 by the government of Abu Dhabi in collaboration with the National Institute of Education (NIE) and Nanyan Technological University (NTU) in Singapore to help release this goal. The college was modelled to NIE to provide pre-service and in-service teachers with education courses and short term professional development courses for school staff to cater for the needs created by the advent of the new educational changes in EAD (Blaik-Horani, 2011). ECAE has introduced reflection as a component of its
practicum/internship programme (which is part of its teacher development programme) with a view to prepare EMI teachers who can, eventually, develop reflective students - a notion termed by Wallace (1991: 18) ‘practicing what you preach’.

It should be admitted here that the implications of the changes in this respect started to be clearer only when the ECAE teacher educators, among others, became involved in the interviews staged in recent years to recruit local teachers for ADEC schools. From these inter-views, ECAE teacher educators (including the researcher) began to realize the mismatch between the teaching practice required by ADEC and the actual practice of both novice and serving teachers as revealed in the inter-views (A. Al-Awami, personal communication, September, 27, 2013).

ADEC has introduced a new school model (NSM) which aims to produce students who are capable of critical thinking, problem solving and lifelong learning (ADEC, 2013-2014); by implication, nurturing a reflective student is what is targeted in the NSM. The majority of the teachers (mostly UAE nationals in addition to some Arab expatriates) interviewed for ADEC teaching jobs, revealed traditional ways of teaching that could be ascribed to their education history, their initial teacher education or training (A. Al-Awami, personal communication, September, 27, 2013). It is most likely that teachers who stick to the traditional ways of teaching (technicians) are deprived of the virtue of reflection and thus the chances are slim that they would be able to help their students become reflective, problem solvers and life learners. Since the rectification of this mismatch between the status quo and the aspired situation falls within the domain of ECAE, the need arose for this study to explore ECAE EMI teacher educators’ understanding of reflection. This understanding is deemed essential for ECAE EMI
teacher educators in order to be able to play valid and purposeful roles in preparing EMI school teachers who are capable of practicing reflection.

The intended study will focus on both aspects: the EMI teacher educators’ understanding of reflective teaching and their perceptions of their roles in preparing reflective future EMI teachers particularly that literature on EMI teacher educators as reflective practitioners is scanty.

1.2 Rationale for the study

Professionalism -practitioner’s knowledge, skills and conduct (Leung, 2009: 49)- is redefined by the broader societal challenges for schooling and it should, simultaneously, typify the form and function of teacher preparation and development. The reform initiative introduced to Abu Dhabi’s educational system and schooling by ADEC necessitates a rethink of teaching quality and, thus, teachers’ standards and teacher preparation. Teachers are seen at the heart of the educational process and “the greater the importance attached to education as a whole -whether for cultural transmission, for social cohesion and justice, or for human resource development so critical in modern, technology-based economy- the higher is the priority that must be accorded to the teachers responsible for that education” (OECD, 1989 as cited in Day, 1999: 1). This importance attached to school teachers quality (EMI teachers included) entails a weight be added to the significance of the role to be played by EMI teacher educators in preparing future school teachers. Within this context of reform, I intend to look at how ECAE EMI teacher educators perceive reflection in teaching before attempting to fathom how they envisage their roles in preparing relevant EMI teachers who are capable of helping effect the change initiated. It is, then, a redefined
professionalism for ECAE EMI teacher educators initiated by the new educational reform.

The difference in the understanding of teaching and teacher education in EAD needs to be studied to help align performance in three constituencies: teacher initial preparation programme, classroom practice and, eventually, student’s authentic life. Admittedly, student’s authentic life is beyond the scope and measurement of this study, but the ripple effect of the initial teacher education programme will most likely reach and impact student’s life.

It is the inevitability of education to influence people’s life that adds to the need for this study. Knowledge-based economy, diversification of the country’s economy, and the Emiratization of jobs as identified in Abu Dhabi Economic Vision 2030 (Abu Dhabi Council for Economic Development, 2009) are largely dependent on teachers’ practice.

1.3 The problem:

The New School Model (NSM) recently introduced in Abu Dhabi educational system calls for preparing reflective students who are capable of problem solving and lifelong learning (ADEC, 2013-2014). By implication, school teachers themselves need to be capable of practicing reflection in their profession. The intended study will investigate how the ECAE EMI teacher educators understand reflective teaching and what roles they perceive to play in preparing reflective practitioners (EMI school teachers).
1.4 Statement of purpose and research questions

The purpose of this study is to explore with eight EMI teacher educators their understandings of reflective practice (RP) and their perceptions of their roles in preparing future EMI school teachers. To shed light on the problem the following research questions are to be addressed:

1- How do the EMI teacher educators perceive and understand the concept of reflection practice?
2- What methods do these EMI teacher educators use to engage their student teachers in reflect practice?
3- What do they engage their student teachers reflect upon in their practice?

Each question focused on one aspect of RP: understanding, method, and content- respectively.

1.5 Hypotheses of the study

To answer the study questions, the researcher proposes the following hypotheses:

1. EMI teacher educators have sound understanding of reflection and reflective practice (RP).
2. EMI teacher educators use certain methods to engage their student teacher in RP.
3. EMI teacher educators introduce their student teachers to topics that incite reflection and develop RP.

1.6 Significance of the study

In the UAE, there is no evidence of studies conducted on EMI teacher educator’s understanding of reflective practice or on how they aid their EMI student teachers
become reflective practitioners. Reflective practice in the context of EAD has been studied from the perspective of student teachers. Internationally, only a few studies on rather relevant topics were found: Bell et al (2010) in the context of Australia who attempted to “describe the types of self-reflection identified in university tutors’ reflective statements following a peer observation of teaching exercise” (2010: 57); Bell et al (2013) who interviewed six tutors to orally elicit their thoughts about reflection and forms of reflection they incorporated in their teaching; and Kane et al (2004), in New Zealand, who interrogated in a reflective mode a group of excellent science faculty to better understand the complex nature of tertiary teaching. This study explores reflective practice from the EMI teacher educators’ standpoints and aspires to bridge the gap in literature in general in this respect. It is also hoped that the insights to be gained via this study will impact teaching and learning via English in the context of the study and in similar contexts. Policies regarding teacher education programmes may also benefit from the findings of this study.

1.7 Methodology of the study

To answer the research questions, the study adopts the qualitative interpretive approach to investigation where interviews, observations, and institutional document analysis are employed as tools of data generation.

The main sources of data are EMI teacher educators and institution documents. The data collected from these sources are then analysed and interpreted.
1.8 Context of the study

This Study is limited to ECAE, UAE. It focuses on how reflective practice (RP) is understood and developed in student teachers by their EMI teacher educators. The study population is confined to educators who use English as a medium of instruction.

UAE, in general and EAD in particular, is currently experiencing a massive reform in all sectors to cope with the dictates of Globalization. Like other Arabian Gulf countries, the UAE, has witnessed a remarkable increase in wealth over recent decades as a result of oil industry, bringing significant and rapid changes in most aspects of life, including education.

In education, the demand for teachers to cover the need for the expanding school system has led to the recruitment of huge numbers of expatriate teachers (Clarke, 2006). To rectify the situation, the UAE government has promoted a policy of Emiratization, or nationalization of the workforce. The Abu Dhabi ECAE’s Bachelor of Education degree in Teaching Young Learners (B.Ed.) - established in 2007- is one translation of this policy (see later).

In recent years, progress has been made in education, for example, with regards to literacy rates, the latter rose to 95% in 2012 (UN: A World Information, 2012) compared to that of less than 20% prior to independence in 1971 (Kazim, 2000). In spite of this progress, the UAE’s education system has come under criticisms from both internal and external circles (internal: Taha-Thomure, 2003; Mograby, 1999; external: Loughrey, Hughes, Bax, Magness, & Aziz, 1999 as cited in Clarke, 2006). According to Clarke (2006: 2), Dr Abdullah Mograby, Head of the Labour and Population Studies Department at the Emirates Centre for Strategic Studies and Research, has cited issues
like: a) lack of clarity in curricula goals and mission; b) inappropriacy of learning/teaching methods; and c) inflexibility of programmes as problem in the UAE school system.

Clark goes further to succinctly summarize the overall picture by positing that:

“The ‘pedagogical gulf’ between existing and aspirational levels of schooling is often expressed discursively in terms of a need to move from ‘traditional’ rote-based, transmission approaches currently practiced in most UAE Government schools and classrooms, to ‘progressive’ approaches involving active, experiential learning. (Clarke, 2006: 2).

Traditional and rote learning that characterized the school system in EAD is now being re-examined and change has started covering different aspects of education including facilities, principals, curriculum and teachers. Recent years have witnessed EAD making remarkable effort to develop and implement comprehensive education reform programmes that can result in skilled, knowledge-based workforce in line with the socioeconomic goals. This urgency for improving the quantity and quality of education has been translated into a vision by ADEC to introduce a new approach to teaching and learning- the New School Model (NSM). This approach, which has been introduced by the peak educational body in EAD, aims at improving student learning experiences and at uplifting the academic outcomes of Abu Dhabi students to the internationally competitive level necessary to achieve Abu Dhabi Vision 2030 (ADEC, 2011). According to NSM:

“Students will be at the center of an active teaching and learning environment supported by schools, families and the community. Key priorities will focus on student health and safety, well-being and individualized learning. Improvement will develop strong Arabic and English literacy and numeracy, critical thinking, problem solving and creativity, while continuing to emphasize cultural and national identity”. (ADEC, 2013-2014: 3).
In this reform initiative, three dimensions can be detected: a) socioeconomic priorities that have been translated into viable education strategy and related goals, b) an operating model characterized by an envisaged sustainability (starting in 2010 with a rollout trajectory to cover all cycles in 2016), and c) an infrastructure (quality teachers and curricula, good learning atmosphere, reliable means of assessment and evaluation) capable of rendering the goals achievable.

With respect to the infrastructure (part of which is my focus: teacher quality), ADEC’s document (2011: 4) highlights the key features of the NSM in seven domains: 1) effective school organization and guiding principle, 2) staffing and structure, 3) students as learners, 4) curriculum, instruction and assessment, 5) child-centred learning environment and resources, 6) family and community involvement, and 7) evaluation of school programmes. More specifically, teachers in this model are expected to hold key understandings with regards to teaching and learning. This can be seen as a clear spell out by the policy maker of a renewed professionalism for EAD teachers. Teachers are to be for the broad beliefs that “All children are capable of learning and that the teacher is responsible for student learning” (ADEC, 2013-2014: 4-5). These beliefs are seen essential for a teacher to be effective in the NSM. The document (ADEC, 2013-2014: 6) goes further to list a number of specific beliefs a teacher should enjoy in this NSM: 1) Learning is safe and secure when risk taking is seen as an opportunity not a problem; 2) Learning is lifelike and not isolated from the real world; 3) Learning is active, purposeful and responsive, not passive and inflexible; 4) Learning occurs best through meaningful, open dialogue, not through one-way closed teacher direction; 5) Learning follows a student and is not a textbook recipe; 6) Learning environments and resources
are an invitation to learn, not a decoration; 7) Learning is a process not just a place or a product.

It can be inferred, then, that one basic element of the change is for schools to prepare lifelong learners who are capable of practicing reflection rather than rote learning. This new orientation in education has had its implications for teachers and EMI teacher educators on equal footing. The NSM introduced by ADEC aims to produce students who are capable of critical thinking, problem solving and lifelong learning; by implication, nurturing a reflective student is what is targeted in the NSM. As mentioned above, the majority of the teachers, interviewed for ADEC teaching jobs in the years 2009-2012 (the researcher was a member of the interviews panels) revealed traditional ways of teaching that could be ascribed to their education history, their initial teacher education or training.

These changes and particularly the notions in pedagogy introduced by the NSM have made it essential for teachers to modify their teaching as necessary to better serve students. Teachers are to be supported (or helped develop) in areas pertaining to student-centred techniques, setting expectations for student academic performance, creating unit plans that respond to learning outcome frameworks (textbooks are no longer provided), using assessment to inform teaching and learning, and joint planning and coordinated teaching between Arabic- medium and English-medium teachers- which meant a redefined professionalism for EAD teachers.

In the context of this study, the NSM has set new parameters for professionalism for EAD school teachers. In Other words, the need for a reflective teacher is much sought for to facilitate producing reflective students and for enhancing teacher’s own
continual professional development (CPD). The repercussions of this new professionalism set out by ADEC’s standards for students can be envisaged to reach teacher education institutions and to set renewed agenda for their work.

ECAE is the first and the only teachers’ college in the UAE. It is interesting, as noted by Null (2009), to see a revival of the teacher college tradition (Null, 2009 as cited in Haslam, 2011: 126) in EAD. It offers a four-year undergraduate programme for elementary school teachers. The Bachelor of Education (B.Ed.) programme prepares ECAE student teachers to teach English, mathematics and science in English to cycle one (years one to five) students. Taking into consideration the bilingual abilities (Arabic/English) of the ECAE students, the programmes are designed to train teachers as generalists who can teach all subjects at the elementary level (Haslam, 2011). To ensure a higher level of academic readiness for the programmes, a one-year foundation in English, mathematics, and science is prescribed. However, a B.Ed. direct entry is possible for applicants who have a band five in the International English Language Testing System (IELTS). Band 6.5 in IELTS is required on graduation to ensure employability by ADEC. ECAE programmes in general introduce student teachers to novel methodologies which include differentiated learning, new methods of assessment, information and communication technologies (ICT), higher order thinking skills, problem-based learning, project work and “myriad modern methods to be used in achieving education standards required of students in the 21st. century” (Haslam, 2011: 128).

These emerging teacher knowledge and skills are provided for through many strands of ECAE curriculum including: extensive English Language Skills, Educational
Studies, English Subject Knowledge, Science Subject knowledge, Mathematics Subject Knowledge, and ICT. An action research component has been introduced to year four programme. At the core of ECAE programmes is Teaching Practice (Practicum). Practicum is described as central to contemporary teacher preparation programmes (ECAE, 2012 – 2013). In a broadly socio-cultural approach to teacher education, ECAE student teachers are engaged in a gradual and structured apprenticeship to teaching.

Within months of beginning their studies, year one students engage in school and classroom observation tasks for ten weeks (one full day every week). The tasks in this practicum (Practicum I) are designed to help the student teacher look at the school environment from the perspective of a teacher rather than that of a student. During this first placement, student teachers focus on various aspects of Cycle One school life; looking, for example, at the day-to-day work of the teacher, at the student interaction and pattern of behaviour, and at classroom management strategies (ECAE, 2012 - 2013). Student teachers are also encouraged to compare their schooling with that of today’s children.

Starting from year two, student teachers gradually begin to engage in actual classroom teaching in a three-week school-based practicum block (Practicum II). They begin by teaching aspects of a lesson i.e. an introduction, a warm up, a game, or a conclusion. The core objectives of the Practicum II experience are for students to participate actively in classroom and school activities and routines, to establish a stronger relationship between theories of learning and the practice of teaching, to help students understand the varied roles and responsibilities of the teacher, “to allow students opportunities to gain confidence as teachers in training, and to develop their
emergent teaching and critical reflective thinking skills so that they become reflective practitioners. Students are also introduced to the New School Model (NSM) currently implemented in the schools” (ECAE, 2012 – 2013: 5).

The practicum blocks become bigger when student teachers reach year three where they spent five continuous weeks and teach connected whole class lessons. Practicum III experience is designed to help students establish a strong base in the teaching, learning and assessment cycle. Student teachers plan, implement, assess, evaluate and reflect on single lessons and on a series of three sequential lessons in English, Mathematics and Science. With reference to ADEC curriculum documents, students engage in planning and teaching lessons in which English, Mathematics and Science are integrated. In Practicum III, students implement a variety of instructional strategies, prepare appropriate assessment tasks and develop reflective thinking skills in the planning and delivery of lessons (ECAE, 2012 – 2013).

In year four, student teachers’ internship is increased to a ten-week period where they take full responsibility for two third of their mentor teachers’ teaching load. The purpose of student teaching/internship is to provide the ECAE student with a varied experience in sustained teaching and learning situations. The goal is to help the student teachers further develop effective instructional /management strategies and to reflect on the impact they have upon students' learning. This experience is expected to enhance the professional growth and a life of reflective practice that will continue after the student teacher has graduated. In their internship, student teachers are required to develop a product portfolio that includes samples of evidence specific to the teacher standards with their own reflections. This portfolio will be used for their assessment and will act as a show case portfolio for future job interviews. “This internship prepares ECAE students
to fulfill the expectations of being a New School Model teacher and work towards meeting the ADEC’s teacher standards” (ECAE, 2012 – 2013: 3). Student teachers, at this level, also engage in an action research project that extends over the whole year. Action research has been introduced to prepare teachers who can eventually develop reflective students- a notion termed by Wallace (1991: 18) ‘practicing what you preach’.

During these practical placements in schools, student teachers are guided, assisted and supervised by visiting College faculty mentors and supported by school mentor teachers in the schools.

1.9 Structure of the thesis

In order to answer the posed research questions (see above) and meet the objectives of this research project, the second chapter (CHAPTER TWO) reviews the literature on the main constructs of the thesis, including reflection, learning, reflective practice, and the socio-cultural theory which is essential for learning in practicum/internship. CHAPTER THREE reveals the research framework and the ideological position of the study. In addition to visiting the study’s research questions and the specific plans to answer them, it also addresses the research methods, data collection, analysis procedures used, the validity and reliability of the study and possible limitations. CHAPTER FOUR presents the key findings from the study and provides in-depth discussion of them. Finally, CHAPTER FIVE provides a summary of findings and conclusions, and discusses the implications of the study with regard to pedagogy, as well as suggestions for further research.
CHAPTER TWO

Literature Review

2.1 Introduction

This chapter reviews relevant research literature. It begins with a discussion of reflection, generic learning, reflective learning, and reflective practice. The review of literature on reflective practice suggests a focus on three issues: basic concepts of reflective practice in seminal works, approaches to reflective practice, and its application in teacher education and practicum. Insights from such works are drawn and related to the current study. Establishing the conceptual framework of the current study and defining related constructs, will be used to categorize the domains of teacher educators’ perceptions and roles.

2.2 Reflection defined

“It is not sufficient simply to have an experience in order to learn. Without reflection upon this experience it may quickly be forgotten, or its learning potential lost. It is from the feelings and thoughts emerging from this reflection that generalizations or concepts can be generated. And it is generalizations that allow new situations to be tackled effectively” (Gibbs, 1988 as cited in Watton, et al., 2001: 4).

The term reflection is derived from the Latin word, refletere (Miriam-Webster n.d), which means “to bend back”. Accordingly, a reflective person is one who deliberately thinks back on an experience. Baird (1992) further defined the term reflection as a conscious, thoughtful, purpose-related process. This type of reflective thinking can legitimately be understood, in Ross’s (1990) view, as careful, contemplative thinking, capable of occurring in isolation or with others; it also requires
time, structure and personal support. The purpose of reflection is to make sense of an event or a problem posed and to transform that into an experience i.e. an event with meaning (Boud et al., 1993). To that effect, Loughran (1996: 21) qualifies reflection to be “the purposeful, deliberate act of inquiry into one’s thoughts and actions through which a perceived problem is examined in order that a thoughtful, reasoned response might be tested out”.

Perplexity, confusion or doubt is seen to instigate thinking/reflection; and the latter cannot be envisaged as “a case of spontaneous combustion” (Dewy, 1933 as in Pollard, 2002: 4) which occurs without provocation or evocation. In a similar vein, Moon (2004) posits that reflection is “akin to thinking but there is more to be added to this” (2004: 82). Moon maintains that people reflect for some purpose or to achieve an outcome. According to Moon, reflection is an activity people apply to more complex issues. She writes that “We do not reflect on the route to the bus-stop or on how to do a simple arithmetic sum where there is an obvious solution” (2004: 82) but might reflect on whether or not to file a complaint about something when that complaint may ensue problematic consequences. In relation to learning and knowledge, reflection is seen by Moon as a process of re-organizing knowledge (and emotional orientations) for the purpose of achieving further insight where the content of reflection might be what we already know. This ‘common-sense view of reflection’ (Moon, 2004: 82) is elegantly encapsulated in the following definition:

“Reflection is a form of mental processing – like a form of thinking – that we use to fulfill a purpose or to achieve some anticipated outcome or we may simply ‘be reflective’ and then an outcome can be unexpected. Reflection is applied to relatively complicated, ill-structured ideas for which there is not an obvious solution and is largely based on the further
processing of knowledge and understanding that we have already possess.” (Moon, 2004: 82).

Reflection is very much enmeshed with knowledge and learning; and also with teaching. Reflection occurs when the equilibrium is upset by means of an external experience- a prelude to the acquisition of new knowledge.

Dewy (1933) made a distinction between thinking and reflection; and cautioned against two scenarios where thinking might not be adequate and had to be wedded to reflection. When the perplexity initiated this thinking lacks an analogous previous experience to draw on, Dewy explains that the confusion will remain mere confusion and no solution can be attained. When there is a perplexity as well as an analogous experience to draw on its suggestions, Dewy warns against jumping to conclusions that are not logically related to the experience. (Dewy, 1933 as cited in Pollard 2002). Hence, Dewy called for reflective thinking. He maintained that reflective thinking could be entertained if one was willing to endure suspense and to undergo the pain of searching (Dewy, 1933 as cited in Pollard 2002). In fact, the personality plays a role in promoting reflective thinking. To a many people both suspense of decision making and intellectual endeavour are repugnant (Dewy, 1933 as cited in Pollard 2002) i.e. these people would prefer immediate reaction to contemplating the meaning of the experience.

To further accentuate the notion of real reflection, Dewy offered the following as features of a genuinely reflective experience:

- Perplexity, confusion, doubt, due to the fact that one is implicated in an incomplete situation whose full character is not yet determined;
• A conjectural anticipation – a tentative interpretation of the given elements, attributing to them a tendency to effect certain consequences;

• A careful survey (examination, inspection, exploration, analysis) of the attainable consideration which will define and clarify the problem in hand;

• A consequent elaboration of the tentative hypothesis to make it more precise and more consistent, because squaring with wider range of facts;

• Taking one stand upon the projected hypothesis as a plan of action which is applied to the existing state of affairs; doing something overtly to bring about the anticipated result, and thereby testing the hypothesis. (Dewy, 1933 as cited in Pollard 2002: 4).

In these features outlined by Dewy, reflection and reflective experience are somehow marked off from a crude trial and error format and are given shape and form. These features can be said to have transcended the interpretation of reflection as merely thinking about a subject without the element of query and enquiry, and as being little more than a mantra rather than a model of practice (Kuit et al., 2001). This notion of reflection is also held by Boud et al. (1993 as cited in Chappel, 2007), when they conceptualized reflection, as a generic term used to describe the processes involved in exploring experience with a view to enhance understanding. It can also be stated that thinking itself, in the features outlined above, has been rendered into a reflective experience, which is highly needed for further learning and knowledge.
2.3 Theories of learning

Reflection, as has aptly been described by Bengtsson, (1995), is an essential ingredient of the learning process. My research is designed to investigate how EMI teacher educators’ view of knowledge and learning (epistemology) might influence their approaches to preparing teachers who are capable of reflection. This section will attempt to define generic learning, ways of learning, link it to reflection and account for reflection as a means of learning.

Learning is a complex and elusive concept: it could refer to incidental or intentional learning; to surface or deep learning (Moon, 2004); it could also be affected by a plethora of factors like learning styles (Ormord, 2012), frame of references or age (Moon, 2004), motives and strategies (Biggs, 2001). Hence, learning seems to defy an all-inclusive definition. For the sake of this study, which links learning with reflection, the definition offered by Ormord appears to be applicable and feasible. Ormord (2012: 4) defines learning as “a means through which we acquire not only skills and knowledge, but also values, attitudes and emotional reactions”. For Ormord, occurrences of learning (acquisition/change) take place at different levels: helping a little child learn to tie his/her shoelace; prompting a student change her attitude towards mathematics; guiding a kid develop an appreciation for the value of money; and arguing with a college student to change her unquestioned political views (2012: 4).

As can be seen, these different examples illustrate occurrences of learning (acquisition/change) vis-a-vis skills, knowledge, attitudes, values and emotional reactions (respectively). It is worth noting here that all of these constructs (skills,
knowledge, values, attitudes and emotional reactions), as shall be discussed later, are the essence of reflection and reflective practice (see later for definition of reflective practice).

In fact, this simple definition of learning is further made rightfully complex when Ormrod adds more three parts to it: long term change, mental representation and experience. In this respect, she (Ormrod), additionally, proposes to re-“define learning as a long-term change in mental representations or associations as a result of experience” (2012: 4). Ormrod carries her definition a step further by explaining each one of its three parts:

“First, learning is a long-term change: It isn’t just a brief, transitory use of information-such as remembering a phone number long enough to call someone and then forgetting it- but it doesn’t necessarily last forever. Second, learning involves mental representation or association and so presumably has its basis in the brain. Third, learning is a change as a result of experience, rather than the result of physiological maturation, fatigue, use of alcohol or drugs, or onset of mental illness or dementia” (2012: 4).

In this, learning is presented as encompassing internal factor (cognitive processing) and external factor (experience) and the change -covert or overt- that results from the interaction between the two factors (internal and external). In the light of this, we can understand knowledge, value and attitudes as internal and not necessarily as an overt change; conversely, skills and emotional reaction can constitute a manifestation of external, overt change. The notions of overt and covert change correspond conspicuously with teacher cognition which is purported to have direct impact on EIM teacher educators’ understanding and enacting of reflective practice.
Another dimension to the notion of learning has been highlighted by Moon (2004). Moon believes that there is a gap in vocabulary when it comes to distinguishing between learning something and the act of expressing that learning i.e. representation of the learning (2004). For Moon, “unless learners can express their learning effectively [in the manner it was acquired], what they know will not be recognized” (2004: 14). Representation of learning intimates reflection which is the main concern of the present study. This idea which is linking representation of learning and reflection is eloquently expressed by Eisner (1982, 1991). Eisner observes that it is important to both note the distinction between learning and the representation of learning and to recognize, in the process of reflection, that the representation of learning is a further source of learning. This indicates that reflection in essence is an act of learning.

Concern with knowing about ways of learning has started before the advent of the 19th Century and yielded a range of theories (learning theories). Ormrod (2012) states that studies on learning started in earnest in the late 1800s with two dominant perspectives in psychology: structuralism (Wilhelm Wundt’s work, for example) and functionalism (John Dewy’s writings, for example). The introspective method used then in gaining insight on learning was rejected and overcome by a behaviourist approach in the early 1900s; behaviourism was later criticized by proponents of a different approach (cognitivism) who pointed to the deficiency of the behaviourist stimulus-response principle to account for a fuller picture of learning (2012). Alternatively, the cognitivists offered scientific methods for studying a variety of mental phenomena like perception, memory, problem solving, reading comprehension and others (2012). Table 2.1 is used to summarize the principles of the main learning theories and their chief proponents.
# Table 2.1 Main Learning Theories and their Proponents

<table>
<thead>
<tr>
<th>Theory</th>
<th>Its Variation(s)</th>
<th>Chief Proponents</th>
<th>Main Tenants</th>
<th>Topics/Themes</th>
<th>Educational Implications</th>
</tr>
</thead>
</table>
| Behaviourism | Classical Conditioning | Pavlov (1927)  
Skinner (1957, 1985) | Understanding how our behavior is modified by our environment | Congruity, classical conditioning, operant conditioning, social observational learning, reinforcement | Direct instruction, programmed and computer assisted instruction, mastery learning, precision teaching, practice, applied behavioural analysis |
|        | Cognition in classical conditioning | Bouton (1994)  
Forsyth and Eifert (1998)  
McDannald and Schoenbaum (2009) | Classical conditioning often involves associations between internal mental representations the stimuli | | |
<p>| Cognitivism | Purposive behaviourism | Tolman (1932, 1938, 1942, 1959) | Understanding how we acquire knowledge | Importance of objectivity in research, inclusion of internal mental phenomena in explaining how learning occurs, behavior is purposive (leads to certain results), expectation affects behavior, cognitive maps | Expository teaching, authentic learning, scaffolding, reciprocal teaching, problem solving. |</p>
<table>
<thead>
<tr>
<th>Gestalt</th>
<th>Koffka (1935) Kohler (1925, 1929) (Wertheimer, 1912 as in Wertheimer and King, 2009)</th>
<th>Importance of organizational processes in learning, perception is often different from reality, the whole is more than the sum of its parts.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information Processing Theory</td>
<td></td>
<td>Human cognition consists of mental hardware and mental software, encoding information, storing information in the memory, retrieving information when needed</td>
</tr>
<tr>
<td>Constructivism</td>
<td>Piaget</td>
<td>Learning is an interpretation of the results of interaction with the environment, schemata, assimilation, accommodation, structural change, equilibrium.</td>
</tr>
<tr>
<td>Sociocultural Theory</td>
<td>Vygotsky</td>
<td>Knowledge has both individual and social components, influence of culture, appropriation of culture’s tools, symbolic cognitive tools, cognitive apprenticeship, Zone of proximal development, internalization</td>
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</tbody>
</table>
The table (Table 2.1) is a synthesis of mélange of literature on learning (Reys & Vallone, 2008; Pelech & Pieper, 2010; Bodrova & Leong, 2007; Marlowe & Page, 2005; Cruickshank, Jenkins & Metcalf, 2006; Pollard, 2008, Ormrod, 2012 and Kail & Cavanaugh, 2010). It shows that perspectives about learning have encompassed the two main dimensions of environment (including culture and society) and cognition. Proponents of each side put more emphasis on the dimension that qualifies their perspective: the behaviourists would give precedence to environment and thus lead an external objective approach (stimulus-response) to studying how learning in organism takes place; differently, the cognitivists are concerned with the internal processes and devote their attentions to issues like knowledge acquisition and knowledge retention in humans.

Despite the differences among these theories on learning, the possibility of their being mutually exclusive (when it comes to the act of learning) is non-existent. To learn, people will inadvertently capitalize on all of these dimensions: environment, society, culture and cognition. Ormrod is rather vocal on the pronouncement of this idea:

“Having read countless books, articles, and paper about human learning over the past 40 years, I remain firmly convinced that ideas from information processing theory, constructivism, and contextual views- as well as views from [other] theories- all make significant contributions to our understanding of how human beings think and learn. Taken in combination, they give us more complete understanding of human cognition than any single approach can offer alone” (Ormrod, 2012: 156).

As a process, learning is, then, more complex than it appears to be, and, further it may overlap with the notion of knowledge as shall be discussed in the following section.
In a study conducted by Saljo (1979), the conceptions of learning were found to range from learning as acquisition of information, to learning as making sense of ideas and the real world and eventually as developing a person. These conceptions of learning clearly intimate different notions of knowledge and how knowledge is constructed/acquired. It could be said that the three mentioned conceptions of learning (Behaviourism, Social Cognitive/learning Theory and Cognitivism) might occur separately or -as Entwistle & Walker (2002) observe- in ‘nested hierarchy’. In other words, a person’s approach to learning is related to the epistemological sophistication of that individual and how s/he sees knowledge: is knowledge imparted, constructed or relative? (see below). If knowledge is seen as absolute -the lowest epistemological stage-, then learning is nothing more than the ability to memorize and reproduce that learning or knowledge. If knowledge is understood to be constructed, then assimilation and accommodation are recognized as part of the process; and in learning the material of learning, the person is transformed (Moon, 2004). Broadly speaking, there can be two stances to learning/knowledge acquisition. One stance views learning as absorbing the learning material (what is to be known) in the same form it has been encountered; and another stance considers learning as an active construction of knowledge on the part of the learner. Elaborating further on these two stances, Moon (1999) disagrees with the first one -which she calls ‘Brick wall’ view of learning- for failing to happen outside the classroom where there are no lectures and formal instruction; conversely, she (Moon 2004) accepts the second stance -calling it ‘flexible network’- as being more useful for learning. Elsewhere Moon explains:

“On a constructivist view of learning, a more useful metaphor for the development of learning than the brick wall is a vast but flexible network of ideas and feelings with groups of more tightly associated linked
ideas/feelings. In the network some groups are far apart and some are near to each other and there are some relatively isolated ideas that have very few links to the network while others are well interconnected” (Moon, 2004: 16).

The idea that learning/knowledge acquisition should not only be connected to instruction is essential to reflection in general and to reflective practice (see down) in particular. The notion of learning as constructed resonates well with the concept and act of reflection in practice/teaching where learning is targeted as a means of understanding and, then, development.

2.4 Reflection and learning

In the light of the notions of learning and the different learning theories outlined above, and since learning and the ways of learning are inextricably connected to knowledge and knowledge acquisition (epistemology); the subsequent section will look briefly at the linkage between learning and reflection. The discussion shall be on how reflection in the field of teaching can help give the practitioner insights on aspects essential to his/her practice.

In this respect, reflection in teaching can be seen as a means to consider the self, context, customers (the students in our case), pedagogy and curriculum. As suggested by Kreber and Cranton (2000), reflection may be informed by two equally important sources of knowledge: formal knowledge (found in books, article, research, inquiry and others) and personal teaching experience. These sources can be claimed to help practitioners gain better insights on (or learn about) the aspects mentioned above (self, context, customer, pedagogy and curriculum). Learning about the self through reflection will help practitioner articulate a rationale for his or her instruction and pedagogy. As Rando and Menges explain, articulating this rationale
requires “reflection about personal theories, knowledge of formal theories, and blending of the personal and formal” (1991: 13, 14).

With regards to the personal, Pollard (2008) sees it as important for a teacher to consider him/herself in terms of social, cultural and educational background; experience and qualification; position; interest and personality. For Pollard, “such factors make up our ‘personal biography’ and together they can be seen as contributing to the development, within each of us, of a unique sense of ‘self’: a conception of the persons we are.” (2008: 116). Pollard argues that this sense of self - as posited by social psychologists (like: Roseburg, 1989; Secord and Backman, 1964, as in Pollard, 2008: 116)- is significant in influencing a teacher’s perspectives, strategies and actions (Pollard, 2008). Some authors (Huberman, 1993; Goodson, 1992; Thomas, 1995 and Nias, 1989) discussed how most people enter the teaching profession with a strong sense of personal identity and personal values and how this strong sense of identity and values may make teachers see themselves as persons-teaching rather than just as teachers. The point made here, then, is that this strong sense of identity and value may, ultimately, either enhance or hamper the attitudes of openness and willingness to change and develop. Openness and willingness to change and develop are attitudes implied by the notion of reflective teaching/practice. Through reflection, a teacher needs both to identify values and to consider indicators of their actual implementation (Pollard, 2008).

kreber and Castleden, (2009) report an empirical study that has explored university teachers’ engagement in reflective practice on their teaching. Kreber and Castleden’s participants have engaged in, and the learning gained. These forms of reflections suggest different levels of reflection: content refers to drawing on existing
knowledge; process implies questioning knowledge only within boundaries of core beliefs; and premise indicates aiming at constructing knowledge (in Mezirow, 1991).

In their study, Kreber and Castleden (2009) also probed for indicators to these forms of reflection their participants said to have practiced. The study reported indicators like: comparing research-based insights to one’s own knowledge, going to conferences, experimenting with ideas gained from workshops on teaching, challenging or critiquing some published literature on teaching and turning to discipline-specific literature on teaching and learning when structuring a course and thinking about the suitability of what it has suggested in the reading. This variety of learning has been achieved as a result of engaging in different levels of reflection.

To further stress the linkage between reflection and learning, a synthesis by the researcher of relevant ideas which have been discussed in the literature is presented in form of a table (Table: 2.2).

<table>
<thead>
<tr>
<th>Domains of reflection</th>
<th>Kinds of reflection</th>
<th>Goal of reflection</th>
<th>levels of reflection</th>
<th>Forms of learning</th>
<th>Forms of Knowing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching and assessment method (K &amp; C) OR Teaching goals (Mc)</td>
<td>Content (Mez)</td>
<td>Form evidence (R)</td>
<td>Draws on existing knowledge (Mc)</td>
<td>testing hypothesis (Scientific method) (R)</td>
<td>Instrumental (Hab)</td>
</tr>
<tr>
<td>Learning and student development (K &amp; C) OR Learning goals (Mc)</td>
<td>Process (Mez)</td>
<td>Question knowledge (R)</td>
<td>Questions knowledge within boundaries of core beliefs (Mc)</td>
<td>Validating knowledge dialogically (R)</td>
<td>Communicative (Hab)</td>
</tr>
<tr>
<td>General and/or Course specific (K &amp; C) OR Educational goals (Mc.)</td>
<td>Premise (Mez)</td>
<td>Question core beliefs (R)</td>
<td>Construction of knowledge (Mc)</td>
<td>Transformation of conceptual structure (R)</td>
<td>Emancipator (Hab)</td>
</tr>
</tbody>
</table>
The ideas collated in this table (Table 2.2) are basically scattered but interrelated concepts of discussions on reflection and learning by: Kreber and Cranton, 2000; McAlpine et al. 2004; Mezirow, 1991 and Habermas, 1971.

The domains of reflection on top of each cell in the first column of the table are found to be discussed in Kreber and Cranton, 2000 (K&C). Corresponding to these, are three domains suggested by McAlpine et al. 2004 (Mc). These domains are at the bottom of each cell in the first column of the table. The table also presents in its second column the kinds of reflection academics may engage in (Content, Process and Premise). These kinds of reflection are enunciated by Mezirow, 1991 (Mez). What suffices at this stage is the fact that learning can happen when teachers reflect on aspects pertaining to both: the personal (personal values, for example) and the formal (Course goals, for example). Goals of reflection and forms of learning (in columns three and column five respectively) have been gleaned by the researcher (R) from the said literature and have been slotted in the flow of this table to help clarify more the linkage between reflection and learning. In a sense, column five serves as an operationalization of the levels of reflection mapped out by McAlpine et al. 2004 (Mc) in column four. Column six is a representation of Habermas’, 1971 (Hab) typology of forms of knowing.

Overall, what is presented in this table corresponds to Kreber and Castleden’s (2009) viewpoint about diversity in orientations to arrive at generic model of reflection. This type of model, according to Kreber and Castleden, can help practitioners turn their reflection into a meaningful knowledge (2009).

This notion of turning reflection into meaningful knowledge is the premise of reflective practice/teaching which shall be the focus of the following section.
2.5 What reflective practice is

This section will attempt to follow the definitions in the literature of reflective practice (RP). It will then delineate how reflective practice is conceptualized in seminal (Dewey’s and Shon's) works. After that, the section will map out the approaches adopted with regards to its application in the field of teaching/learning.

2.5.1 General definitions of reflective practice

“We all had the experiences but missed the meaning” (T.S. Eliot as cited in Tomlin, 1988: 42)

During the last decades, the notion of reflective practice “has emerged as the new Zeitgeist” (Pollard, 2002: 13) in education. Teachers and teacher educators have all become oriented towards being or developing the ‘reflective practitioner’ (2002: 3) as a result of both the increased respect for teachers’ practical theories, and of the growth of research on teacher thinking (Clark, 1988). Reflective practice has become part of the rhetoric in classrooms, conferences and journals, “yet the idea of reflective practice has become increasingly more disparate” (Ruth-Sahd, 2003: 488) in the sense that the term ‘reflective practice’ can generate host of responses that range from excitement and enthusiasm to complete ambiguity and bewilderment (Burton, 2000). Nonetheless, many attempts have been made to define the term reflective practice.

Since its introduction to the field of education by Dewey (1933, 1938) more than 70 years ago, the notion of reflective practice started to permeate the literature of education revealing different understandings which are, in essence, highly
dependent on the authors’ or the researchers’ individual experiences or worldview (Ruth-Sahd, 2003). Zwozdiak-Myers, for example, defines reflective practice as:

“A disposition to enquiry incorporating the process through which ... teachers structure or restructure actions, beliefs, knowledge and theories that inform teaching for the purpose of professional development” (Zwozdiak-Myers, 2010: 83).

This definition accepts reflective practice to be an inquiry into teacher’s practice and cognition for the purpose of development. In a rather similar vein, Valencic-Zuljan, et al (2011) capture reflective practice as “a way of thinking about pedagogical issues, involving the ability of rational decision making, selecting and taking responsibility for the selected option” (2011: 487). Similarly, Pennington (1992) describes reflective practice as “a movement in teacher education in which ... teachers analyse their own practice and their underlying basis and then consider alternative means of achieving their ends” (1992: 48). To this definition, an element of criticality has been added by Richards and Lockhart (1994). These two authors support a critical reflective approach to teaching arguing that such approach to one’s practice can trigger a deeper understanding of teaching and contributes to the teacher development. To that effect, Richards and Lockhart describe a reflective approach to teaching as being one “in which teachers and student teachers collect data about teaching, examine their attitudes, beliefs, assumptions and teaching practice, and use the information obtained as a basis for critical reflection about teaching” (1994: 1).

Zeichner (1983) and Zeichner and Liston (1987) have transcended the micro level discernible in the previous definitions which associated reflective practice with the immediate environment of the teacher. For Zeichner (1983) and Zeichner and Liston (1987) reflection is a clarification of the practitioner’s daily routine from the standpoint of both the pedagogical and the wider dimensions. In other words,
reflection should incorporate the question of how the teacher sees his/her activity in relation to the wider context involving ethical, moral and political principles. In even a more practical term, Zeichner and Liston (1996) point out that reflective teaching involves teachers in examining, framing, attempting to solve problems of classroom and school, and asking questions about assumptions and values they bring to teaching. For them, reflective teaching also involves attending to school and cultural context in which teachers interact, participate in curriculum development, being involved in school change and accepting responsibility for their own professional growth. In fact, Larrivee (2000) believes that reflection is basically initiated when a problem is recognized and the uncertainty of its resolution is accepted. As posited by Chappell “[t]he dissonance created in understanding that a problem [exists] [engages] the reflective practitioner to become an active inquirer, involved in the critique of current conclusions and the generation of new hypotheses” (2007: 259).

The idea that reflective practice is to be directed to solving a specific problem, as can be inferred from Zeichner and Liston’s (1996) conceptualization of reflective practice, does not resonate well with Cunningham (2001). According to the latter, the goal of reflective practice is not necessarily to deal with a specific question as in a practitioner’s research, such as action research. Cunningham maintains that the goal of reflective practice is to observe and refine practice generally and on an ongoing basis (2001). While both views are valid and revealing of different worldviews, they can both, nonetheless, be combined to address a specific problem or question in teaching, and, simultaneously, to monitor the overall picture by adjusting and refining the practice in general. The same notion can be found in Bell’s et al. (2010) understanding of reflective practice. These writers regard reflective practice as “an iterative process rather than a one-off event” (2010:}
for them, this process involves “repeated cycles of examining practice, adjusting practice and reflecting upon it, before trying it again” (Grushka’s et al. 2005 as cited in Bell et al. 2010: 58).

From a different perspective, Bell (1993) sees reflective practice as a process of cognitive learning originating from an in-depth analysis of teacher’s own practice and cognition that informs the individual thinking and action. Bell postulates that reflection can be a solo process or an interactive one where a critical friend may assist the teacher in clarifying dilemmas, posing questions and acquiring deeper insight into the work and the conditions besetting the work. The element of collaboration is also found in Young’s (2006) understanding of reflective practice. Young, who has drawn on Kahn’s et al. (2006) definition, perceives reflective practice as “… reflective processes [that] involve creating meaning around practice. This is inherently collaborative. The resulting understanding … provides a starting point for adapting practice” (Young, 2006 as cited in Bell et al. 2010: 58).

The notion of process in reflective practice is also captured by Evan (2009) who posits that “A reflective practice is one that provides the learner with a process, framework or support tools for learning enhancement through reflection” (2009: 1). Evans elaborates on her definition by adding that reflection may be individual and private (example: in journaling), verbal and dialogic (with another person) or in group, as in what is called ‘an action learning set’ (2009: 1). Action Learning Sets are a structured method enabling small groups to address complicated issues by meeting regularly and working collectively. It is a tool especially geared to learning and personal development at the professional levels.

In addition to all that, York-Barr et al (2006: 8) have listed a number of succinct definitions of reflective practice offered by a number of authors:
“Reflective practice is as much a state of mind as it is a set of activities” (Voughan, 1999)

“A genuinely critical, questioning orientation and a deep commitment to the discovery and analysis of positive and negative information concerning the quality and status of professional’s designed action” (Bright, 1996)

“The practice or act of analyzing our actions, decisions, or products by focusing on our process of achieving them” (Killion and Todnem, 1991)

“Deliberate thinking about action, with a view to its improvement” (Hatton and Smith, 1995b)

“The ability to frame and reframe the practice setting, to develop and respond to this framing through action so that the practitioner’s wisdom-in-action is enhanced and … articulation of professional knowledgement is encouraged” (Loughran, 2002).

“The practice of periodically stepping back to ponder the meaning of what has recently transpired … [Reflective practice] privileges the process of inquiry … probing to a deeper level than trial and error experience” (Raelin, 2002).

As can be seen, reflective practice defies a unified definition that can be all-encapsulating, but the fact that writers from different parts of the world (for example: Hatton and Smith, 1995a; Zeichner and Liston, 1996; Cole, 1997; Ghaye and Ghaye, 1998; Day, 1999; Kristiina, Marja-Terttu, and Marita 2001; and Farrell, 2001) have offered their understandings of reflective practice is indicative of the worldwide appeal of reflective practice.
As “there is no universally accepted definition of reflective practice but a multitude of perspectives” (York-Barr et al, 2006: 8), it is recommendable for a practitioner to consider his/her way of defining reflective practice so that this way becomes the organizer for this practitioner’s own thinking and learning (2006).

For the sake of this study, I will adopt the definition offered by Boud et al. (1985):

“reflection in the context of learning is a generic term for those intellectual and affective activities in which individuals engage to explore their experiences in order to lead to new understandings and appreciations” (1985: 19).

This definition hints at the complexity of the notion of reflective practice. It also situates reflective practice in the context of learning, which is part to the whole premise of this study. The definition also includes two important dimensions (intellectual and affective); both of them are deemed essential to the endeavour of probing teacher educators’ perceptions of reflective practice. Additionally, the end game of reflective practice in this definition is to enable a new level of learning that emphasises meaning making via discovering and challenging one’s own and other’s assumptions. This discovering and challenging of ideas, is to be viewed as a step in establishing new meaning perspectives which, by turn, “can lead to more than just frames of current ideas; they foster qualitatively more complex ways of understanding and Knowing” (Kegan, 2000 as cited in Taylor, 2006: 79).

2.5.2 Basic concepts of reflective practice

To further disentangle the rather matted threads of literature on reflective practice, it might be feasible to consider the works of Dewey (1933, 1938) and Shōn (1983, 1987) as the foundational source from which other works emanated and
ramified. To a great extent, these two scholars could be seen to have established the basic concepts pertaining to reflective practice; whereas, other authors (such as: Kolb, Van Manen, Boud and others) tend to develop and identify more structured frames to conceptualize or to enact reflective practice hinging on the seminal works of Dewey (1933, 1938) and Shön (1983, 1987). It is worth mentioning here that Van Manen, chronologically speaking, wrote about levels of reflection in 1977 i.e. prior to Shon’s (1983, 1987) seminal works; but with the intent in mind for this study to logically organize the varied conceptualization of reflective practice, it is deemed fit to treat Van Manen’s work in a subsequent section (Approaches to reflective practice). So, this section will attempt to follow how initially Dewey (1933) and, later, Shön (1983, 1987) have conceptualized reflective practice.

2.5.2.1 Dewey (1933,1938)

Reflection in relation to the profession of teaching has its roots in the writing of the philosopher John Dewey (1910) (Neslson and Sadler, 2013). Over a century ago, Dewey (1910) wrote about the importance of reflective thinking characterizing it as a sense-making process instigated by a ‘felt need’ (Boreen, et al. 2009: 57). He indicated that reflective thinking is important because it “converts action that is merely appetitive, blind, and impulsive into intelligent action” (Dewey, 1933 as cited in Bartell, 2005: 117). It is postulated by some authors (Calderhead and Gates, 1993; Furlong and Maynard, 1995; Pollard et al, 2005; and Rodgers, 2002) that Dewey’s (1910, 1933) work on the nature, acquisition and application of problem posing and problem solving skills has been of great influence in the context of learning and teaching.
It is evident, then, that Dewey’s work is of constant mentioning in the literature pertaining to reflective practice, but, as Rodgers (2002) claims, clear understanding of Dewey’s work is currently missing. Rodgers explices:

“Dewey is mentioned consistently in books and articles written on reflection, teacher education, and student learning, but an extensive examination of what he actually meant by reflection is missing from the contemporary literature” (2002: 843).

Rodgers based her judgment on what she sees as an ambiguity in four areas:

1. How systematic reflection is different from other types of thought

2. How to assess a skill (reflection) that is vaguely defined

3. Lack of common language to talk about reflection


The four areas highlighted by Rodgers (2002) typify the complexity of reflection/reflective practice. They bespeak the fact that reflective practice defies a definition or a preset procedure that can hold it distinct from the other forms of thinking. As in Rodgers’ rhetorical questions “Does mere participation in a study group, or the keeping of journal, for example, qualify as reflection? If a teacher wants to think reflectively about or inquire into her practice, what does she do first? How does she know if she is getting better at doing it …” (2002: 843). Tied up to the problem of defining reflection/reflective practice, is assessing reflection. Assessing reflection is seen as problematic since it is difficult to specify what evidence is to be sought as proof of reflection. Additionally, the inability to depict a clear picture of
reflection is considered by Rodgers to hamper a consensus on a unified language to talk about the notion of reflection; and here comes the confusion as a result of using overlapping meanings (such as reflection, inquiry, critical thinking, metacognition) (Rodgers, 2002). Consequently, without a clear sense of what is meant by reflective practice, it will not be clear how “to research the effects of reflective teacher education and professional development [...] on teachers’ practice and students’ learning” (Rodgers, 2002: 843).

Looking analytically at Dewey’s How We Think, (1910/1933), Rodgers has identified the forms of thought the former tackled in his book: belief, imagination, and stream of consciousness, in addition to reflection in which Dewey was most interested. Simultaneously, Rodgers doubts the fact that practitioners (teachers and teacher educators), contrary to philosophers, refer to Dewey’s “literature in constructing their own approach” (2002: 844) in the field despite the claim of many teacher education programmes to turn out reflective practitioners (2002).

In her endeavour to make Dewey’s thinking more accessible, Rodgers manages to distill four criteria from the former’s writing:

1- Reflection is a meaning-making process that is continuous, progressive and moral;

2- Reflection is a systematic way of thinking that is rooted in scientific enquiry;

3- Reflection is dialogic and needs to happen interactively in community;

4- Reflection requires attitudes that value growth (personal and intellectual) (2002: 844).
These criteria, for Rodgers, characterize Dewey’s concept of reflection and the purposes Dewey thought reflection served.

In fact, the first criterion formulated by Rodgers (2002) bespeaks Dewey’s view of education. The meaning and purpose of education for Dewey (1944) was to promote the intellectual, moral, and emotional growth of the individual and, ultimately, the evolution of a democratic society in which the interests of a group were shared by all its members. Reflective practice is, then, considered to be a deliberative cognitive action which involves interrelated ideas that embody underlying beliefs and knowledge (Hatton and Smith, 1995b). Dewey qualifies reflective practice as a specialized mode of thinking that aims at transforming a perplexing situation into a settled one by presenting a tentative resolution to the initial problem (Dewey, 1933). In this sense, Dewey was mainly concerned with the cognitive aspect of reflection that is structured of sequence and consequence fashion—an approach which manifests Dewey’s problem solving theory (feeling the problem, defining the problem, hypothesizing for a solution, reasoning about methods for solution and testing the hypothesis) (Dewey, 1933: 102). More relevantly, Dewey articulated his understanding of reflection to be the “… reconstruction and reorganization of experience which adds to the meaning of experience and which increases ability to direct the course of subsequent experience” (1933: 74). Reflection here is equated to learning where equilibrium succeeds disequilibrium as a result of assimilation or accommodation (Piaget as cited in Knight, 2002).

The second criterion has been inferred from Dewey’s How we Think (1933). According to Rodgers (2002), Dewey explored extensively the process of reflection and used around “30 different specialized terms to describe it (process of reflection)” (2002: 849). To demystify the term and render it accessible to teachers and teacher
educators, Rodgers explains in plain words that thinking cannot be equated with “haphazard ‘mulling over’ something” (2002: 849): it is a systematic way of thinking. This systematic way of thinking is different from the ‘stream of consciousness’ mode of thinking (Dewey, 1933) which happens involuntarily; it is also held distinct from the beliefs maintained as prejudgment not as “conclusions reached as the result of personal mental activity, such as observing, collecting, and examining evidence” Dewey, 1938 as cited in Rodgers, 2002: 450). Furthermore, systematic thinking is distinguished from imagination as the former is about “image- ing” rather than imagining (2002: 850). Reflection as systematic thinking requires drawing on past experience to image “other events that are similar to or different from the experience being inquired into” (2002: 850). Reflection as systematic thinking for Dewey is a kind of thinking that involves turning a subject over in the mind. Reflective thinking in Dewey’s work, as interpreted by Rodgers, starts “by an encounter with, and the conscious perception of, the potential significance inherent in an experience” (2002: 850). The potential of an experience may not be perceived by everyone: as eloquently stated in Rodgers’ “How many apples had fallen on heads before Newton perceived the inherent significance of the event” (2002: 850). With reference to teaching, Dewey’s (1933, 1938) “distinction between routine and reflective action in teaching highlighted the importance of teachers reflecting systematically upon their working contexts, resources, and actions” (Burton, 2009: 298). Moreover, Dewey enjoins teachers to apply the knowledge they gain in their everyday and long-run decision making (2009). The kind of structure Dewey attempted to bestow of his conception of reflective practice testifies to the justification given by York-Barr et al. (2006) that the context of the Progressive Era has had it impact on Dewey’s view. In enunciation, York-Barr et al. state “Dewey,
whose views emerged during the Progressive Era, when scientific advances were shaping education and social science, emphasized not just rigor but specific consideration of scientific knowledge” (2006: 4).

The third criterion by Rodgers (2002) about reflection in community acknowledges the need for one to express what one thinks. Dewey labeled thinking without saying it an ‘incomplete action’; more succinctly put “The experience has to be formulated in order to be communicated” (Dewey, 1944: 6). Dewey, as Rodgers understands, recognized the importance of conveying ideas to others as a means of testing these ideas. In other words, when one shares one’s ideas with others, the others will be in position to reveal both the strengths and the holes in one’s thinking-collaborative reflection (2002). Reflecting on her own experience as an educator, Rodgers has identified some factors that manifest the benefits of collaborative reflection:

- **Affirmation of the value of one’s experience:** In isolation what matters can easily be dismissed as insignificant;

- **Seeing things newly:** Alternative meanings are offered by others and the ensuing broadening of understanding;

- **Support to engage in inquiry:** Being accountable to a group, teacher will not succumb to the feeling of being overwhelmed by the daily demands. (2002: 457).

Evidently, what Rodgers has gleaned from her own reflection experience matches Dewey’s proposition that teachers (and also students) need the support of the community, and the ability to act independently within the larger world (Dewey,
1944). By the same token, Javis (1987) maintains that the experience itself has got no significance or meaning unless it is endowed with meaning by the individual who ultimately draws on socially constructed meaning. The role played by the society in the construction of the individual experience and its interpretation is not deniable (Moon, 2004).

The last criterion projected by Rodgers (reflection as a set of attitudes) embodies Dewey’s call for the fusion of the intellectual and the emotional. The latter two ones are seen as a consequence of the integration between character and mind. Dewey sees the split between character and mind as fictitious since “natively and normally the personality works as a whole” (Rodgers, 2002: 858). Attitudes for Dewey, as understood by Rodgers, can either block or facilitate learning from experience via reflection. It is, therefore, commendable of an individual not only to be aware of his/her attitudes and emotions, but also to harness them to their advantages. For Boud et al. (1985), the functioning of the whole person, particularly the emotional aspect, is warranted by the very nature of experiential learning which is fundamentally holistic. As Moon (2004) reports “Many would argue that taking account of the ‘whole learner’ does facilitate learning” (2004: 125). (See the section on the dimensions of reflection).

In essence, the criteria and the characteristics elicited by Rodgers help a great deal in illuminating Dewey’s notions of open-mindedness, responsibility and wholeheartedness which have been quoted extensively in the literature but with rather limited insights. These notions, which constitute the bases for Dewey’s reflective thinking and orientation to practice, were seen by the latter as attitudes linked to the attributes of ideal teachers/practitioners who were capable of acquiring the habit of on-going thoughtfulness and examination of the beliefs and theories they
used in order to inform their practice. This is the type of reflective practice prized by Dewey because it can emancipate “us from merely impulsive and routine activity… enable] us to direct our activities with foresight and plan according to ends-in-view” (1933: 17). For Dewey, reflection is a rational and purposeful act, and an “active, persistent and careful consideration of any belief or supposed form of knowledge in the light of the ground that support it, and further conclusions to which it leads” (Dewey, 1933: 7). Dewey goes on to add more bluntly that reflection “… includes a conscious and voluntarily effort to establish belief upon a firm basis of evidence of rationality” (1933: 7). However, this cognitive, systematic and scientific view of reflective practice is later seen to be positivistic and termed ‘technical rationality’ by Shön (1987: 3) to whom the discussion turns in the following section.

2.5.2.2 Shön (1983, 1987)

Shön is another proponent of reflective practice. He expanded on Dewey’s concept of reflection but he “emphasized context and experiential knowledge” (York-Barr, et al. (2006: 4). This emphasis has held his notion of reflective practice distinct from Dewey’s; as observed by Fendler:

”These days the meaning of reflective practice is riddled with tensions between Shön’s notion of practitioner-based intuition, on the one hand, and Dewey’s notion of rational and scientific thinking on the other hand” (Fendler, 2003 as cited in York-Barr, 2006: 4).

Shön adopts a constructionist view of reality with which the practitioner deals. In this respect, he sees a practitioner as one who constructs “situations of his practice, not only in the exercise of professional artistry but also in all other modes of professional competence” (Shön, 1987: 36). He suggests that technical rationality is anchored on an objectivist view of the relation of the knowing practitioner to the reality he knows. In other words, professional knowledge, according to this view,
rests on stable facts by reference to which all meaningful disagreement are solvable and the truth of beliefs is strictly testable (Shön, 1987). In contrast with this objectivist view, Shön offered a constructionist view that regards “our perceptions, appreciations, and beliefs [as] [are] rooted in worlds of our own making that we come to accept as reality” (1987: 36). From this standpoint, Shön hints at his disapproval of Dewey’s technical rationality as it focuses the competent practitioner’s concern on solely instrumental problems and confines his/her “search for the means best suited to the achievement of fixed, unambiguous ends” (1987: 33).

The success of the practitioner in this case (of technical rationality) is measured by his/her ability to apply theories and techniques derived from systematic, scientific research to the solution of the instrumental problem faced in practice. In fact, Shön acknowledges the existence of two practice situations and two kinds of knowing appropriate to them: the familiar situations where the body of professional knowledge can avail; and the unfamiliar situations where there is no fit between the situation and the available body of professional knowledge (1987). However, Shön posits that in initially problematic situations it would be a case of limitation to make a routine application of existing rules and procedures to the facts of such situations. (1987). It can be gleaned, then, that although Shön acknowledges that professionals are to acquire a body of specialized knowledge, he strongly argues that such body of knowledge cannot simply be applied in a rule governed fashion to practice. His argument is based on questioning the appropriateness of applying knowledge in a context that is different to context in which that knowledge has originally been produced.

Alternatively, Shön proposes a discourse of professional artistry (1987: 22); a term he uses “to refer to the kinds of competence practitioners sometimes display in
unique, uncertain, and conflicting situations of practice” (Shôn, 1987: 22). Shôn qualifies this artistry as an esoteric variant of the more commonplace competence people repeatedly exhibit every day in different “acts of recognition, judgment and skillful performance” (1987: 22). Shôn has further reversed Dewey’s technical rationality approach by claiming that knowledge embedded within and gathered from the context of the school, can both generate and develop an understanding of practice.

This reversal of approach is premised on the disapproval of what Shôn describes as ‘crisis in professional knowledge’ and ‘crisis in professional education’ (1987: 3 and 8). Both aspects of crises refer to the gap between professional knowledge and actual competences required for practicing teaching (1987: 10). To illustrate this, Shôn relays teachers’ complaint about the “cognitive psychologists [who] have little of practical utility to teach [them]” (1987: 10). These crises—each contributing to and exacerbating the other, as Shôn decides—are seen to have resulted from technical rationality which promotes a normative, objective positivistic epistemology of practice. In its so described epistemology of practice, “technical rationality holds that practitioners are instrumental problem solvers who select technical means best suited to particular purposes” (1987: 3). The rigour in the techniques derived from systematic scientific method, as Shôn posits, can only suit well-formed instrumental problems not the increasingly ill-formed today’s world problems. Research-based theories and techniques are applicable to ‘high ground manageable’ problems not to ‘swamp’ (1987: 3) problems. As adjudicated by Shôn “In the swampy lowland, messy, confusing problems defy technical solution”, (1987: 3).
To shift the focus from the relatively unimportant high ground problems to the swamp problems -which are of greatest human concern-, Shon emphasizes practitioner-generated, intuitive knowledge derived from experience i.e. “swampy knowledge” (York-Barr, et al. 2006: 6). It is, then, a call for refraining from attempting converting problematic situations to well-formed situation in order to solve the technical problem; instead, it is a call for working to facilitate a solution to the technical problem through naming and framing (1987: 5). Naming and framing of problematic situations, for Shön, cannot be facilitated via sole technical professional knowledge, but more likely via “wisdom, talent, intuition or artistry” (1987: 13). Artistry, also called reflection-in-action (1983, 1987), is recognized by Shön as inherent in the practice of professionals. It is a kind of knowledge and an exercise of intelligent that is rigorous in its own terms. Shön maintains that in their everyday life as well as in their workday life, people show themselves to be knowledgeable in a special way. “Our Knowing”, Shön pronounces, “is ordinarily tacit in our patterns of actions and in our feel of the stuff with which we are dealing”; and he goes on to conclude that “It seems right to say that our knowing is in our action” (1983: 49). As Russell and Munby explain “the essence of reflection-in-action is hearing differently or seeing differently, a process that Shön calls reframing” (1991: 164). According to these authors, reflection-in-action is a process that is instigated by experience and over which teachers have no control (1991). In his epistemology of practice, Shön offers the view that reflective practice can be a creative process in the sense that practitioners can generate their own theory-in-use (Argyris and Shön, 1974) as they name and frame each unique teaching situation. However, Argyris and Shön put a distinction between theories-in-use and espoused theories: the former refers to the patterns and behaviours that teachers accumulate in their daily work; the latter refers
to the models of behavior that teachers learn in their educational programmes (1974).

In delineating his epistemology of practice, Shön exposes the false division between theory and practice in teaching. He suggests that teachers draw upon their own theories-in-use when reflecting-in-action; and draw upon espoused theories when reflecting on action. Reflecting-in-action, as meant by Shön, is the process of observing one’s own thinking and actions as they are occurring in order for one to make timely adjustment; whereas, reflection-on-action is the process of looking back on and learning from experience or action in order to affect future action (York-Barr, et al. 2006). Reflection-in-action is, then, unplanned, unorganized and unsystematic in nature. It occurs amid activity and often results in immediate reframing of a class situation or action. Reframing results from “a sudden and unexpected flash of knowledge or understanding that enables the teacher to think and act differently and more productively” (Boreen, et al, 2009: 59). Unlike reflection-in-action, reflection-on-action is a deferred action that “involves a systematic analysis of professional activity or performance” (Boreen, et al., 2009: 58) after a dilemma or experience has been resolved.

According to Shön’s epistemology, the relationship between knowing-in-action and reflecting-on-action presents a means through which practitioners can make explicit their own implicit assumptions, beliefs, theories and values with a view to effect progress and development. Shön perceives reflective practice occurring in feedback loops: a single feedback loop operating in the classroom whereby the teacher reflects and takes prompt action on a teaching consequence; and a double feedback loop as operating outside the classroom when the teacher reflects on a teaching incident and draws upon factors beyond the context of the classroom (Burton, 2009). In case of single feedback loop, the teacher might take an immediate
decision to change a teaching strategy as a result of reflecting-in-action. With respect to double loop feedback, the consequences “can go beyond an immediate event and be far reaching” (2009: 299). Schön views teaching as an activity that is complicated and full of uncertainty; and, logically, practitioners cannot just apply what they have been taught in an inflexible manner. Schön conceptualizes knowledge-in-action (theories-in-use/tacit knowledge) as the source to be tapped when a dilemma in teaching arises. This type of ‘tacit knowledge’ (Shön, 1987: 22), which is not consciously articulated by the individual, includes a repertoire of values, knowledge, theories and practice (1983, 1987).

Shön’s epistemology of practice has recognized that the majority of teaching practice is a weave of indeterminate situations and zones that are not in the book (Kinsella, 2007). In Kinsella’s words “Such indeterminate zones are not negotiable by simple application of science and techniques” (2007: 402). Schön’s concept of reflective practice seems to fit well with his contemporary postmodern view which prizes diversity and rejects grand narratives that used to hail rationality and to detest ambiguity. In essence, reflective practice from this perspective is a learning (to teach) process that is a far cry from the behaviourist-oriented view of learning that was concomitant with the era of empiricism.

Overall, this section (Basic concepts of reflective practice) has attempted to explore the origin of and the fundamental ideas underpinning the nature of reflective practice. Broadly, the basic ideas are found to stem from two different understandings of the complex relationship between the process of theorizing and other forms of propositional knowledge: the role of teacher’s intuition (artistry), and the prominence of scientific research (technical rationality) in learning via reflection. Schön and Dewey, respectively, proclaimed these two different concepts of reflective
practice. Schön’s and Dewey’s basic concepts were further treated by some authors and educators (such as: Kolb, 1984; Korthagen, & Vasalos, 2005; Zeichner, 1987) to facilitate implementation of reflective practice. To this end, these educators and others (see subsequent section) have envisaged some approaches to reflective practice.

2.5.3 Approaches to reflective practice

Research shows that there was little consensus not only on the meanings associated with reflective practice, but also on approaches towards its implementation, and on the notions pertaining to what should be the object of reflection (Adler, 1991; Calderhead, 1989; Feiman-Nemser, 1990; Gore, 1987; Hatton & Smith, 1995b; Vali, 1992; Zeichner & Tabachnik, 1991).

To operationalize reflective practice in the field of education, scholars have looked at the concepts of reflective practice from different angles and thus envisaged varying perspectives as to its (reflective practice) application. For example, Van Manen (1977) talks about levels of reflection, Kolb (1984) proposes experiential learning, while others (Boud, et al. 1985; King and Kitchner, 1994; respectively) advance dimensions, and models of reflective practice as avenues to be trodden when implementing reflective practice.

This section looks at the literature on functionalizing the concept of reflective practice in the field of teaching to highlight some of the different approaches delineated by some authors and educators. Part of that literature (Van Manen, 1977; Valli, 1990; King and Kitchener, 1994; Kolb, 1984 and Korthagen & Vasalos, 2005) will be shortly discussed and illustrated under two subheadings (Levels of reflection and Models of reflection) to help establish an overall picture of reflective practice.
2.5.3.1 Levels of reflection

A number of scholars (Dewey, 1933; Hatton & Smith, 1995b; Jay & Johnson, 2002; Lee, 2005; Valli, 1992; Van Manen, 1977) identified different levels at which the depth of reflection in teaching could be measured. But, as there is no ideal way to categorize the levels of reflection (Bell, et al. 2010) in teaching, it is seen fit to discuss mainly the one combined from the works of Van Manen (1977) and Valli (1990).

Van Manen (1977) suggested three levels of reflection that also hints at the process of thought (Collier, 1999). These levels are technical rationality (efficacy of the action), practical action (goal of the action) and critical reflection (action as part of a wider context) (Roberts, 2008). Others (Bell, et al., 2010: 59) refer to these levels simply as: technical, practical and critical. Van Manen proposed these three levels of reflectivity to describe different aims of reflection.

The first level -technical reflection- is concerned with the effective application of teaching skills and technical knowledge. At this level, the teacher examines the skills, strategies and methods used to reach predetermined goals (York-Barr, et al. 2006). Only responses pertinent to technical application of educational knowledge, basic curriculum principles and instructional strategies are envisaged. Technical reflection in Van Manen’s words is “concerned mainly with means rather than ends” (1977: 226). In essence, this level is described as the most basic level of reflection because it focuses on efficiency and effectiveness of the means adopted in accomplishing ends which are accepted as given (Zeichner, 1994). Although no change is expected to ensue from such kind of reflection, some researchers
(Griffithes & Tann, 1992; Zeichner, 1994) consider it as important as this type of reflection relates to everyday world of teachers.

At the second (practical) level, the teacher describes an experience in a way that a subjective perception or commitment to a certain theory or system can easily be detected (Collier, 1999). In other words, the teacher focuses on the connection between the principles and the practice and on “an interpretive understanding both of the nature and quality of educational experiences” (Van Manen, 1977: 226-7). Students’ outcomes and behaviour (as well as teacher’s behaviour) are also investigated at this level to see if and how goals are attained (York-Barr, et al., 2006). At the practical level, individual and independent pedagogical decisions are made subsequent to applying educational criteria to teaching practice (Van Manen, 1977).

The third level, which is the critical level, “focuses on inquiry about the moral, ethical, and equity aspects of practice” (York-Barr, et al. 2006: 6). At this level, teachers are concerned with the “worth of knowledge … a constant critique of domination, of institutions, and of repressive forms of authority” (Van Manen, 1977: 227). As Killen (2007) sees it, reflection at this level goes beyond the classroom to moral and social issues. This incorporation of the moral/ethical and social aspects brings to the focus questions about validity and feasibility of the entire current educational experience (goals, processes and activities) vis-à-vis justice and equity; and “whether current arrangements serve important human needs and satisfy important human purposes” (Tom as cited in Zeichner & Liston, 1987: 25). As such, both teaching and contexts are seen as problematic (Zeichner & Liston, 1987).
As understood by Nelson & Sadler (2013), Van Manen has drawn “connections between the three major traditions of social science (empirical-analytical, hermeneutic-phenomenological, and critical-dialectical) and teacher reflection” (2013: 46).

In addition to the above-mentioned three levels postulated by Van Manen (1977), Valli (1997) proposes other two levels: reflection-in and on-action, and personalistic reflection. Valli’s five-level-typology of reflection is viewed to work as an organizing structure to address the purpose of teacher education (Nelson & Sadler, 2013). In tandem with Van Manen’s, Valli’s levels are incorporated to form the following structure of levels of reflection:

1- Technical reflection: reflection is on teacher’s techniques which are determined externally. (see preceding section)

2- Reflection-in and on-action: reflection at this level is on one’s own teaching performance which can lead to decisions based on one’s own unique situation. (York-Barr, et al., 2006). Evidently, this level corresponds to Shön’s (1983, 1987) conceptualization of reflective practice (see above). According to the present typology, reflection in-action helps build “a repertoire of professional practice by recognizing the tacit knowledge manifested in an act of teaching” (Nelson & Sadler, 2013:47), whereas reflection on-action is about retrospective thinking on an experience (2013).

3- Deliberative reflection: like in the practical level posited by Van Manen (see above), reflection at this level is on assumptions, knowledge and research findings related to teaching, but teaching decisions are based on internal considerations.
4- Personalistic reflection: the focus here is on personal development and liberation (Nelson & Sadler, 2013). The last two ones are envisaged to happen via listening to one’s own inner voice as well as to those of others, and, also, by attending to aspects of students’ lives, often from a perspective of trust and care (Valli, 1997; Wellington & Austin, 1996).

5- Critical Reflection: as in Van Manen’s levels, reflection is viewed as instrumental in addressing the imbalances in the wider context (see above). It focuses on social, moral, and political dimensions of education and takes into account making judgements founded on ethical criteria (Valli, 1997: 75).

Levels of reflection are, then, an approach to putting the concepts of reflection to practice. When applied (partially or entirely) by teachers or teacher educators, this typology of reflection can give indications of how the practitioner views knowledge and the way knowledge is acquired. This idea is substantiated by Wong et al. (1995) whose study found that “reflective journals submitted by students evidenced three levels of reflection: nonreflector, reflector, and critical reflector” (Wong, et al., 1995 as cited in Ruth-Sahd, 2003: 492).

2.5.3.2 Models of reflective practice

The process of knowing (view of knowledge) and how knowledge is acquired (justification of beliefs) were also investigated by King and Kitchener (1994, as in Meyer, 2004). They studied university students’ responses to ill-structured problems and the processes these students worked through to solve the problems. The findings led King and Kitchener (1994, as in Meyer, 2004) to devise a model of reflective judgment. The model is composed of seven distinct and yet developmentally related sets of epistemological assumptions that are contained in stages (from 1 to 7). These seven stages are broadly categorized into three levels or phases (see Table 2.3) that
betray a continuum of development towards reflective judgement across adolescence and adulthood: Pre-reflective Thinking (Stages 1 and 3), Quasi-reflective Thinking (Stages 4 and 5), Reflective Thinking (Stages 6 and 7). The authors (1994) saw reflective judgement as evident only in the most advanced stages (6 and 7).

(Table 2.3) The Reflective Judgment Model – adapted from King and Kitchener’s (1994, as in Meyer, 2004)

<table>
<thead>
<tr>
<th>Phase</th>
<th>Assumptions of Stage</th>
<th>Assumptions of Stage</th>
<th>Assumptions of Stage</th>
</tr>
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<tbody>
<tr>
<td>One: Pre-Reflective Thinking</td>
<td>1 Knowledge: exists absolutely and concretely: can be obtained with certainty by direct observation. It is not understood as abstract. Beliefs: are seen as absolute and therefore they need no justification</td>
<td>2 Knowledge: assumed absolutely certain but might not be immediately available; and can be obtained from authority. Beliefs: are unexamined and corresponding to authority (unjustifiable)</td>
<td>3 Knowledge: absolutely certain or temporarily uncertain. Authority and individuals can be the source of knowledge Beliefs: justified if personal ideas; otherwise, correspondence to authority suffices.</td>
</tr>
<tr>
<td>Two: Quasi-Reflective Thinking</td>
<td>4 Knowledge: uncertain, and its claims are idiosyncratic to individuals Beliefs: justified via reasons and evidence</td>
<td>5 Knowledge: contextual and subjective Beliefs: justified within a particular context by means of relevant rules of inquiry.</td>
<td></td>
</tr>
<tr>
<td>Three: Reflective Thinking</td>
<td>6 Knowledge: constructed using a variety of sources. Beliefs: justified via comparing different evidence</td>
<td>7 Knowledge: outcome of a process of inquiry Beliefs: justified using a variety of considerations.</td>
<td></td>
</tr>
</tbody>
</table>

In the Pre-reflective Thinking Phase (Stages 1, 2 and 3), knowledge is assumed to be absolute and concrete, and can, therefore, be obtained via observation. Beliefs at this level are seen to correspond to reality and need not be justified. People at this stage cannot perceive of a problem that has no correct solution; they would believe that the authority carries the truth, and they -people- only have to learn this truth. People who hold such assumptions tend to view all problems as though they were well structured (King and Kitchener, 1994, as in Meyer, 2004:103).
In the Qauzi-reflective Thinking Phase (Stages 4 and 5), knowledge is seen as uncertain, and knowledge claims are considered idiosyncratic to the individuals. People filter knowledge through their individual perceptions and criteria for judgment and, therefore, only interpretations of contextually-specific experiences may be known (subjectivity and contextuality of reality). In other words, “there is a recognition that different frames of reference rely on different forms of evidence” (Moon, 2004: 36), and on situational variables that impose an element of ambiguity to knowing (King and Kitchener, 1994, as in Meyer, 2004).

In the Reflective Thinking Phase (Stages 6 and 7), “people understand that knowledge is not given but constructed and that claims of knowledge are related to the context in which they are generated” (Moon, 2004: 36). Knowledge claims are not said to be made with certainty. Nonetheless, people at this stage will tend to make reasonable judgments about which, based on the available data, they are relatively certain (King and Kitchener, 1994, as in Meyer, 2004). Relativity is characterized by the fact that the knowledge claims are evaluated for validity of judgment in relation to the context in which they were generated; and that the adequacy of these judgments must be re-evaluated as new data or new methodologies become available. As maintained by Moon “… all knowledge is provisional and may be re-evaluated at any time and [ … ] that the most advanced stages of reflective judgment may represent stages of greater development” (Moon, 2004: 37).

The three phases above are described by King and Kitchener as “qualitatively different networks of concepts that affect ill-structured problem solving” (1994, as in Meyer 2004:103). These networks suggest a continuum of reflective development. In the beginning stages, people regard knowledge as certain, absolute and as learned either from authority or from direct observation (Collier,
1999). At a later stage, knowledge is seen as uncertain, relative and personally constructed. With further development, individuals will start to integrate knowledge (1999). According to King and Kitchener’s work “learners who use true reflective judgment understand that learning is constructed and are also able to understand the ways in which others (who have less advanced conceptions of knowledge) view learning” (Moon, 2004: 42). This understanding gleaned by Moon flows well with the current of this literature review which aims to conceptualize the process of teaching and learning in teacher education specifically with respect to producing reflective practitioners.

Models of reflection in teacher education have also been treated by Kolb (1984), and Korthagen and Vasalos (2005). The former, links reflective practice to experiential learning and sees it to represent a key element of his development of Lewin’s experiential learning cycle (Roberts, 2008). The other authors (Korthagen and Vasalos) postulated that reflection is not necessarily only on practical situations confronted by teachers, but also on more fundamental issues such as self-concept. The latter -self-concept- is suggested by Korthagen and Vasalos to have “a decisive influence on the way they [teachers] function” (2005: 47).

In his model, Kolb believes that reflection is closely bound up with action and that the pursuit of a certain cycle of reflection (Figure 2.1) leads to new learning.

**Figure 2.1 Kolb’s (1984) model of experiential learning.**
In this model, the cycle begins with having an immediate experience (Concrete experience) which provides the basis for reflecting or reviewing the experience (Reflective observation). The observations and reflections gleaned are then distilled and assimilated into (abstract conceptualization) which, then, generates new possibilities for action (Active experimentation). This, in turn, creates new experiences to be reflectively observed, abstracted, and actively tested. Harrison and Yaffé (2009) find similarities between Kolb’s (1984) model and Carr and Kemnis’ (1986) model of action research. They posit that both models “focus on active problem-solving implementation of new practice and reflective account of the outcomes of that practice” (2009: 147). Kolb draws analogy between his theory of experiential learning and Piage’s (1967) theory of cognitive development. Both are seen to consider development as an outcome of the processes of assimilation and accommodation. Moon (2004) holds a slightly different view: she believes that it is not necessary that all experiential learning is a reflective learning. Experiential learning for her “will involve at some stage, an external experience of learning” (2004: 130), whereas, with regards to reflective learning “the learner may be working entirely with internal experience (cognitive housekeeping)” (2004: 130). What is of essence here is the fact that in both views learning is present, regardless of the source or the position of the experience (internal or external).

Kolb’s model, as seen by Korthagen & Vasalos, (2005), is a rational one that “stresses conceptualization much more than the development of an awareness of less rational sources of teacher behaviour” (Korthagen, & Vasalos, 2005: 50). For these two authors, Kolb’s model describes experiential learning as a cyclical process that comprises: concrete experience, reflective observation, abstract observation, abstract conceptualization and active experimentation (Korthagen, & Vasalos, 2005:}
which they see as insufficient. To avoid such short-term measures in hectic time (measures that seek quick fix or a rapid solution for practical problem rather than shedding light on the underlying issues), ALACT model of reflection (Action, Looking back on the action, Awareness of essential aspects, Creating alternative methods of action and Trial) (Korthagen et al, 2001 as cited in Korthagen & Vasalos, 2005: 49) was proposed by Korthagen. ALACT is based on the understanding that developing growth competence requires going deeper with a “balanced focus on thinking, feeling, wanting and acting” (Korthagen, & Vasalos, 2005: 50) of teachers. This holistic approach to teachers and teaching delves more deeply into teachers’ feelings, needs, self-concepts, their up-bringing and their deepest motives for being teacher. Korthagen goes further to call for what he terms ‘core reflection’ by suggesting the Onion Model (Figure 2.2) which calls upon deeper level inside the teacher rather than extensive analysis of the problematic situation (Korthagen, & Vasalos, 2005: 54). The Onion Model provides a framework for solving problems encountered by teacher. “It shows various levels which can influence the way a teacher functions” (2005: 53). The basic idea of the model is supremacy of the inner levels over the outer levels in determining the way an individual functions.

**Figure 2.2: The Onion Model as envisaged by Korthagen (2005)**
This model describes the six different levels on which reflection can take place. Initially, the model was composed of 4 levels:

1- Environment: which refers to everything the teacher encounters outside of his/herself, such as the behaviour of a particular student.

2- Behaviour: refers both to effective and less effective behaviours exhibited by the teacher.

3- Competencies: such as the ability to respond in a constructive manner.

4- Beliefs: how the teacher may interpret a student disruptive behaviour (intentional or not motivated)

Two new levels were added to this model: identity (Beijaard, 1995) and mission (Korthagen, 2005). The level of identity is concerned with how teacher experience themselves and their self-concept (a novice teacher might see his/her self differently from the way an experienced teacher might do). On the level of mission, reflection raises questions as why the person decided to be a teacher, “or even what he sees as his calling in the world” (Korthagen, 2001: 9). For Korthagen, this is a transpersonal level since the teacher becomes aware of his role in relation to his fellow man (Korthagen, 2005).

As posited by Korthagen, & Vasalos (2005), reflection is assumed to be part of human nature i.e. people have the tendency of reflecting on their experiences; however, (with respect to teacher), systematic reflection “often differs from what teachers are accustomed to doing” (Korthagen, & Vasalos, 2005: 48). According to Korthagen, & Vasalos, the way teachers reflect is affected by school culture and that pressure of work may lead a teacher to focus on quick fix for a practical problem (2005). Eventually, the teacher may run the risk of his professional development being stagnate (2005) as a result of focusing on finding a rapid solution for a
practical problem “rather than shedding light on the underlying issues” (Korthagen, & Vasalos, 2005: 48).

Despite the variation in focus of the two models discussed above, it can, nonetheless, be stated that professionalism (teacher’s knowledge, skills and behaviour) comes at the essence of these reflective processes: it can be teased out and developed as well. Since teachers, as humans, reflect by nature, and since they tend to find quick answers to their practical problems, it might then be logical to graft reflection in teacher education. Being part of teacher education programmes, reflection acquisition will help prospective teachers grow as they will have developed the skill of problematizing issues, occurrences and contextual elements.

2.6 Application of reflective practice

This section will look at how reflection is, or is supposed to be, implemented in teacher preparation programmes. Traditionally, teachers are prepared across different stages of their careers: pre-service stage, induction stage, and ongoing professional development (Bratell, 2005). For the sake of the present study, the main focus shall be on the pre-service stage to help depict a picture of how reflection (as a teaching/learning activity) is being engrained in teacher preparation programmes, internationally and locally, and also in practicum.

2.6.1 Reflective practice and teacher education

It has been understood that reflection is the crux of what educators do in teacher education programmes: if teacher educators can help the new teacher to really focus on the idea of reflection and self-criticism, that teacher will eventually become a lifelong learner (Wing and Jinks, 2001). The need for reflection in the career of teaching is rationalized by the fact that teachers are claimed to make about 200 decisions every school day (Clark and Peterson, 1986). It would, then, be “hard
to imagine a teacher who does not engage in some sort of reflection” (Bartell, 2005: 117). For some (Zeichner, 1996 as cited in Bartell, 2005) “… such thing as an unreflective teacher” (2005: 117) is categorically unconceivable.

Systematic reflection can be understood to be a learned activity. As found in a study by Wildman, et al. (1990), that any endeavour to promote reflective practice in teachers can gain momentum from a carefully designed set of tasks that help practitioners develop: a) sensitivity to their ways of looking at and talking about teaching; b) a positive attitude toward inquiry; and, c) a self-analytic approach to teaching. In other words, a reflective practitioner is one who can analyze his/her own practice in addition to the context in which this practice occurs; the reflective practitioner “is able to stand back from their own teaching, evaluate their situation, and take responsibility for their own future action” (Calderhead, 1992: 141). It is, then, a learning situation par excellence, where the notion of knowledge and how knowledge is acquired (epistemology) is readily evident.

To prepare or develop such a reflective practitioner in teacher education programmes, Bartell advocates basing these programmes on the principles of adult learning (2005). Principles of adult learning, or andragogy, as outlined by Knowles et al. (2005) postulate six assumptions regarding the way adults learn. First, adults need to know why they need to learn something before undertaking it. Second, adults are responsible for their own decisions. Third, adults have a great deal of experience to bring to the learning setting. Fourth, adults become ready to learn when they are convinced of the benefit of what they are supposed to learn. Fifth, adults are life-centred in their orientation to learning (new knowledge that is applicable in real-life situations). Finally, adults are mostly internally motivated. (2005: 39-40). These principles of andragogy (see 5.3.1 to compare it with 'Heutagogy') resonate well
with LaBosky’s (1993) position regarding novice student teachers. He believes that novices do not come to teacher education programmes as blank slates because, after several years in classrooms, these students will have formed ideas about what teachers do. But, LaBosky explains that these ideas held by novices about teaching have been “derived from a student perspective, not a teacher perspective, and thus are very likely to be inaccurate, inappropriate, or incomplete” (1993: 24).

As regards teacher education, Liston & Zeichner argue that teacher education “ought to aim directly at developing teachers who are able to articulate their purposes … and can be counted on for giving good reasons for their actions” (1990: 236). The implication here is the concept of liberation whereby the teachers are able to “exercise their judgment on the content and processes of their work” (Zeichner &Liston, 1987: 24). This view of reflection in teacher education seems to pose a challenge to the traditional/behaviourist views of teacher education which has continually obstructed attempts at educational reform (Bryan, 2000: 209). Behaviourism in the eyes of writers like Tom (1987) and Noddings (1988) encourages a reductive approach to teacher education by often focusing on sets of indicators while ignoring the artistic and moral dimensions that are essential to teaching. It can be seen that epistemology and the spirit of Dewey’s and Schön’s work (see previous sections) are both present in the debate about reflection in teacher education.

It might be notable that teacher education (initial preparation and in-service professional development) is still marking time as Sarason et al (1986 as cited in Fullan, 1993) noticed. Sarason et al (1986) clearly stated that they had published a book entitled: The Preparation of Teachers: An Unstudied Problem in Education in 1962 and that they did not have to change the subtitle after 25 years. According to
them, the fundamental question of the relationship between the preparation of teachers and the realities teachers practically experience was still unstudied (Sarason et al 1986 as cited in Fullan, 1993). In fact, most of the literature on teacher education I have come across is predominantly focusing on the structural aspect of teacher education. Moon et al (2003) edited a book on teacher education in Europe. In that book, for example, the chapter on teacher education in England detailed the history of the origin of teacher education since 1798 up to 2001 and outlining these three phases in the 20th. century: a) the flowering of the elementary progressive tradition - 1900-1970; b) hope and expansion – 1970-1985; and c) disillusion and contraction – 1985-2000. The discussion of these phases highlighted the politics behind the orientation in each phase, who was responsible for teacher education and their certification, and the recruitment of teacher.

Laferriere et al (as in Moon, 2003), reviewed teacher education in three Canadian provinces: British Colombia, Ontario and Quebec. The review also discussed the kinds of institutions offering teacher education, the structural changes it assumed, and the development of a regime of teacher testing. One exception in these compiled studies was the study on Finland. In addition to outlining the structure of teacher education in Finland, the report spared three pages (89-91) to talking about the content of the teacher education programme. What need to be studied are really the characteristics of teacher education programmes and their impact on teachers’ careers.

In their detailed case studies of six universities in the United States, Ho-vey and Zimpher (1989) managed to “generate key attributes that would be necessary for [a teacher] program coherence, which they find lacking in existing programs, factors as:
- Program based on clear conceptions of teaching and schooling;
- Programs that have clear thematic qualities;
- Faculty coalescing around experiential or alternative programs that have distinctive qualities;
- Working with student cohort groups
- Adequate curriculum materials and a well-conceived laboratory component;
- Articulation between on-campus programming and field-based student teaching;
- Direct linkage to research and development knowledge bases;

Overall, it can be noticed that the conventional teacher education programmes address areas like: subject content, didactics, pedagogy, curriculum and class ecology; but, this approach might look like a programmed chip being installed in processor. In other words, the teacher only has to apply what he/she has been taught in college or at practicum (in practicum most likely teachers are decided for by mentors). In our modern times, knowledge has transformed definition and -from experience- students are an immensely diverse, complex and evolving population: interconnectedness has rendered predetermined needs of students and predetermined curricula and approaches a fallacy. Teachers, therefore, need to acquire collaborative and inquiry skills that will facilitate taking contextually appropriate actions and decisions. The basic role of teacher education is now seen to transform teachers from being “technicians and ‘consumers of curriculum knowledge’ to being able to contribute to reform through ‘formulating the purpose and ends of their work’” (Zeichner and Liston, 1996: 4). Fullan (1993) posits that the core agenda for teacher
education should help teachers become “simultaneously and seamlessly inquiry oriented, [skilled], reflective and collaborative professionals” (Fullan, 1993: 325). To that effect, Fullan supports Interactive professionalism in the forms of: clinical supervision, reflective and action research practices, life histories and narratives, and strategies such as peer and cognitive coaching. In the same vein, Wallace (1991) proposes a reflective model to teacher development that could be viewed as an alternative to the two juxtaposed models (the craft and the applied science models). Wallace believes that the craft model, where a novice learns by “sitting with Nellie”, befits a static society that is different from a society characterized by rapid change (Wallace, 1991: 6); conversely, the applied science model for Wallace is merely instrumental in nature where the authority of this model in driven from the achievement of empirical science whose “experts are well removed from the day-to-day working scene (Wallace, 1991: 10).

Despite the claim that teacher education has made no progress as regards the question of the relationship between the preparation of teachers and the realities teachers practically experience (see above), some scholars (Zeichner & Liston, 1987; Valli, 1992) subscribe to the belief that the reflective practice paradigm is one reform effort that has started to assert its place in education. Tabachink & Zeichner (1991) and Valli (1992) posit that reflective practice became a popular concept in the United States of America during the 1980s.

2.6.1.1 International empirical studies on reflection in teacher education

Following, is a review of some international, then local, empirical studies conducted on reflection in teacher education. Teacher education is viewed to span: initial teacher education, internship, and professional development. The review of the
empirical studies in this field will look at the approaches and the prongs taken to
implement or to gauge reflection in the field.

To better understand reflective practice in teacher education, Pedro (2005)
conducted a qualitative interpretive study that involved five pre-service teachers in a
US (United States) university. The study sought to, specifically, explore how the
participants “construct[ed] meanings of reflective practice, and how these meanings
affect[ed] their practice” (Pedro, 2005: 49). The author culled nine themes from the
data generated via interviews and journals. The nine

emerging themes (Defining reflection, Questioning in reflection, Having
opportunities to reflect, Reflection is learned from self and significant other,
Reflection on action and for action, Reflection is based on personal beliefs and
educational theory, Self-reflection, Verbal reflection, and Written reflection) (2005:
49) were categorized with linkage to the three symbolic interaction social processes
of acquiring perspectives, achieving individuality, and situating the act of reflection
(Prus, 1996 as cited in Pedro, 2005: 54). The study concluded that the pre-service
teachers had positive views of their experience with reflective practice. Participants
felt they were provided with many opportunities for reflection; they also had general
understanding, though with varying notions, of reflective practice. Furthermore, the
author concluded that his participants “understood and learned to reflect through
courses and field activities, and [that] they engaged in reflection in different
contexts” (Pedro, 2005: 62). Importantly, the participants, according to the author,
were found to have “used reflection as a conceptual device to help them think about
their knowledge and better their teaching skills” (2005: 62). Another point of interest
in the findings is that the pre-service teachers in this study “linked their reflections to
their personal values and educational theories they were learning” (2005: 62).
Pedro’s (2005) study indicates the importance of developing reflection in pre-service teachers as reflection helps them think about their own knowledge and skills. Nonetheless, the study fell short of stating whether or not the pre-service teachers need be taught explicitly about the notions, levels and models of reflection (not only prompts by a significant other) in order for them to be able to engage adequately in reflective practice. It is a point of no contention that man reflects by nature (see above); but in teacher education, reflective practice has to be grounded and taught/learned. This idea is certified by the works of Dewy (1933); Shön, (1983, 1987) and Van Manen (1977) who wrote extensively to ground reflective practice.

Pedro’s compatriots, Minor, Onwuegbuzie and James (2002) conducted a study previous to his to examine pre-service teachers’ perceptions of characteristics of effective teachers as well as to investigate if these perceptions could be ascribed to educational beliefs the students hold. The researchers administered a questionnaire and a survey to their 134 participants who were drawn from several sections of an introductory-level educational class in education majors. The multistage qualitative-quantitative (2002: 118) analysis of responses “revealed several characteristics [showing] that many of the pre-service teachers considered to reflect effective teaching” (Minor, et al, 2002: 116 - 118). These characteristics yielded seven themes (student centered, competent instructor, ethical, enthusiastic about teaching, knowledgeable about subject, and professional) which were then classified into three broad categories: transmissive (28.4% of the participants), progressive (12.7%), and eclectic (59%) orientations (educational beliefs). The transmissive educators, who are “often referred to as being traditional and conservative” (Witcher and Traverse, 1999 as cited in Minor et al, 2002: 124), would view the needs of their society and students as basically stable; and as such they would avoid introducing any change to
the schooling process in any dramatic way (2002: 124). Transmissive educators, the authors posit, see their role as one of dispensing key knowledge to their learners, and they prefer teaching methods that take the form of lecturing, demonstration and recitation. The progressive educators (referred to as being modern an experiential) regard school as a social institution and try to link curriculum with contemporary needs in an endeavour to make learning meaningful, current and relevant with respect to students (2002). As a result, “these teachers tend to present curricula holistically and in an open-ended manner to help students develop problem-solving skills” (2002: 124). The third category of (eclectic) educators is seen to have “attenuated the relationship between educational beliefs and their perceptions of the characteristics of effective teachers” (2002: 125). According to the authors, holding eclectic position in teaching is indicative of reflection i.e. teachers normally adopt this orientation to education after having seriously considered “transmissive and progressive educational viewpoints about the purposes of education and ideal types of curriculum to achieve these purposes” (2002: 125). The study subscribes to the idea that once a pre-service teacher launches into reflection about his or her future teaching “a dominant educational belief system typically should emerge that reflects consistency of belief about the purpose and process of schooling” (2002: 125).

Apart from the justifications lightly touched upon by the authors as to why participants in their study have exhibited these three trends in teaching (for example: participants’ previous schooling and geographic areas), it is valid to adopt the researchers’ view on the importance of pre-service teachers examining their educational beliefs and perceptions. It is worth noting that the authors also stress the value of enabling teacher candidates to reflect on their entering beliefs and to change the mal-founded ones. Furthermore, it is feasible, as well, for teacher educators to
heed the suggestion offered them to design activities that encourage pre-service teachers identify their beliefs, and to link these beliefs to curricula and pedagogy in relevant disciplines.

Students’ beliefs about teaching (music) were also investigated in a Greek context. Dogani (2008) conducted a predominantly qualitative study to explore “the way future teachers can be encouraged to frame their pedagogy for music teaching through reflection” (2008: 125). Data in Dogani’s study was collected during student teachers’ first experience to teach music to children in a preschool setting. The researcher used questionnaires, real time and video observation of teaching in addition to discussions and reflective journals (2008). The research focused on reflection as the main way of accessing participants’ approach to teaching music in the setting mentioned above. Participants’ reflection was considered before, during and after their teaching experience. At the beginning of their course of study, students were asked to respond to a simple questionnaire and to make entries to their reflective journals. The information collected via the questionnaire and the reflective journal, in conjunction with assignments given to student teachers, helped the researcher form an idea about her participants’ musical background and preferences. It was found that student teachers’ background might “influence their perceptions in relation to teaching music and creativity in music, towards a classically oriented approach” (2008: 131). This classically oriented approach was said to have the tendency of making teachers and student teachers “fear and distrust” experimentation and musical invention and avoid mentioning the development of children’s individualism and self-expression” (Witkin, 1974 as cited in Dogani, 2008: 131).
Engagement in reflection - during and after practice - was advocated by the study as a means to positively influence student teachers’ practice with respect to attempt realizing areas of experimentation, musical invention, individualism and self-expression in children. In other words, “engagement with creativity, as well as reflection, [would] result[ed] in them [student teachers] being more alert to apply those areas or change their ways of thinking after their teaching practice” (2008: 131). Reflection, as a way of framing and re-evaluating a student teacher’s pedagogy, is advised by the researcher to be part of everyday music educational practice. This can happen when student teachers are exposed to situations whereby they are summoned to reflect at their own pace. In this manner, student teachers “can gradually develop a critical stance towards their own role in music classroom” (2008: 136).

In Hong Kong, enhancing student teachers’ learning and teaching through guided reflection was investigated by Sivan and Lam (2008). Sixteen (Postgraduate Diploma in Education full-time) student teachers participated in observed and recorded meetings, and these participants were visited and interviewed twice with a view to help them “better reflect on their teaching and [to] prepare them for assuming their roles as teachers” (2008: 17). In the (four) meetings, participants “shared their feelings, thoughts and emerging concerns from their initial involvement in teaching” (Sian and Lam, 2008: 17) during a six-week practical component of their course. Visits and interviews were used to solicit participants’ main concerns and thoughts. “Main themes raised by the students served as a basis for their reflection in the meetings” (2008: 117). Importantly, follow-up interviews with students were conducted to assess students’ thoughts about the process implemented in the researchers’ project. These follow-up interviews highlighted the positive effects the
meeting sessions had on the participants’ ability to reflect and to learn via guided reflection by the researchers (2008). According to the authors, the project provided a platform for student teachers to reflect collaboratively on their teaching experience, to share concerns and “to gain support for their personal and professional growth” (2008: 23). It was indicated that as students, the participants reflected on their learning process, and when teaching, they reflected on both their learning and teaching experience. Moreover, the findings revealed that guided reflection provided to student teachers on their own themes helped these participants gain a holistic understanding of their roles as teachers. Findings also revealed that reflection could enhance student teachers’ “acquisition and implementation of coping strategies necessary for best undertaking the role of a teacher” (2008: 24).

Overall, the researchers concluded that their participants developed practical knowledge of reflection, used the forum provided to reflect collaboratively, managed to reflect on their teaching experience, and gained support for personal and professional growth.

The outcomes of this project are interesting as they represent a great deal of the ultimate goal of any teacher education programme. The project itself can be seen to have delineated a roadmap for fruitful application of reflection in practice.

Reflective practice in internship –as part of teacher education- has been brought to limelight by Middleton et al (2011). In their study, these authors researched resistance and disidentification in reflective practice with pre-service teaching interns. The two case studies of interns were examined “to identify contextual factors that may enhance or inhibit their use of self-reflective practice” (2011: 67). Self-reflection practice as explicated by the authors could mean a form of self-regulation. In other words, it “is a cognitive process by which an individual monitors and
changes his or her beliefs, affects, motivation, and behavior to meet a goal” (Zimmerman, 1998 as cited in Middleton, 2011: 67). The researchers gathered information over 18 months to create case studies using several sources: semi-structured interviews, observation with postobservation conferences, journal entries, and inquiry projects (2011). The two cases studied (Tom and Lynn) highlighted “the variation in self-reflective practice and its relation to social and cultural practices” (2011: 69). One of the cases (Tom) was found to have strong belief in self-efficacy and to understand teaching as relationship with students. This case also held the belief that reflection was only for student teachers but not for real teachers (like himself) particularly that this intern saw himself as fully immersed in practical issues related to teaching students. The context in which Tom worked was found to be unsupportive of reflection and of the university programme. As result, the intern did not engage in reflective practice and disidentified with his community of practice. By contrast, the other case, Lynn, who started her internship with low concept of self-efficacy, worked laboriously “to cultivate positive relationships with students and colleagues” (2011: 70). Part of her coping strategies was to spend time talking to her cooperating teacher, other teachers, the university supervisor, and peers about classroom practice. People in her context (cooperative teacher, fellow teachers) were helpful and cooperative and were willing to invite Lynn to their classes.

These examples of interns presented “very different patterns of engagement with reflective practice” (2011: 71): Tom showed little evidence of valuing self-reflective practice; whereas Lynn engaged more fully in self-reflection (2011: 71). The authors have evoked the concepts of “disidentification and resistance [which] provide insight into their [case studies’] choices about engaging in self-reflection” (2011: 71). Examination of the case studies against these concepts has led the researchers to six
assertions about the possible effect of interns’ beliefs on reflective practice: negative effect of high level of self-efficacy, preconception of teaching, the view that self-reflection is not for real teachers, stronger identification as a result of positive outcomes of participations, resistance can be attributed to the internship context, and resistance to reflection can ensue from cumbersome university programme requirements (2011: 73).

The findings and implications of Middleton’s et al (2011) study look feasible and revealing; but the interplay between the personal and the contextual seems to be in need of further investigation. If Lynn and Tom exchanged places, would that affect their individual inclination to self-reflection? Lynn is understood to have started with low confidence towards teaching, but, eventually, positively changed as a result of a context that is conducive. On the other hand, Tom with his view of high self-efficacy was placed in a context that did not encourage self-reflective practice. Evidence need be sought to clarify which variable (personality or context) is more decisive in nurturing self-reflective practice in (internship) teacher education.

Reflection in (internship) teacher education has also been approached by Ottesen (2007) in Norway but from a different angle. In her study, Ottesen analysed conversations between four student teachers and their mentors during internship “to explore how they reflect and what they seem to accomplish through reflection” (2007: 31). She capitalized on Vygotsky’s socio-cultural theory to view reflection as collaborative communicative action; and she introduced the notion of ‘mode of reflection’ (2007: 31) to explore the relationship between reflective action and the motive of the activity (reflecting). As findings, the study discerned and discussed three modes of reflection: reflection as induction to warranted ways of seeing,
thinking and acting, reflection as concept development, and reflection as off-line (imagined) actions.

In line with the tenets of socio-cultural theory, Ottesen’s study envisaged the situated discourses of student teachers and mentors as possible loci of reflection. With a view to capturing and theorizing reflection in the social interactions of the interns and their mentors, the author analyzed these interactions (approximately 50 hours of audio taped discussion). The interactions were used as primary data for the study and were “broken down into units of actions relevant episodes […] and coded according to topics or objects of discussion” (2007: 35). In her analysis, the author also cared to identify the initiator of the objects of reflection in the interaction as she believed it was central to her study “to discern who (i.e. students or mentors) initiated the formation of objects of reflection, as well as how a trajectory of participation unfolded” (2007: 36). Interdependence of contributions was equally claimed to be important for the study. Based on such analysis of interns and mentors discussions, the three models (mentioned above) were identified. The first mode (Reflection as induction) stood for routine exchange about some practicalities of teaching. The second one (Reflection as concept of development) is about the interaction that would “open up the possibility for a dialogue about different understandings of what learning is” (2007: 39). The third mode pertained to interaction in which the interlocutors would transform “reflection within the didactic model to reflecting on the model” (2007: 40). In other words, “The reconstruction of the object of reflection allows for an imagined practice […] to be constructed” (2007: 40).

Rightly, the paper has argued that “reflection is a discursive process in which an object is elicited from the flow of events and expanded in communicative action”
The paper also suggested that there was huge potential for expanding reflection in teacher education but cautioned against focusing on student teachers as performers rather than on them as learners since that would have adverse influence on reflective practice. The notion of learner and the concept of learning implied in Ottesen’s findings are essential to my present study.

At a different level of teacher education, university tutors in the context of Australia were asked to participate in a study by Bell et al (2010). The study set out to “describe the types of self-reflection identified in tutors’ reflective statements following a peer observation of teaching exercise” (2010: 57). Using an adaptation of Van Mannen’s (1977) framework, the researchers coded the tutors’ (their 20 participants) written reflections made following the peer observation of the teaching exercise. The statements were solicited via four prompts (what I learned from observing my colleague; what I gained from my colleague’s feedback; what I will apply to my own teaching; and any other comments on the exercise (2010: 61). The collated, grouped comments from tutors in response to the four reflective prompts were found to spread across the three categories (technical, practical, and critical) of the adapted model adopted (2010, p: 63, 64). The authors subscribed to the notion that knowing what tutors reflect on as important aspects of their teaching would help the faculty better support the tutors’ professional development (2010: 64).

This study of 2010 was later followed by another one -in the same context- on tutors’ understanding and engagement with reflective practices. Dissimilar in the previous study, the authors in 2013 (Bell et al) interviewed six tutors to orally elicit their (the tutors) thoughts about reflection and forms of reflection they incorporated in their teaching. According to the study, the participants saw benefits in reflection including the improvement of their teaching. Furthermore, the tutors revealed focus
of reflection before and after teaching but few examples of reflection while teaching. The authors also lamented the fact that some tutors said their “reflection was mainly triggered after they had made a mistake” (2013: 8). As academic developers, the authors “wanted their tutors to be able to learn, grow and change [via reflection] even when they were doing a great job” (2013: 8).

The study suggested a developmental approach that provided opportunities for both conceptual expansion and acquiring teaching experience. It envisages this approach to be in the form of an on-the-job professional development (such as peer observation). Modelling reflection-in-action in mock tutorials was also suggested as a tool in development sessions to help tutors develop that ability (reflection-in-action).

The suggestions above seem feasible, but a rather controversial suggestion regarding reflection-in-action was offered in this study. The authors suggested that “Tutors could also be helped to prepare in advance to reflect-in-action by anticipating possible scenarios and various options in response” (2013: 9). It is controversial because this suggested kind of prior preparation can easily be confused for reflection-for-action. The latter, as proposed by Killion, & Todnem (1991), focuses more on the desired outcome to guide future action, and, thus, is more proactive in nature. Prior preparation to reflect-in-action can also preempt valid opportunities for authentic learning to reflect-in-action. In fact, teachers, inadvertently and unconsciously, reflect-in-action. All that need be done is to make them think aloud about the decisions they have taken mid-action; and to highlight the moments they seem to have reflected in-action while teaching. This last point can be detected via monitoring tutors’ body language (Hartman, 2010 as cited in Bell et al, 2013).
Faculty in New Zealand were also interrogated in a reflective mode to better understand the complex nature of tertiary teaching. Kane et al (2004) worked with a group of excellent science teachers to identify and investigate their attributes. Using interviews and observation, the researchers examined what the excellent teachers “say about their teaching and what they do in their teaching practice” (2004: 283). The findings emphasized “the strong link between the teaching practice and research commitment of [our] excellent science teachers; as well as the key roles played by interpersonal relationships and the ‘person’ of the teacher” (2004: 283).

What is of more interest in the study was the use of reflective practice as a hub around which the dimensions of attributes of good teaching (as discussed in pertinent literature) were linked like spokes in a wheel (see Kane’s et. al, 2004 figure beneath).

(Figure 2.3 Model – dimensions of tertiary teaching) (Kane et.al, 2004: 292)

Based on their evidence, the researchers proposed “that the participants engaged in purposeful reflective practice as a means to integrate the different dimensions of themselves as teachers and to better understand and improve their own teaching
practice” (2004: 292). In other words, it was reflection that enabled these teachers “to interrogate their teaching practice and to find the best fit between their subject, teaching skills, relationships built with students, research and personality” (2004: 306). Moreover, the insights provided by the participants were seen to be useful in assisting “less experienced university teachers in examining their own teaching practice” (2004: 305). Just as in the other studies, learning is conspicuously present in the act of reflective practice.

Research on reflective approach to teacher education in the wider educational context is rather plenty compared to those in the context of EAD; and here comes the need for this study in the context of EAD to explore EMI teacher educators’ understanding of the concept of reflective practice.

2-6-1-2 Local empirical studies on reflection in teacher education

In the context of the UAE, rather a limited number of studies have been conducted to explore the existence of new orientation to teacher preparation that is meant to cope with changes in education and to enhance reflective practice. Clarke has conducted a two-year study of student teachers at the Higher Colleges of Technology (HCT) -UAE to look at “the discursive construction of the students’ system of knowledge and beliefs” (Clarke, 2006: 225). The paper concludes that there was a remarkable coherence within the students’ teaching community where the traditional teacher is a constitutive other. Clarke sees that as a concern but has noted that “Over time it is quite possible that this oppositional affiliation of the HCT’s student teachers will be naturally reduced” (Clarke, 2006: 236). The paper suggests that the student teachers should be assisted “in the performance of authoring identities that move beyond the oppositional affiliation and so reduce the potential for antagonistic relations [between students’ beliefs and practices predominant in
government schools” (Clarke, 2006: 236). It can be posited that teacher education has a role to play in changing the entrenched teaching practice which might not be culture specific as some studies tend to allude to.

Richardson (2004) reported her study on possible influence of Arabic-Islamic culture on the reflective practices proposed for a tertiary teacher education institution in the UAE. In this study, Richardson “has attempted to demonstrate that the cultural value frameworks underpinning society and education in the United Arab Emirates carry with them assumptions about the social world and about teaching and learning that are incongruent with the underlying assumptions of reflective practice” (Richardson, 2004: 435). As premises for this mismatch, Richardson portrayed the Emirati feminine code of dress and range of contact where women are shrouded in black and are restricted in movement and communication. She attributed that to the “society’s adherence to a strict Muslim code of behaviour where women are protected from public display and not often involved in the public arena” (Richardson, 2004: 432). It is not easy to take that argument for granted. Islamic and Arabic culture has always called for reflection by virtue of the fact that a number of verses in the Holy Quran (Islam religious scripture) invite people to think about the universe and to contemplate their contexts for practical solution in case of unprecedented or novel problems:

“...In the creation of the heavens and the earth, and in the alternation of night and day, are signs for people of understanding. 191. Those who remember God while standing, and sitting, and on their sides; and they reflect upon the creation of the heavens and the earth: ‘Our Lord, You did not create this in vain, glory to You, so protect us from the punishment of the Fire’ (The Holy Quran, Family of Immran, 3: 190-191.).
A call for reflection is very eminent in these verses from the Holy Quran. Muslims are enjoined to arrive at educated faith and belief via thinking and reflecting. Elsewhere, Muslims are cautioned against taking things for granted and against following blindly paths taken by their fathers and forefathers.

Women and societies in other parts of the Islamic World (Sudan, Egypt, Syria and others) are not fully dependent on males and are not covered from display or are isolated from the public arena; nonetheless, education in these contexts (countries) is marked as being not progressive and as lacking reflective practices. The cause is then situational rather than being broadly cultural or religious. The Arab and Islamic world, through the succession of civilization, has inherited the western mid-twentieth century educational system being transplanted by the colonizers; but it (the Arab World) has failed (for reasons beyond the scope of this study) to keep abreast with the successive developments in education taking place around. It would, then, be a miss to ascribe the tardiness in education in this part of the world to cultural or religious causes, and to rule out the possibility of introducing reflective practices to the educational system in this context based on cultural and religious reasons.

The socio-cultural context of learning has also loomed large as one of the barriers to reflection in a study by Hourani (2013) conducted in the ECAE. In her qualitative case study, Hourani used semi-structured-focused-group-interviews to generate data from 60 pre-service student teachers. “The findings revolved around dimensions of various limitations and constraints” (2013: 12). In addition to the socio-social context of learning as a constraint, other issues were raised: language barrier, multi-layered tasks, nature and dimension of reflection, lack of reflection skills, the absence of post development plan, emotional barrier and external locus of control.
Unlike the conclusions drawn by Richardson, 2004 (see above), the students in Hourani’s study attributed their inability to reflect to their upbringing and not to religious influence per se. They articulated propositions such: “… reflection is not practiced at home and is not part of our upbringing. If a child does a mistake we punish him we don’t ask him why? Or ask him to explain [?]” (2013: 24). It could be noticed that regarding this issue of socio-cultural context and all the other issues claimed as barriers to reflection, reflection is associated with mistakes and weaknesses. For instance, one of the participants declares that “… it is hard to face my mistakes” (2013: 23) Reflection need not always be about mistakes; it is about the espoused theory and theory-in-action (Shön, 1983, 1987). This misunderstanding of the notion of reflection on the part of the participants in Hourani’s study is also discernible in the section about multi-layered tasks. One of the student teacher reports that “It is restrictive to reflect and link to theories simultaneously. Covering two dimensions at the same time distracts us from reflection” (2013: 22). It is relevant for the study recommendations to suggest enhancing and restructuring the reflective practice within the college programme.

As a matter of fact, Al Kaddah (2010) has reported positive results of a project designed to introduce action research to final year B.Ed. students at HCT. According to Al Kaddah, reflective practices were developed throughout the four year B.Ed. program at the institution. In the first three years students engaged in “reflection during teaching practice, and other activities have been developed which encourage a critical, reflective stance such as peer observations, online discussions and practical teaching projects with specific reflective components” (Al Kaddah, 2010: 37). During the fourth year, the reflection took the shape of a year-long-classroom based action research project where the students identified an area of classroom practice to
focus on. Students in this programme acknowledged that the research project helped them “develop their ability to reflect on their practice and adopt a critical stance in terms of their own practice both as student teachers and future professionals” (Al Kaddah, 2010: 37). Not only that, but students, according to the study, also felt empowered as they were “able to take theories and experiments with them and assess how suitable these are for their own teaching context” (Al Kaddah, 2010: 38). This study reflects student teachers’ capacity for reflection in this context, and indicates the possibility of revamping teacher education to cater for the educational reform being introduced.

As can be gleaned from the empirical studies reviewed above, attempts have been made to investigate reflective practice in teacher education.

In some of the international empirical studies (Bell et al, 2010; Kane, 2004; Bell et al, 2013), teacher educators’ understandings have been directly teased out and exposed i.e. teacher educators were the participants in the studies. In some other studies (Pedro, 2005; Minor et al, 2002; Dogani, 2008; Sivan and Lam, 2008; Middleton et al, 2011; Ottesen, 2007) pre-service teachers or interns were investigated, which, by implication, gave insights on the way understanding of reflective was nurtured in these participants i.e. teacher educators’ perceptions of reflective practice was indirectly brought to investigation.

In the local empirical studies, added to their paucity, there is nonexistence of ones that target the understandings of reflective practice on the part of teacher educators. Furthermore, the studies conducted to explore student teachers’ perceptions of reflective practice in the context of the EAD seem to summon further studies of more profundity. In one case, it is sensed that student teachers have revealed a rather skewed understanding of reflective practice (see the study by
Hourani, 2013); in another instance, the ability of local student teachers to practice reflection was illegitimately ordained as a myth (see the study by Richardson, 2004). In both cases there stands conspicuously the need to probe local teacher educators’ perceptions of reflective practice and of their roles in developing reflective practitioners. In other words, if student teachers do not clearly understand what reflective practice is; or if they cannot convincingly practice reflection in practice, the question will, then, go up the ladder to be about the way these student teachers are originally prepared and developed. Logically, the way they are prepared is of much dependence on the views and beliefs held by their teacher educators about reflection, teaching and learning, and knowledge (epistemology). The present study sees it as its vocation to attempt bridging the glaring gap in this area by investigating the Emirate of Abu Dhabi (EAD) teacher educators’ perceptions of their epistemic approaches to preparing reflective practitioners with specific emphasis on school practicum.

2.6.2 Reflective practice and practicum

As posited by some scholars (Zeichner, 1994; Kothagen, 2001; Admiraal and Wubbels, 2005), reflective practitioners are outcomes of learning processes during teacher education programmes. Part of these programme processes is the school practicum which Ottesen (2007) sees “as a discursive tool mediating learning” (2007: 32).

School-based teaching practice is considered by student teachers to be the most important component of a teacher training programme because it gives them opportunities for actual teaching and real learning (Calderhead, 1988; Franke & Dahlgreen, 1996). Theoretical information gathered during a pre-service teacher training cannot be sufficient for a student teacher to acquire the role, behaviour and
the teaching skills required. Practicum (teaching practice), as a first step of a personal journey, can help a student teacher bridge the gap between theory and practice through defining and refining teaching skills (Thibeault, 2004; Walkington, 2005; Williams, 2001).

Mentoring (provided by college mentors in our case), which has become an increasingly important method of providing feedback on pre-service teaching can best be defined as:

“a nurturing process in which a more skilled or experienced person teaches, sponsors, encourages, counsels, serves a role model, and befriend a less experienced person for the purpose of promoting the latter’s professional and personal development” (Anderson & Shannon, 1988: 40)

Originally, the word ‘mentor’ comes from the classic tale of the Odyssey (Dimock, 1989 as cited in Carol, 2005) in which Odysseus entrusted the education, nurturing and upbringing of his son, Telemachus, to his old and trusted friend, Mentor. Mentor encouraged, supported and helped Telemachus as he was finding his way in life and developing his adult identity. The term has, thus, become linked to the role of the more experienced person who guides and supports the protégé. “The word mentor now means a wise and trusted friend and the role has expanded to include teacher, supporter, guide, protector, and sponsor” (Villani, 2009: 9).

Carol (2005) suggests that mentors are found in our personal and professional lives; indicating that mentors usually are more experienced or older colleagues who give support to and watch over the progress of less experienced or younger persons: they listen, advise, promote, nurture, suggest, guide, respond, support, encourage and endeavour to promote the skills and abilities of their protégés; they are role models for novices, living and practicing what they advocate (Carol, 2005).
Bey (1990) offers a definition of ‘mentoring’ close to the one above. He defines the term mentoring as “a professional practice that is emerging as a way for experienced teachers and supervising teachers to offer assistance to new teachers” (Bey, 1990 as cited in Ebru, 2011: 116). In this sense, Bey (1990) encompasses teaching practicum and supervision into the notion of ‘mentoring’.

Nonetheless, due to the highly personal interactions conducted under different circumstances and in different contexts, a universal definition of mentoring in practicum experiences is not clear (Zanting, Verloop & Vermunt, 2001).

While noting that definitions of mentoring vary, Zanting et al (2001) investigated the characteristics of a ‘good mentor’ as perceived by student teachers. Five factors were identified in their study: 1) the effective aspects of learning to teach, 2) information source, 3) assessment of the student teacher, 4) reflection on student teacher’s lesson, 5) the school content/ school orientation. These characteristics, including reflection, are thought of as essential for a good mentoring relationship. In a similar vein, Rowley (1999) identifies six important qualities of a good mentor: 1) committed to the role of mentoring; 2) accepting of beginning teacher; 3) skilled at providing professional support; 4) effective in different interpersonal contexts; 5) a model of a continuous learner; and 6) communicates hope and optimism. Jonson (2003) developed a triangular model of mentor competence. Three components were included in that model: mentor character virtues (integrity, caring, prudence); mentor abilities (cognitive, emotional, relational); and mentor competences (knowledge and skills) (Jonson, 2003). But to provide optimal learning experience for student teachers, mentors should, in addition to exhibiting such qualities, be aware of how to utilize their knowledge and skills to assist socialize pre-service teachers into the field (Graves, 2010). It can, then, be conclude that good qualities, characteristics and
competences of mentors are highly valued but they need be practically used in a social context of interaction if they were to be of benefit to mentees.

Thus, Nash (2010) believes that mentors, who take responsibility of facilitating the growth of novice teachers, need to understand that the task is not that small. Nash (2010) posits that the task involves the significant charge of helping novice teachers develop the capacity for being life problem solvers. Resta (2006) carries that further by asserting that in order for mentoring to be beneficial to beginning teachers and ultimately to their students, mentors have to able to inquire sensitively, listen carefully, and look thoughtfully at their classrooms at work (Resta, 2006 as cited in Nash, 2010).

Focusing more specifically on mentoring skills, Zachary (2000) listed over ten areas associated with effective mentoring: brokering relationships, building and maintaining relationships, coaching, communicating, encouraging, facilitating, goal setting, guiding, managing conflict, problem solving, reflecting and others. It is believed that mentors need to learn and also to practice these skills. From their perspective, Calderhead and Shorrock (1997) suggested that mentoring often seemed to be regarded as simply another teaching context in the sense that it involves mutual construction of knowledge with the help of a more experienced other. Thus, Calderhead and Shorrock (1997) detailed eight areas which they believed need be engaged in by mentors. Those areas are: developing a language to discuss teaching, being a competent practitioner, willingness to appraise their own practice, counselling skills, target setting, understanding professional development, relation building and collegiality. Calderhead and Shorrock (1997) maintain that these specific areas are essential for mentors to learn in order to develop effective mentor-mentee interactions.
Roles of mentors in practicum are also given prominence in some studies. Nash (2010) for, example, believes that the lynchpin role of the induction programme is that of the mentor. It is postulated that “During the transformational learning process, mentors develop their teachers to become independent problem solvers and thinkers” (Horn & Metler-Armijo, 2011). The mentor roles are intended to support mentees and to help transform the latter’s practice. Horn & Metler-Armijo (2011) identify 12 roles that can be used to provide support to novices: advocate, catalyst, collaborator, data collector, demonstrator, facilitator, instructor, leader, learner, problem solver, resource provider, and trusted listener. According to Horn & Metler-Armijo (2011), these roles are not to be used sequentially i.e. the mentor determines, depending on the needs of the novice teacher, which role would best assist accelerate the novice teacher’s practice. Villani (2009) delineates different levels of guidance and support that a mentor may provide for a novice teacher. These levels of support include: essential beginning, where mentor familiarizes the new teacher with the setting; instructional support and development, in which curriculum and instruction are discussed; and professional support and development, that involve modelling, role playing and collaboration on projects. Emotional support and encouragement are also discussed by Villani (2009) as part of the mentor’s roles. Villani (2009) postulates that many new teachers experience a sense of self-doubt as they encounter students and many would wonder if they have made the right career choice. Trust and rapport, to be established by mentors with novice teachers, would convey a positive mind set and would help novice teachers believe in their abilities to meet their challenging responsibilities and “put their energies towards learning more about their practice’ (Villani, 2009).
As regards student teachers’ perceptions of practicum, Hudson (2004) concluded that student teachers considered school mentors to be a key aspect of their practicum experience. Hudson (2004) also reported that student teachers found it very essential to plan lessons with a mentor, to have mentors observe their teaching and give feedback. In a longitudinal study conducted by Wooley (1997) of student teachers’ perceptions of their mentors, the results highlighted nine themes: guide, feedback, expert, style, power, welcome, support, ideas and evaluation.

The interactions between mentees and mentors are seen as very essential in facilitating the learning process because knowledge, as proposed by the social constructivists, is socially constructed rather than merely discovered (Rogoff, 1991).

Systematic reflection in practicum, as Boreen et al (2009) maintain, “can significantly enrich a novice teacher’s understanding” (2009: 56). Particularly at the beginning of their careers, Boreen et al assert, “new teachers need to step back and look at their classroom practices” (2009: 56). Reflection as these authors posit:

• Helps beginning teachers organize their thoughts and make sense of classroom events.
• Leads to professional forms of inquiry and goal setting.
• Promotes a model of learning that views teaching as an ongoing process of knowledge building.
• Promotes conversation and collaboration with mentors. (2009: 56)

From the definitions and the notions accumulated above, it can be gleaned that practicum is about: reflecting, thinking, knowing, learning and teaching; and relationships i.e. cognition and interaction.
2.7 Summary of the Chapter

This chapter has attempted to present an understanding of the notion of reflective practice and how it is related to learning/teaching in the literature. The chapter has also discussed the application of reflective practice in teacher education, and how teacher cognition can be teased out via reflective practice. Understanding of reflective practice and teacher cognition are suggested in the literature to be significant in forming teachers’/teacher educators’ perceptions and enactment of reflective practice. Learning also emerged as a common thread linking the argument about the various dimensions of reflection.
CHAPTER THREE

Methodology

3.1 Introduction

This chapter presents a detailed description of the procedures followed to conduct this study. The objectives and the research questions of the study are followed by research paradigms and the justification for the paradigm used in this study, the theoretical framework and the research methodology. Then, a detailed description of the sampling, the data collection methods and the rationale for selection are demonstrated. Finally, the analysis process, ethical consideration, and limitations are provided.

3.2 Research questions

This research study began with the overarching question “What is reflective practice for EMI teacher educators in the context of the study and how do they promote reflective practitioners?” This was developed into the following specific research questions:

1- How do EMI teacher educators in the context of the study perceive and understand the concept of reflection and reflective practice?

Individual interviews were used to generate data to address the question.

2- What methods do these EMI teacher educators use to engage their student teachers in reflect practice?

Observation and documents were primarily employed to elicit answers to this question.

3- What do they engage their student teachers to reflect upon in their practice?
Documents, observation, constructive post observation dialogues and semi-structured interviews assisted in constructing this information. The responses to these questions will be addressed in Chapters Four and Five of this study.

3.3 Research paradigms (ontology, epistemology, methodology)

The current section presents a brief description of the three main modes of enquiry: the positivistic, the interpretative-constructivist, and the critical. This is followed by a rationale for the research paradigm adopted in the study. This description is achieved through the elaboration on three main axes: ontology, epistemology and methodology.

Any researcher, trying to investigate a problem s/he is interested in, will be faced with the task of deciding how to best research the problem. Then, the researcher will be embroiled with the inevitable paradigmatic debate. Guba & Lincoln, (1994) have given a comprehensive but practical definition of the term. A paradigm for them means a set of basic beliefs that deals with ultimates or first principles. It represents a worldview that defines, for its holder, the nature of the world, the individual's place in it, and the range of possible relationships to that world and its parts. The basic beliefs that define inquiry paradigms can be summarised by the responses given by proponents of any given paradigm to three fundamental questions:

- The ontological question: What is the form and nature of reality and, therefore, what is there that can be known about it?
- The epistemological question: What is the nature of the relationship between the knower and the known?
- The methodological question: How can the inquirer go about finding out whatever he or she believes can be known?
Three research stances have dominated the scene and become the most popular. These are the positivistic, the interpretive/constructivist and the critical modes of inquiry.

Guba & Lincoln (1994) summarised and compared them on different axes. The following table (Table 3-1) explains this.

**Table (3-1): Paradigm position on practical issues**

<table>
<thead>
<tr>
<th>Issue</th>
<th>Positivism</th>
<th>Critical</th>
<th>Interpretative/Constructivism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inquiry aim</td>
<td>Explanation, prediction, and control</td>
<td>Critique, transformation, and emancipation</td>
<td>Understanding; reconstruction</td>
</tr>
<tr>
<td>Nature of Knowledge</td>
<td>Verified hypotheses established as factors or laws</td>
<td>Structural/historical insight</td>
<td>Individual reconstructions coalescing around consensus.</td>
</tr>
<tr>
<td>Knowledge accumulation</td>
<td>Accretion, generalization, and cause-effect linkages</td>
<td>Historical revisionism; generalization by similarity</td>
<td>More informed and sophisticated reconstructions; vicarious experience.</td>
</tr>
<tr>
<td>Goodness or quality criteria</td>
<td>Conventional benchmarks of rigor: internal and external validity, reliability, and objectivity.</td>
<td>Historical situatedness; erosion of ignorance.</td>
<td>Trustworthiness and authenticity and misapprehension.</td>
</tr>
<tr>
<td>Values</td>
<td>Excluded-influence denied</td>
<td>Included-formative</td>
<td></td>
</tr>
<tr>
<td>Ethics</td>
<td>Extrinsic; tilt toward deception.</td>
<td>Intrinsic; moral tilt toward revelation</td>
<td>Intrinsic; process tilt toward revelation; special problems</td>
</tr>
<tr>
<td>Voice</td>
<td>Disinterested scientist as informer of decision makers, policy makers, and change agents.</td>
<td>Transformative intellectual as advocate and activist</td>
<td>Passionate participants as facilitator of multi-voice reconstruction</td>
</tr>
<tr>
<td>Training</td>
<td>Technical and quantitative; substantive theories.</td>
<td>Resocialization; qualitative and quantitative history; values of altruism and empowerment.</td>
<td></td>
</tr>
<tr>
<td>Accommodation</td>
<td>Commensurable</td>
<td>incommensurable</td>
<td></td>
</tr>
</tbody>
</table>

(Source: Guba & Lincoln, 1994: 112)
Using this table as a launching pad shows that each paradigm has its own stance in relation to some pressing issues in educational research. Proponents of each stance rigorously defended their philosophical beliefs which led to what was called the "paradigm war". Even they disagreed about the very definition of paradigm which may mean different things to different people (Collis & Hussey, 2003).

Moreover, this debate has also resulted in what is now claimed to be "the incommensurability of paradigms". It is therefore a requirement that researchers state their ontological assumption at the outset, which in turn guides the methodology they employ. However, the incommensurability of paradigms has been recently criticised, with Lewis & Grimes (1999) stating that theory can be developed from multiple paradigms using multiple theoretical perspectives (Sun, 2006).

As noted by Tashakkori & Teddie (1998: 21), it appears that this is an unproductive debate. Some argue that this is because it is now clear that there is a basic incompatibility between the two approaches, hence it is time to stop the talking and get on with one's own thing. Another alternative approach is to use the pragmatist credo of "what works": use whatever philosophical or methodological approach works best for a particular research problem at issue. This leads to a mixed or multiple method designs of studies where both quantitative and qualitative approaches are adopted under a certain paradigm.

3.4 The paradigm followed in this study
(ontology, epistemology and methodology)

Based on the exploratory nature of this study, and its context-specificity, the naturalistic orientation of interpretive research appears to be an appropriate selection since the aim is to understand actualities, social realities and human behaviours and characteristics rather than providing generalisable hunches on human phenomena.
The aim of this study was to uncover the idiosyncrasies regarding EMI educators' understanding of reflective practice through natural language: oral or written. In this study, the interpretive approach was for understanding the context within which participants act, and for understanding the process by which events and actions take place (Maxwell, 1996). The interpretive approach will help the researcher explain why things happened from the insider's view (Denzin & Lincoln, 2000).

Based on the above argument, the interpretive mode of inquiry seems pertinent since the study aims to come to grips with two kinds of social reality. The first is the EMI teacher educators' perceptions of reflective practice. This necessitated gaining insight into this understanding by looking into the participants' cognition and understanding of the context as well as the concept of reflective practice. The second was their roles in stimulating and facilitating reflective practice; and this required building a picture of the strategies they employed to this endeavor.

The realities stated above are socially constructed and there exist as many such constructions as there are individuals (Guba & Lincoln, 1989). It is believed that EMI teacher educators are capable of supplying valuable information about their perceptions and processes. However, the social reality here is believed to be regarded as the product of a process by which different individuals (social actors) together negotiate the meaning of actions and situations (Blaikie: 96 in Crotty, 2003).

The interpretive-constructivist mode of inquiry has the potential to enable the informants to articulate their ideas, beliefs, and processes in certain situations. The social construction of reality and the ways in which social interaction reflects actors’ unfolding definitions of their situations are the things which render the natural social world intelligible (Guba & Lincoln, 1994). In this sense, investigating the practicum
social world of the EMI teacher educators as distinct from other instructional contexts would reflect the participants' definitions of reflective practice, in general, and the strategies adopted in the processes of promoting reflective practitioners in particular. It gives them the chance to clarify what they believe in, aspire to, and seek to achieve. Moreover, it gives them the chance to explicate their behaviours and the reasons for these behaviours. This is quite consistent with the constructivist philosophy in which participants are seen as constructors of their own knowledge through active participation in the research process. This type of learning is based on ample interaction in the research process that allows EMI teacher educators to resolve cognitive quandaries, if any, through focusing on concrete experiences, collaborative discourse, and reflection (Brooks & Brooks, 1993).

Furthermore, and on the level of methodology, it was necessary to carry out some adjustments to the study design in conducting the fieldwork of the study. One of these was the adjustment: made to the questions of the semi-structured interviews. The semi-structured interviews were based on the themes which emanated from being involved in ADEC educational reform initiative as an educator and teacher educator. Each theme was broad enough to cover topics and experiences that participants would wish to talk about. At the same time, the themes shaped for me my research foci. The questions were used to stimulate the interaction as well as to probe into participants' inner thoughts. The direction of the interview was determined by both the participants' interests and the research foci.

It is, therefore, not surprising to find multiple tools in a naturalistic inquiry as a means of cross-checking information as well as offsetting problems that may arise. In view of the fact that naturalistic inquiry often deals with opinions and interpretations, and as mentioned in literature that a phenomenon cannot be
completely explained through statistics (Glass & Hopkins, 1996), I believe using more than one tool in my study reinforces the findings; and at the same time helps triangulating the information. Using multiple tools adds rigour to the data, reaffirms findings, and leads to greater validity and reliability of the findings (Patton, 1990), and in qualitative terms, trustworthiness and dependability.

The element of generalisability of findings to a wider context has never been a goal of naturalistic inquiry. However, the in-depth nature of the inquiry means the findings give insightful explanations of phenomena, which could be useful to the people in similar situations (Lichtman, 2006). It was felt that the interpretivist constructivist paradigm with a multiple tools research approach would ensure greater contextualisation, dependability and trustworthiness for the research on beliefs about reflective practice and roles in facilitating reflective practice.

The current study takes an exploratory form of investigation. It aims at probing into the participant's understanding of reflective practice and their role in promoting reflective practitioners. A number of qualitative tools have been developed for such an investigation. These include semi-structured interview (Ehrman & Oxford, 1995; Jimenez, Garcia & Pearson, 1996; Lan, 2005); observation (Cohen, Manion, and Morrison 2001), and analyzing documents (Yin 2003).

The multiple tools used to investigate these phenomena highlight the difficult task of probing into those two aspects (understanding and roles). This also emphasizes the challenges involved in investigating the world of reflective practice. For example, perceptions include features related to teacher's cognition which teachers in general might not be aware of if not investigated and questioned. Processes and roles to help create reflective future teachers span features related to the metacognitive awareness of the strategies used. This indicates once again the
complexity of the topic under study. This complexity is considered as a motive to gain insight and explore those unexplored areas in the context of the study.

3.4.1 Qualitative inquiry

The focus of the research questions determined the type of inquiry utilized in this study. Qualitative inquiry is the umbrella concept under which multiple approaches, methodologies, and interpretive practices can be applied for the purposes of capturing the human point of view, the constraints of every-day life, and the meaning in the lives of individuals. According to Denzin and Lincoln (1994), qualitative research is involved in an interpretive, naturalistic approach to its subject matter. Qualitative researchers are attempting to understand a phenomenon in a natural setting. The thrust of this study is to understand what the EMI teacher educators’ experiences are in the practicum as related to the concept of a reflective practice and, therefore, calls for the use of qualitative inquiry.

3.4.2 Interpretive paradigm

The interpretive paradigm is a specific philosophical delineation under the qualitative discourse that served as the foundation of this study of the reflective practice. The ontology of the qualitative branch reveals that individuals who are interacting with their social worlds construct their reality. The interpretive researcher is interested in understanding the meaning that people have constructed.

Meaning is embedded in peoples’ experiences and this meaning is mediated through the researcher’s own perceptions (Merriam, 1998). The interpretive paradigm involves the description of a phenomenon and includes the exploration of “the meaning-perspectives of the particular actors in the particular events” (Erickson, 1986: 21). Interpretive research requires a multi-focused, rigorous, and systematic approach to field experiences in order to understand the phenomenon studied.
However, it is important for the design to remain sufficiently open and flexible to permit exploration of whatever the phenomenon under study offers for inquiry. Qualitative designs continue to be emergent even after the collection of data begins (Patton, 1990). Methods for the study of personal experience need to simultaneously focus inward, outward, forward, and backward (Clandinin & Connelly, 1994). Multiplicity and flexibility in methodology are necessary components of research performed within the interpretive paradigm. The process of this study continually evolved as the participants provided input concerning meaningful ways to reflect through dialogue and the written word.

3.4.3 Sociocultural perspective

This section discusses primarily the socio-cultural perspective and the reasons why the socio-cultural perspective is appropriate for this study and its consonance with reflective practice in terms of how it is reflected in understanding and teaching reflective capability. It then proceeds to focus on mediation because I believe that semiotic mediation plays a central theoretical role in forms of thinking/reflection which are shaped through interpersonal-society interaction. In the discussion of mediation, I focus more on the active nature of mediation.

This study is grounded within a socio-cultural perspective which emerged initially through Vygotsky's (1896-1934) writings. The term 'socio-cultural' has also been used by several authors from a variety of disciplines such as Dewy when he deals with logic and enquiry (Wertsch et al, 1995). It should be noted that Vygotsky and his colleagues usually used the term 'socio-historical' rather than 'socio-cultural'. However, as Wertsch (1991) posits, the term socio-cultural may help in mental action work in cultural, historical, and institutional situations and to recognize the significant contributions of mediated action on schools of thought.
Socio-cultural research aims to understand the relationship between human mental functioning and institutional settings, particularly from a cultural and historical perspective, that comes from the view that practices of human communication give opportunities for the individual to enhance their mental functioning by going outside themselves in a process of a dynamic interactive exchange. The socio-cultural perspective assumes that we cannot separate mediated action from the setting in which it is carried out (Wertsch, 1991, 1995; Wertsch and Tulviste, 1992; John-Steiner and Mahn, 1996; Robbins, 2005). From this stance, some authors (e.g. Rogoff and Chavajay, 1995; John-Steiner and Mahn, 1996) maintain that the power of Vygotsky’s ideas lies in his view about the process of dynamic interdependence between the social and the individual that cannot be separated, and that socially shared activities become transformed into internalized processes.

In addition, the socio-cultural perspective provides a deeper understanding of the nature of educational processes. The view perceives educational institutions as reflecting the larger social order in which they are situated. Contextualized features are built into socio-cultural perspectives, as Rogoff (2003) argued that the cultural practices and circumstances of communities can lead to understanding how people change and develop as they participate in cultural communities. According to this perspective, teaching and learning processes (practicum in this case) take place in socially shaped contexts that are constantly changing, producing changed contexts and opportunities for learning (John-Steiner and Mahn, 1996).

Thus, according to the sociocultural perspective, to understand individual thinking/reflection processes need arises to understanding their contexts, cultural setting and larger communities. As Vygotsky (1962: 12) maintains: “Directed
thought is social. As it develops, it is increasingly influenced by the laws of experience and of logic proper”. Individual thinking/reflection cannot be researched in a vacuum, and individual thinking is not independent of the types of activities of social life of which they form a part (Rogoff and Chavajay, 1995). In other words, a sociocultural perspective can offer a fuller picture of thinking processes, and at the same time it does not ignore the individual but assumes that construction of cognition - which is essential for reflection - is not an individual process, but rather a collaborative one.

Vygotsky’s theory is adeptly summarized by Lee and Smagorisky (2000: 2) as four assertions: Firstly, learning occurs through interaction between the individual and other people and their cultural artefacts ‘on the inter-psychological plane’; secondly, learning through the psychological plane happens in a procedure known as ‘scaffolding’, in which more culturally knowledgeable experts and mentors engage in activity with those who have less of it; this reciprocal process and ‘meaning’ are thus constructed through joint activity rather than being transmitted from teacher to learner; thirdly, the concepts are constructed historically and culturally and this connects them to cultural history in daily life. Thus, learning/teaching reflection is inherently social, and ‘language becomes the primary medium for learning, meaning construction, and cultural transmission and transformation (Lee and Smagorisky 2000: 2). Fourthly, the capacity to learn is not limited and bounded but one can learn constantly. All these features captured in Vygotsky’s socio-cultural perspective fit squarely with the endeavor to probing reflective practice which is the main concern of the present study as will be explained in the subsequent lines.

These four assertions of Vygotsky’s theory are very significant elements for this study because of their influence on the definition of thinking for this study and
for the general characteristics of models of and structures for thinking/reflective skills. In brief, encouraging and supporting interaction through mediational means in a social setting is informed by Vygotsky’s view.

Moreover, there are opportunities to use scaffolding as a strategy for mediating thinking/reflection between the learning of teaching skills and the learning of reflective skills when teaching or learning reflection via different situations as stimulated recall and journaling. Furthermore, regarding the reasons why the sociocultural perspective is appropriate for this study, Vygotsky’s view shows how the nurturing of thinking/reflection is situated in a sociocultural context, in communication with others, as an effect of a dynamic interactive exchange. All these points will be further discussed later in this section.

3.4.4 Why is the socio-cultural perspective appropriate for this study?

The socio-cultural perspective is the most appropriate for this study for many reasons. First of all, there is a strong relationship between learning thinking/reflective skills processes and society (Vygotsky, 1962), in the sense that these thinking/reflective processes are constructed within the specific society’s history and cultural circumstances. Packer and Goicoechea’s (2000) theory of ontology in the socio-cultural perspective, emphasizes that the link between learning processes and identity is constructed in a social context, through practical activity, in community membership. Reflection always has influences and takes place in a context of interaction, whether directly or indirectly, and personal thinking/reflection is influenced by the affordances and constrains of various contexts (Moseley et al, 2005).
This perspective recognizes the vital role of collaboration and dialogue in the strengthening of reasoning judgement in the thinking/reflective skills field. Furthermore, “meaning making is not just an individual operation. The individual interacts with others to construct shared knowledge. There is a cycle of internalization to affect the learner’s social participation” (Costa, 2006: 64). In this regard, a growing body of research (e.g. Rojas-Drummond et al, 2008; Burke and Williams, 2008; Etapelto and Lahti, 2008) argues that the social and communicative nature of human life needs to be taken into account in the process of nurturing thinking/reflective skills. Furthermore, and essential factor is related to the view of reflective skills adopted in this study which applies the idea of mental function to social as well as individual forms of activity, and thus emphasizes the primacy of social interaction in human development, as applied in the teaching and learning of thinking/reflective skills.

Secondly, the socio-cultural perspective includes many elements which are fundamental to this study, such as social interaction, and mediation. Mediation plays an essential role in promoting cognitive process. Vygotsky (1978: 57) states: “Every function in a child cultural development appears twice: first, on the social level, later, on the individual level; first, between people (interpsychological) and then inside the child (intrapsychological). This applies equally to voluntary attention, to logical memory, and to the formation of concepts”. The socio-cultural perspective is relevant to the current study in that the thinking/reflective skills literature describes what is meant by cultural tools in thinking/reflective skills, showing the importance of such cultural tools, and this notion of cultural tools is derived from the socio-cultural perspective. ‘Tools’ determine a boundary between the internal and external processes (Robbins, 2005). One such example is social values as a cultural tool that
cannot be separated from a particular academic activity, and which could mediate to assist the development of student teachers’ thinking/reflective skills in the practicum context. Another example of the significance of mediation for this study is that it provides an insight into the social dynamic interactions in the practicum context which can be influenced by many different social, historical and cultural factors within educational processes, as will be discussed in more detail later in this section.

Thirdly, the sociocultural perspective is more appropriate for the context of this study, rather than other approaches. The NSM (New School Model) was introduced to Abu Dhabi educational system in September 2010 and included the embedding of reflection as a primary outcome of teaching at ADEC schools. The NSM document puts an emphasis on the importance society and the changing contexts have for today’s students. This shows the commonalities between the documents and the socio-cultural perspectives. They both emphasize that the social dimension of consciousness is primary and, at the same time, they emphasize the interdependence of social and individual processes. Moreover, they both give primacy to the interaction between individuals and for the functioning of society. It can be argued that the socio-cultural perspective assists in achieving some sense of the articulation between the interaction between thinking/reflective skills in the context of practicum and the practices of the culture including values and aspirations of the society. Craft and Wegerif (2006: 1) support this view as emphasized “In our view successful approaches to teaching thinking skills […] appeal not only to the cognitive but also to the affective […] dimension of being human”.

For this reason, the socio-cultural perspective is worth further exploration and application in the context of the study. Application of socio-cultural perspectives influences pedagogical practices in practicum. An example is the mentor scaffolding
student teachers' reflective activities through engaging in a practice of socio-cultural interaction that not only extends their reflective abilities, but is also involved in the formation of professional identity of the student teacher as a member of the society, and for his/her prospects for future practice. This future practice is determined by the NSM which aims at supporting and developing school students' scientific research, reflective abilities, thinking skills, problem solving, and life-long learning; i.e. strengthening students' abilities to notice, contemplate, and solve problems; and thus, nurturing a life-long learning student (ADEC, 2013-2014).

3.5 Research design

This section describes the study sample and how they were approached as well as their roles in the research. This is followed by a description of the data collection process and storage, and data analysis process. Ethical considerations guiding the research are then highlighted followed by the challenges encountered throughout the study.

3.5.1 Sampling and participants

Sampling is “the process of drawing a sample from a population” (Johnson and Christensen, 2010: 216). Not like in the quantitative perspective where the selection of a representative and random sample is key, in qualitative inquiry a purposeful strategy is dominant approach. This is because the qualitative perspective focuses on the aim of the investigation, obtaining information most useful to these aims and achieving a high level of credibility with relatively small sample of participants (Hoepfl, 1997; Willington, 2000).

Purposeful sampling, one of the most common sampling strategies in qualitative research (Hoepfl, 1997), is a non-random sampling method in which “the researcher specifies the characteristics of the population of interest and locates the
individuals within these characteristics” (Johnsons and Christensen, 2010:213). Such individuals would be information-rich cases suitable for in-depth study (Patton, 2002; Willington, 2000). Therefore, purposive sampling was used in this study. Qualitative research aims to understand the conditions within which the researched phenomenon occurred rather than emphasizing the generalizability of findings.

Qualitative samples are usually smaller than those in quantitative research (Ritchie and Lewis, 2003). The participants in this study were eight (8) EMI teacher educators (three females and five males) in a UAE tertiary education institution. Two other EMI teacher educators participated at the beginning of the study, but later withdrew due to personal reasons. The eight participants in the study were drawn from the teacher preparation programme faculty. They were originally purposely selected (Cresswell, 1994) to reflect the different dimensions of the programme: English, Mathematics, Science, Educational Studies, and ICT (Information and Communication Technology) as these last four subjects were taught in English (EMI) as well. The eight EMI teacher educator participants were involved in both the input sessions at college (instructors) and the practicum at schools (mentors). They were initially, meant to represent evenly the five integral parts of the programme (English, Science, Math, Educational Studies and ICT), i.e. two participants from each discipline; but unfortunately, for some reasons related to the Math and ICT Departments, I was able to interview only one teacher educator from each of the two said departments. Seven of the participants (see Appendix A) were from different western nationalities (Three British, two Americans, an Australian, a New Zealander), and one was an Arab bilingual. The Australian participant was originally an Arab and a west educated Ph.D. holder. Seven of the eight participants worked for
the institution, where the study was conducted, since its start in 2007. The participants were assured confidentiality and assigned pseudonyms.

These EMI teacher educators exhibited the following characteristics in order to be selected for this study: a passion for teaching and learning; interest in developing reflective habits; and commitment to life-long learning. In addition to that, they were all experienced EMI teacher educators who came from different countries and had different nationalities, but all lived and worked in the UAE for a minimum of five years; four of these participants were Ph. D. holders, one was a Ph.D. candidate, and three were Masters Degrees holders. Interest in developing a reflective practice was determined through my own questioning of each participant. A commitment to lifelong learning was indicated by a track record of professional development for these EMI teacher educators and the willingness to participate in this research.

The students of these eight EMI teacher educators also indirectly participated in the research by generating data via reflection sheets and taking part in the observed stimulated recall and discussion sessions held with their EMI teacher educators (mentors). I, as the researcher, was also a participant in the study in the sense that I critically reflected upon my interactions with these eight EMI teacher educators and my own theories of the teaching/learning and reflective practice. My voice is part of the stories of these EMI teacher educators as well.

3.5.1.1 Solicitation of participants /informed consent

I solicited the EMI teacher educators’ participation by first speaking to them in person using a specified script/solicitation letter (Appendix B). It was essential that the participants knew the expectations in the study. These expectations were
presented both verbally and in writing. Once an EMI teacher educator had indicated interest, we met in the faculty lounge (inside the research site). Each participant was verbally briefed by the researcher and presented in writing the following information: 1) the purpose of the study; 2) risks involved in the study, which may include the discomfort of analyzing a mentoring practice; 3) general procedures of the study; 4) demands upon participants’ time in the study; 5) timeline of the study; 6) confidentiality concerning and anonymity of participants in the study, which included the use of pseudonym names; 7) rights of participants in the study which included that the participant is acting in a voluntary role and may withdraw at any time without penalty; 8) the phone numbers of the researcher; and 9) benefits of the study to the participant and the profession. Once participant agreed to work with me as a researcher in this study, I asked him/her to sign a permission slip/contract (Appendix C) indicating consent to be in the study. The participants were told that they could withdraw at any time throughout the research process.

After each EMI teacher educator agreed to be a participant, I contacted the college Research Committee and explained the purpose and methodology of the study. I also assured the Academic Dean that the EMI teacher educators would be in control of the curriculum and students. Copies of the teacher educator solicitation letter (Appendix B) were lodged with research committee.

3.5.1.2 Role of the participants

EMI teacher educators in this study responded to questions in semi-structured interviews. They were given a selection of core questions in advance to give direction to the interviews (see Appendix D). They also conducted observed stimulated recall and discussion sessions with their student teachers, and gave me access to their student teachers’ reflection sheet (see Appendix E) and other
documents used in structuring and facilitating reflection on the part of student teachers. They also allowed me to attend their stimulated recall and discussion sessions.

Permission by the student teachers was needed in order for the researcher to observe the stimulated recall and the discussion sessions, and to examine their reflection sheet. After initiating the reflective process, each student teacher was invited by his/her mentor, for example, to select a facet of the practice that the student teacher would like to explore for the purpose of improved practice or understanding further the practice. Following the EMI teacher educator’s stimulated recall and discussion with their student teachers in which I was present, the EMI teacher educators and I reflected upon what occurred, how they directed/facilitated students’ reflection on their practice, and other pertinent topics using constructive dialogue to verify or enrich my field notes and remarks I committed to the observation sheet. Constructive dialogue is an intentional conversation to which two or more parties consent for the purpose of bringing to light any aspects of the teacher’s practice (Stegman, 1996).

The primary goal of the study was not to assure change, but rather, to understand how the process of reflection was conducted, how reflection was stimulated, what issues were raised, and what may affect the choice of the issue and the course of change if any is suggested. So my role in this research was three-dimensional: a colleague, a researcher, and a critically reflective EMI teacher educator. In the capacity of colleague, my goals were to listen and share. In a personal role, I worked to build a relationship of friendship and caring as well as become critically reflective. As the researcher, I facilitated the process of the study by conducting semi-structured interviews, observing sessions, collecting field notes,
initiating constructive conversations, sharing data with the participants, and analyzing relevant documents. I closely examined the procedures of this study as well as reflected upon my interactions with my participants. My role in this study was constantly shifting between colleague and researcher as the EMI teacher educators became more comfortable being involved in the study. As a critically reflective EMI teacher educator, I looked at my own philosophy of what comprises excellent teaching, my strengths and weaknesses as an EMI teacher educator, and what my own personal and professional needs are as an EMI teacher educator.

3.5.2 Data collection tools and justification

Data collection techniques can be divided into three major categories: experiencing, enquiring, and examining (Wolcott, 1992). Experiencing includes the observation of activities, people, and physical aspects of a situation, and the engagement in activities that provide useful information. Enquiring occurs when the researcher or mentor (EMI teacher educator) poses some form of a question. Examining refers to the use of data that is written: reflection sheet and institutional documents. Each of these categories was included in the process of data gathering. By triangulating the methodology, the researcher was able to formulate a fuller picture of participants' understanding of reflective practice and their roles in promoting reflective practitioners. Triangulation was also achieved through the three voices that were heard in the study; the participants, the students in an indirect way, and the researcher. Three tools were used: semi-structured interviews, observation, and documents analysis.

3.5.2.1 Semi-structured interview data

The format of the interview in the current study is semi-structured in the sense that I had, based on the conceptual and theoretical framework of the study, a
list of topics or themes to cover in the interview. However, some other issues emerged during the interview. These emergent issues were not previously determined.

The use of semi-structured interviews is coherent with the ontological and epistemological assumptions postulated in the current study that there are multiple realities existing in the minds of the participants. Unless these realities had been allowed to be constructed from the perspectives of those who lived these realities, a whole picture of what constitutes the EMI teacher educators' perception of and role in reflective practice would have never been approached or probed.

The semi-structured format in the current study allowed accommodating emergent issues. It provided a mental orientation both to focus on what was to be investigated and accommodate what was raised from the interviewee's own perspective. This helped in providing a well-balanced discussion including both the agenda of the interviewer and that of the interviewee. Therefore, there was no tight control over the flow of discussion as long as it evolved around the big themes being discussed (For a sample interview script, see Appendix F).

Although I may have some understanding of what is to be explored; a lot of issues still remain the realm of each of the EMI teacher educator. I had familiarity with the context of the interviewees out of being a practicing teacher, an educational advisor, a teaching assistant at the university and an EMI teacher educator. This helped -in addition to readings and relevant literature- to identify some major topics or themes to be discussed with the interviewees.

However, being aware of the wealth of experiences of the interviewed participants, there was allowance for emergent issues to be discussed. Unlike other tools such as the questionnaire and the structured interviews, the semi-structured
interviews could provide rich data because it is not only a key venue for exploring the ways in which the participants experience and understand their world, but also provides a unique access to their lived world describing, in their own words, their activities, experiences and opinions (Kvale, 2007).

With regard to the semi-structured interview guide (See Appendix G), it was based on the research questions. Previous studies and other reading material were examined carefully long before the final version of the interview guide was produced. In fact, the interview guide had never been close-ended till the last interview to accommodate emergent issues raised by the respondents.

The interview guide was useful in many ways. Arthur & Nazroo (2003) suggest three ways to make use of the interview guide as: (1) an aide-memoire to enhance the consistency of data collection, (2) a tool to ensure that relevant issues are covered systematically and with some uniformity, while still allowing flexibility to pursue the detail that is salient to each individual participant, and (3) a mechanism for steering the discussion not as an exact prescription of coverage. These ways were relevant while using the interview guide during the interview process. It worked as a reference guide especially in the initial interviews. After some familiarity with the protocol of the interview process, minimal use was made out of it.

Due to the semi-structured format, I was flexible with regard to the use of the interview guide. With this type of interview, what is more important than the interview guide is a general sense of the questions or topics to be discussed as well as more communication skills in general, and listening and follow-up questioning in particular (Punch, 2009). After gaining some familiarity with the proceedings of the interview, the interview guide was only used as a reference to ensure the full coverage of an area to be explored. I was also flexible with regard to the wording and
ordering of the questions. The original blueprint of the interview guide was refined several times to accommodate emergent topics. It could be said that the design and construction of the interviews made use of the accumulated experiences obtained throughout the whole data collection process. This adds rigour to the design and administration of the interviews.

I was aware that conducting a successful in-depth qualitative interview was not an easy task to be carried out. Given that qualitative research interviewers are themselves research instruments, the success of the interview depends to a large extent, on the personal and professional qualities of the individual interviewer (Legard, Keegan & Ward, 2003). Since I was previously familiar with qualitative interviewing, which was a famous research tradition in the context of my study, I was very keen to listen to the interviewed EMI teacher educators to see the world of reflective practice through their eyes, and to dig deep into what they tell. The interviewees were my source of knowledge and therefore, I had to acknowledge that they voluntarily had given me the chance to share their knowledge. Although I have had my own knowledge which I have constructed from my previous and present practice, I never let my knowledge compete with theirs. I asked comprehension and clarification questions to probe further and to understand rather than to test or check their knowledge. As a qualitative interviewer, according to Legard et al. (2003), I was required to be: (1) a good listener who can decide how to probe further, (2) curious to know more about what has been told, (3) capable of establishing good rapport with the participants, (4) capable of displaying a sense of tranquility during the interview, and (5) recipient of the participant's wisdom without needing to compete.
All of the interviews were conducted in a quiet seclusion room inside the library of the site. A very small portable digital voice recorder (Dictaphone) was used to record the interviews. The small size of the device made it unnoticeable and consequently less distracting during the interview. One good feature about the recorder was its ability to filter irrelevant surrounding noise. I could have used a microphone extension but I felt it was unnecessary because of the high quality voice of the recorder, and also to provide a comfortable hands-free environment. The date, time and duration of the interview were recorded automatically by the recorder. I had to make sure that the device capacity was big enough to accommodate the entire interview.

The interviewees were previously informed that the interview would last for at least one hour. The time of the interview was set by the interviewee and lasted for forty five minutes to one hour. This helped me to conduct the interview without interruption of teaching commitments. I put a time plan to cover the areas within the first forty five minutes. Once I covered these areas, I made use of the opportunity to dig deep into the already covered areas or emergent issues till the end of the interview which had to be ended.

All the interviews were conducted in English because six of the participants were native speakers of English, and because of the high proficiency level in English of the other two bilingual interviewees who studied for their degrees in English and taught their subjects in English as EMI (For the interviewees’ profiles, see Appendix A).

All the interviews were conducted face to face to establish rapport with the interviewees. I was also keen to keep reference to the interview guide to a minimum. After a couple of interviews, I gained familiarity with the questions till I found it
easier to conduct the interviews without looking at the questions because they were learned. This yielded a smooth flow of the interview. However, the schedule was kept to ensure that all the areas were covered during the interview. I was keen to listen carefully to what the interviewees were saying as well as their tone of voice. Emphasis placed on certain areas by the interviewees was further discussed with them. These are their own realities, and their emphasis is surely justified. I was also keen to ask for clarification or elaboration from the interviewees. Sometimes, I made some comments and remarks to elicit more information, views or perceptions from the interviewee.

3.5.2.2 Observations

Despite my rather limited experience as a researcher, I decided it was imperative to include observations in my data collection process, though it could be a double-edged sword if not adeptly managed. Cohen, Manion, and Morrison (2001) suggest taking sufficient notes that could adequately provide a reasonably vivid picture of the situation months later. It was imperative, however, to design the observations procedure with the idea of transparency in mind, making clear what was being observed. Cohen et al. (2001: 305) stress that observed incidents add “a certain freshness to this form of data collection that is denied in other forms, e.g., questionnaire or test.” Therefore, before I sit in any session for an observation, I had a plan to look for specific behaviors and to remain as systematic as possible.

One reservation I had of me observing EMI teacher educators stimulating student teachers’ reflection was that sitting in the conference room obviously documenting their actions could lead to unnatural behavior on their part. Just simply having an outsider at the session introduces changes and can ultimately lead to an artificial situation unlike the so-called normal interaction. Tashakkori and Teddlie
(1998) suggest that this can affect data accuracy. I did my best to overcome the possible Hawthorne effect (McCarney, et al, 2007) my presence might cause by ostensibly occupying myself with browsing through the practicum pamphlet just like what I did when I was a supervisor to avoid disturbing the classroom natural interaction. In the event that I observed things I wanted to note, I scribbled shorthand remarks that I would remember later. Often notes were taken or even rewritten at the end of sessions so I could reevaluate them later. Most generally, I made an effort to remain as unobtrusive as possible so that the EMI teacher educators as well as the student teachers would “behave in as natural and uncontrolled a manner as they [did] when they [were] not being observed/studied” (Tashakkori and Teddlie, 1998: 97).

To maintain my goal of being the “fly on the wall” and keep from interrupting the regular discussions in the sessions, I tried to create an environment as authentic as I could make it. I had to observe participants discussions/interaction as they occurred naturally, again, making mental notes and typing them up at the end of each session or unobtrusively during the session itself. To ensure that I remembered some particular aspect of an observation, I would jot down notes briefly, creating the impression that I was merely working on something else. I noted the kind of exchanges EMI teacher educators had with their students in the sessions, how they were conducting the reflective process, and what issues they were actively involved reflecting on, as well as the levels of reflection.

The observations allowed me the freedom to verify what participants said in the semi-structured interviews about their understanding of reflective practice and about their roles in promoting reflective practitioners; as Clough and Nutbrown (2002) suggest, observations are not intended so much to intervene, but to understand. The context did not vary, but was always the regular session under
normal stimulated recall circumstances and settings. The hope was to set up a scenario with my data, which “people who [were] not present at the real events could become part of, engage with and bring their own meaning,” according to Clough and Nutbrown (2002: 48). Moreover, I again took care to avoid imposing my own framework of interpretation as defined within my culture and instead seek the structures of the individuals being studied.

In making notes of my observations, I tried to create a realistic impression of what I actually observed in the sessions. I would review these guidelines before most observations, in order to remember what I needed to be cognizant of when in the sessions. Although I had to form opinions of what I was witnessing, I did not always choose to make notes throughout the observations, so as not to draw attention to myself and cause participants or student teachers to behave unnaturally.

At the end of the session, when typing up all I wanted to retain from the session, I included the date and time of the observations, as well as the salient notes pertaining to reflection and reflective practice. I also made note of any unexpected issues that were raised and themes that emerged. This process helped me analyze the findings without having to reread the extensive notes, when it came time to analyze the data.

A fundamental goal during the observation process was to keep from imposing my values on the notes and suppressing the ordinary inclination of the sessions. Further, I entered the arena from my own paradigm with the intent of respecting the “complexity of the social world and its workings” and avoid “having already decided what [I wanted] to find” as my results (Richards 2003: 267). Because the findings from the observations would not be straightforward, I made an
extra effort to follow appropriate procedure in maintaining the integrity of the research project.

Without a doubt, my perceptions, values, or understandings of a particular set of circumstances could vary widely from those of others observing the same situation. Moreover, it was unlikely that a significant generalization was possible, according to Pring (2000), because each person’s awareness and interpretation can differ a great deal. Hence, it was necessary to draw up “clear instructions to observe only certain things and to record behaviors for each of those,” as well as to consider “the meanings and motives of those [persons being] observed” (Pring 2000: 34-35).

In any case, observations, however necessary, should not shroud the experience of what was happening in the sessions.

Using this data, I believed, would allow me to highlight specific aspects relevant to the study and explain to the reader my ideas of what happened rather than simply by representing them with theories or principles. Anecdotal information hardly justifies data collection or a method of research. However, McCracken (1988) notes that the right “feeling” or “hunch” is an important methodological consideration. In the current study, I felt it could add substantially to the data collection. Further, McCracken (1998) suggests this process can give the research project a method of combining the wealth of detail and experiences with shared consensus and collective meaning-making.

I began to search for emerging themes that suggested how participants understand and facilitate/conduct reflection in practicum according to their responses in the semi-structured interviews. These emerging themes were also used to study the institutional documents designed to structure reflection.
3.5.2.3 Documents analysis

It is asserted by Yin (2003) that documentary evidence supports, reinforces and informs the findings obtained from other sources such as interviews. It is claimed by Briggs and Coleman (2007) that research through documentary sources provides the opportunity for the researcher to create and construct his/her own methods of data collection and analysis. Therefore, various documents were obtained from the site of the study (the College) and from ADEC, such as:

College Documents:

- IHY4 (Internship Handbook, B.Ed Year 4) (Emirates College for Advanced Education, 2013);
- RPHY4 (Research Project Edu 4003 B.Ed Year 4) (Emirates College for Advanced Education, 2012);
- SSPP (Samples of Student Practicum Portfolios, 2014) (Appendix E).

ADEC Documents:

- INSM (Introduction to the New School Model) (Abu Dhabi Education Council, 2010);
- PM (Policy manual) (Abu Dhabi Education Council, 2013);
- SLH (School Leadership Handbook) (Abu Dhabi Education Council, N.D.);
- SAM (Student Assessment Manual) (Abu Dhabi Education Council, 2011);
- TGLO (Teacher Guidebook & Learning Outcomes) (Abu Dhabi Education Council, 2014);
- C1TGLO (Cycle 1 Teacher Guidebook & Learning Outcomes) (Abu Dhabi Education Council, 2014).
The methods used in this study were working together to answer the research questions. These methods (Semi-interviews, observations and documentary evidence) were not isolated, but they were consistent with each other to provide qualitative data for both understanding how EMI teacher educators understand reflection and what roles they play to promote reflective practitioners.

The foregoing discussion justified the use of the interview as a research method that is compatible with my research philosophic paradigm. However, the fact that meaning and perception are evident in documents, as stated by Hodder (2000) in Denizen and Lincoln, justifies the use of documentary analysis. Hence, the analysis of a document could bring many of the author’s perspectives to the fore.

A critical realist philosophy suggests that there is the need to examine people’s conception in trying to determine their understanding of certain reality, for reality is connected to conception, but is not determined by it, as Balihar (2004) and Spencer (1995) point out. Therefore, one way to elicit people’s perceptions is to examine their writings and relevant documents that have bearing on their behaviours as well as on the perceptions they hold. The existence of people’s conception and perspective in documents and the research philosophic paradigm supports the inclusion of documentary analysis as a viable research method. According to Balihar (2004) website: Misconception c) concerns the common tendency to think of knowledge as a product or thing (e.g., a book or newspaper) which exists outside of us, which we can possess and which is stored in finished form in our heads or in libraries. We tend not to think in terms of knowing, which is in the process of becoming. This active nature of developing and sharing knowledge tends to be neglected. To combat this misconception, we have to consider the production of knowledge as a social activity, requiring material and discursive resources (e.g., raw materials and linguistic tools).
Knowledge as a product, a resource, a skill is both the ever-present condition and continually reproduced outcome of human agency (Balihar, 2004, not paginated).

I can infer from this quotation that knowledge and concepts are products and found in documents such as books or newspapers. While this thought supports the use of documents in this study, it takes this further by inferring that the production of knowledge cannot be divorced from its human producers. Hence, knowledge and concept are both a production resulting from social activities or human agency, as well as existing in books and documents. This means that as a researcher, my own perceptive and the focus of the study will influence how I read and interpret documents, as well as the knowledge and concepts that are the product of my reading and interpretation (subjective epistemology).

Given these realities, EMI teacher educator-produced documents and institutional documents do contain information regarding their perceptions and therefore are useful tools in understanding what they know, as well as what they think about the research areas. Therefore, the use of documentary analysis in the form of EMI teacher educator-produced documents and institutional documents is not only compatible with my overall philosophical paradigm, but also a useful aid in achieving the main research aim.

Since from the foregoing discussion I stated that an interview guide was the main data collection instrument, the purpose of documentary analysis was to supplement, that is to confirm or make more or less plausible, findings of the interview—as shown in chapters four and five—and aid in gaining additional insight into the areas pertinent to this study. Cortazzi (2002) makes the point that documents employed in educational research are many, ranging from policy document to graffiti on walls. For this study, EMI teacher educator-produced documents and institutional
documents are analysed. Cortazzi suggests that in analysing documents, a number of questions are necessary. The main questions asked of the documents are the extent to which they provide support for and confirm findings, or they made the findings more or less plausible (see chapters four and five). Outlined later in this chapter is how the documents were analysed.

3.5.3 Data storage

For safety of the interviews generated data, I transferred them from the digital voice recorder to a personal computer for back-up and then the data were transferred from the computer into a USB memory stick and copied on CD for more back-up. All documents and field observation notes were kept in a safe locked drawer that was inaccessible to others.

3.5.4 Data analysis

Analysis of the data in this study was an ongoing process that occurred both during and after the multiple pieces of data was collected.

As the purpose of this study was to understand how reflective practice is understood and facilitated; the structures, documents, discussions, and description of the content of the reflective sessions were crucial elements in revealing how the EMI teacher educators understood and played roles in promoting reflective practitioners. The EMI teacher educators talked in the semi-structured interviews about their perceptions of reflective practice and were able to numerate multiple ways to help their student teachers become reflective practitioners. I looked for congruency, or lack thereof, between the semi-structured interviews (with their constructive dialogues and reflective narratives), field observation notes and documents to build an overall description of the phenomenon under study.
I focused on particular themes, issues, or patterns that emerged from the triangulation of all of the data within the framework of each teacher. The following four steps were implemented in order to understand the phenomenon (Denzin, 1989): locate within the data gleaned by the multiple methods, key phrases or indicators that speak to the phenomenon in question; interpret the meanings of these phrases and indicators as an informed reader who knows the EMI teacher educator and the context of that EMI teacher educator’s practice; obtain the participant’s interpretation of these findings; inspect these meanings for what they reveal about the recurring features of the EMI teacher educator’s practice; and make a speculation based on the above factors.

A two-step coding process was employed in the analysis. After reading each piece of data, key phrases or indicators were highlighted and a summary word or phrase was written in the right-hand column of the paper. Themes/issues that recurred were determined, and codes were indicated above the key phrases; these codes were, then, collapsed into Themes. These Themes included: Self-awareness, Conceptual understanding, Scaffolding, and Topical pedagogy.

Multiple voices were heard in this study. In addition to the voices of the EMI teacher educators, the students, and me; were also the voices of past teachers, families, colleagues, and other influential people in these EMI teacher educator’s lives. The recognition of these voices was a critical component to the understanding of reflective practice of the EMI teacher educators as well as their roles in promoting reflective practitioners. My own interpretations of the meanings of those words were also affected by these voices. It was necessary to analyze these multiple voices from multiple perspectives; the oral and written narratives of the EMI teacher educators; the issues and problems the EMI teacher educators helped their students address; the
personal themes that inform their mentoring in the practicum and the observations and reflections sessions that I examined through various theoretical lenses.

3.6 Researcher as data collection instrument/self-disclosure

Due to the process of observation, field notes, document analysis, and participant interviews, the researcher is the main data collection instrument in a qualitative study. The field notes should contain everything that the observer believes to be worthy of noting (Patton, 1990). This statement has implications regarding the researcher’s perspective. My own background and personal theory of teaching affected my interactions with the teachers as well as my observations and interviews. My education and experiences were influential in the conduct of this study and specifically in the analysis of the data, formulation of themes, and narration of the EMI teacher educator’s understanding of and roles in reflective practice. I shared with them this information so they, too, could be informed concerning my beliefs and biases.

I played the role of an insider in this study because I have been a teacher, a supervisor, and an EMI teacher educator who has developed strong opinions throughout the years about expectations in reflective practice. My variety of teaching experiences as well as my observations of teaching has left me with views of a transformed reflective practice discourse. These experiences and opinions influenced my conversations with the participants as well as my writing of their stories.

3.7 Validity/trustworthiness

The issues of validity and trustworthiness are concerned with the question, how does the researcher know that the data collected accurately gauges what the
researcher wants to know? Guba (1981) states that trustworthiness can be addressed by the following characteristics: credibility, transferability, dependability, and confirmability.

Credibility was accomplished through the following means: prolonged participation at the site; persistent observation; peer stimulated recall; triangulation; member checks; and the collection of narratives, journals, and audiotapes received as raw data. Transferability included the collection of detailed description of data. Dependability was demonstrated by the overlapping of methods and an audit trail. An audit trail enabled the ability to reconstruct the process by maintaining careful documentation of the conceptual development of the study, thereby leaving an adequate amount of evidence. The documentation included in the audit trail was: raw data; data reduction and analysis products; data reconstruction products; process notes, which were in the form of the researcher’s journal; materials related to intentions, which were also found in the researcher’s journal, and instrument development information (Halpern, 1983). Confirmability refers to the neutrality of collecting the data. It is concerned with the fact that the data and interpretations of an inquiry are not merely figments of the researcher’s imagination. Confirmability calls for linking assertions, findings, and interpretations to the data themselves in readily discernable ways (Schwandt, 1997: 164). The audit trail is also a useful procedure for establishing confirmability.

This study is descriptive rather than propositional in nature. It was emphasized to the participants that there was no right or wrong way to respond or think about the issues addressed in the study. I, as the researcher, made no predictions or assumptions about how the EMI teacher educators would perceive reflective practice or would engage in helping a reflective process, and therefore, I
did not expect the EMI teacher educators to skew their stimulated recall sessions and narratives to say what they think I wanted to hear.

3.8 Research ethics

In the last few decades research ethics has become an important issue that has to be dealt with carefully in any empirical endeavour. According to Sieber (1993: 14), “ethics has to do with the application of moral principles to prevent harming or wronging others, to promote the good, to be respectful and to be fair” (quoted in Wellington et al, 2005: 104). Pring (2000: 142) adds that a discussion of ethics should not focus on making any particular moral judgments but rather on “the meaning and justification of moral considerations which underlie research”. In this regard, Wallen and Fraenkel (2001: 22-3) point out three key issues that researchers should account for in their research: protecting participants from harm, ensuring confidentiality of research data, and the knowing deception of research participants. In this study, careful attention was paid to these issues in order to ensure ethical practice.

Throughout the present research, a number of procedures were taken to ensure full compliance with, and adherence to, regulations of SUST and guidelines on research ethics.

3.8.1 Informed consent

Diener and Crandall (1978, quoted in Cohen et al, 2000: 51) define informed consent as “the procedures in which individuals choose whether to participate in an investigation after being informed of the facts that would be likely to influence their decisions”.

Before conducting the study, consent forms, written in English, were submitted to, and obtained from, all participants involved in the study. These forms
included an explanation of the aims and purposes of the study as well as the benefits to be expected (see Appendix B). Moreover, informed consent included requests for participation as well as the participants’ right to withdraw from the study at any stage throughout the research without affecting the way in which they were treated in their schools. Thus, “informed consent implies informed refusal” (Cohen et al, 2000: 51).

3.8.2 Issues of anonymity and confidentiality

Before each interview participants were given assurances of both confidentiality and of their anonymity within the research study. Undertakings that information supplied by participants would only be used for the purposes of this study were given. Furthermore, participants were also assured that the characters and codes used to describe them in the analysis, discussion and publication of the data would not be assigned in a manner that would identify them. For example, one way such assurances were fulfilled in the current research was the use of pseudonyms (see Appendix A) and the annexing of the interviews in a random order to protect the participants’ identities.

Finally, once data had been collected, it was stored in a safe place and was not shared with any third parties (see section: 4.5.4).

3.8.3 Issues of deception and bias

The two issues of deception and bias were given a careful attention in the design of the present research. Creswell (2007: 242) states that deception “relates to the act of the researcher intentionally deceiving the informants to gain information”.

In order not to privilege one participant over another, interview transcripts were fed back to the participants, who were given the opportunity to further clarify and make comments on their responses if necessary. Unless otherwise agreed beforehand, off-the-record information was deleted from the analysis in order
not to harm participants. Similarly, to avoid the problem of deception, important information was communicated to the participants about this research. For example, it was explained that the purposes and the benefits of this research are the advancement of knowledge and understanding of the phenomenon of reflective practice. Finally, the researcher added that by conducting the study he sought a personal gain, the achievement of a higher degree, and without their full cooperation this work would not have been accomplished. This also gave them a sense of appreciation of their efforts and the value of their contribution to the current research. It must be acknowledged, however, that there are limitations to this research.

3.9 Limitations of the Study

Some difficulties placed constraints on the findings of this study. First, since documentary analysis is not a widely used method in educational research, a lack of literature that deals in depth with this type of research tool was encountered. However, since documentary analysis was employed to supplement interviews, it did not place major limitations on the findings of the current study. Secondly, the time allocated for data collection – three months – did not allow a sufficient number of observations to be conducted and analysed; this might have given richer data and impacted the findings. Travers (2006: 267) succinctly describes postmodern qualitative research as “one that celebrates indeterminacy [...] through exposing the short-comings of positivism as an epistemological position”. Regardless of this, this can still be seen as a limitation in terms of breadth.

To sum up, bearing in mind the limitations of both the time and resources available, it is hoped that the various methods used (semi-structured interviews, observations, and documents analysis) yielded useful data for understanding the
phenomenon and for policy-makers to help guide their decision-making with regard to reflection sought to be engendered in the school teaching practice.

3-10 Summary of the Chapter

This chapter started with a discussion of the aspects of research paradigms in general and a justification for the paradigm followed in this study. This was followed by a detailed account of the socio-cultural perspective and its appropriacy for this qualitative, interpretive type of research. Attention then shifted to a review of the research design, a justification of the chosen sampling procedure, and methods used in collecting data where the argument narrowed down to focus on documentary analysis and observations as a useful tool to supplement the semi-interviews that are utilized as the main method for data collection in this study. The data collection and data analysis procedures were divided into two phases of activities: data collection and data analysis. This was subsequently followed by a response to the issue of validity. Since ethics are paramount in any empirical endeavour, they also received careful attention in this discussion. Finally, this chapter closed by acknowledging the limitations of the research. The following chapter will present the findings of the study.
CHAPTER FOUR

Findings and Discussion

4.1 Introduction

The aim of this study is to explore the EMI teacher educators’ perception of Reflective Practice (RP) and of their role in promoting reflective practitioners. This chapter presents and discusses the data collected in response to the study’s three research questions: 1) How do the EMI teacher educators in the context of the study perceive and understand the concept of reflection practice?; 2) What methods do these EMI teacher educators use to engage their student teachers in reflect practice?; and 3) What do they engage their student teachers reflect upon in their practice? Each question focused on one aspect of RP: understanding, method, and content—respectively.

Following Denzin's advice, the two main sections of this chapter will "strive for a balance between description and interpretation" (Denzin, 1989, as cited in Zhang & Wildemuth, 2017: 322); because descriptions give the reader thick and rich background, and interpretation represents the researcher's theoretical understanding of the phenomenon (Zhang and Wildemuth, 2017). Patton succinctly captures this idea by stating that an interesting and readable report "provides sufficient description to allow the reader to understand the basis for an interpretation, and sufficient interpretation to allow the reader to understand the description" (2002: 503-504). The endeavor in this Chapter is, then, to present an essentially well-thought-out conversation that integrates findings, literature, research, and practice (Volpe and Bloomberg, 2012).

In the first section, the semi-structured interviews responses from the participating EMI teacher educators are presented in a table (Table 4.1) that
summarizes the analyzed data; but these responses are presented verbatim under their relevant sub-sections in this chapter. Data gleaned from institutional documents (Table 4.2), and data gathered from observations (Table 4.3) are presented in line with the analytic categories, and sub-themes adopted in the analysis of the semi-structured interviews data. The data generated from these three sources are presented according to their direct relevance with each question and organized into themes; collectively they create a resemblance to the EMI teacher educators’ perception of RP and of their role in promoting reflective practitioners.

Following the presentation of the findings from the three sources (4.2), a discussion relating the information to the literature (4.3) will ensue. In doing so, the information from the semi-structured interviews for each research question (RQ) will be supported with information from the other two sources: the institutional documents and observations.

4.2 Organization and presentation of findings

As Holliday (2002) warns, if the constructed qualitative evidence is not well reported and presented, it may run the risk of being difficult to read and incapable of reflecting the social reality of the phenomenon under investigation. This is necessary because the carving out of the data already takes the researcher at least one step from social reality. With this concern in mind, I use three tables to summarize and present the information from the three sources of data in this study: Table 4.1, presents a summary of the analyzed data from eight semi-structured interviews; Table 4.2, presents a summary of the data from the document analysis, and Table 4.3, presents a summary of the data from the observations.
4.2.1 Semi-structured interview data

The following table (Table 4.1) presents the organization of the analyzed semi-structured interviews data.

**Table 4.1: Semi-structured Interviews Data Analysis and Organization**

<table>
<thead>
<tr>
<th>Analytic Categories</th>
<th>Sub-themes (14)</th>
<th>Participants (8)</th>
<th>Themes (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Flora</td>
<td>Kelly</td>
</tr>
<tr>
<td>1</td>
<td>Knowledge of Own Beliefs</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Critical Thinking</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Self-analysis</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>4</td>
<td>Self-expression</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>Deep Learning Process</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>Evaluating Pedagogy</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>7</td>
<td>Self-directed Inquiry</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>8</td>
<td>Peer/Group Discussion</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>9</td>
<td>Guided Reading/Writing</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>10</td>
<td>Structured/Unstructured Thought Process</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>11</td>
<td>Action Research</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>12</td>
<td>Teaching/Learning Milieu</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>13</td>
<td>Practice Dilemma</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>14</td>
<td>Critical Incident</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

As Table 4.1 shows, three Analytic Categories (column 2) are used to code the data from the eight inter-views. These categories are: Perceptions, Methods, and Content. The prior analytic categories are directly aligned to one of the research questions. Perceptions is aligned to Research Question 1 (RQ1); Methods to RQ2; and Content to RQ3. These analytic categories have yielded 14 Sub-themes (column 3): seven sub-themes under Perceptions, four sub-themes under Methods, and three...
sub-themes under Content. Columns 4 to 14 show statistics of participants' responses coded within each one of the 14 Sub-themes: columns 4-11 in particular give the participant pseudonyms; whereas column 12 shows the number of quotes pertaining to each Sub-theme; column 13 shows the number of participants whose quotes pertain to the individual Sub-themes; and column 14 gives the percentage of participants whose quotes pertain to the individual Sub-themes. Column 15 shows the total of four Themes that individually subsume a certain number of the 14 Sub-themes (whose total numeration is traced in column 1).

Using the three research questions as guidance for analyzing the semi-structured interviews data, I identified 14 Sub-themes which have been classified under four themes.

4.2.2 Institutional document analysis

Another source of data to answer the research questions is the institutional documents. ADEC's documents and ECAE's documents are analyzed and relevant information has been organized pertinently in Table 4.2 below.

Table 4.2 presents both ADEC and College documents that have been analyzed for information to substantiate interviewees' accounts.

ADEC documents presented (column 4) are:

- INSM (Introduction to the New School Model) (Abu Dhabi Education Council, 2010);
- PM (Policy manual) (Abu Dhabi Education Council, 2013);
- SLH (School Leadership Handbook) (Abu Dhabi Education Council, N.D.);
- SAM (Student Assessment Manual) (Abu Dhabi Education Council, 2011);
- TGLO (Teacher Guidebook & Learning Outcomes) (Abu Dhabi Education Council, 2014);
- C1TGLO (Cycle 1 Teacher Guidebook & Learning Outcomes) (Abu Dhabi Education Council, 2014).

College documents presented (column 6) are:
- IHY4 (Internship Handbook, B.Ed Year 4) (Emirates College for Advanced Education, 2013);
- RPHY4 (Research Project Edu 4003 B.Ed Year 4) (Emirates College for Advanced Education, 2012);
- SSPP (Samples of Student Practicum Portfolios, 2014) (Appendix E).

(Table 4.2): Documents Data Analysis and Organization

<table>
<thead>
<tr>
<th>SR. No.</th>
<th>Analytic Categories (14)</th>
<th>Sub-themes</th>
<th>ADEC Documents</th>
<th>College Documents</th>
<th>Themes (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Knowledge of Own Beliefs</td>
<td>NSMp5,6,7</td>
<td>SLH p.6</td>
<td>-</td>
<td>1-Self-awareness (4 Sub-themes)</td>
</tr>
<tr>
<td>2</td>
<td>Critical Thinking</td>
<td>NSMp2, 3</td>
<td>SLH p.11</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Self-analysis</td>
<td>NSMp3, PMp13</td>
<td></td>
<td>HY4p.6</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Self-expression</td>
<td></td>
<td></td>
<td>HY4p.3</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Deep Learning Process</td>
<td>NSMp2,14</td>
<td>FGLOp3,4, 6, 17, 18, 60, 61, 62</td>
<td>HY4p.3, 41, SSPP 2014</td>
<td>2-Conceptual Understanding (3 Sub-themes)</td>
</tr>
<tr>
<td>6</td>
<td>Evaluating Pedagogy</td>
<td>C1TGLOp9,3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Self-directed Inquiry</td>
<td>NSMp28, C1TGLOp5</td>
<td>SAM p.4</td>
<td>SSPP 2014</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Peer/group discussion</td>
<td></td>
<td>-</td>
<td>HY4p.3, 41</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Guided reading/writing</td>
<td></td>
<td>-</td>
<td>RPHY4p.22</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Structured/unstructured Thought Process</td>
<td>NSMp10-13, FGLOp6</td>
<td>RPHY4p6,39, SSPP 2014, SSPP 2014</td>
<td></td>
<td>3-Scaffolding (4 Sub-themes)</td>
</tr>
<tr>
<td>11</td>
<td>Action Research</td>
<td></td>
<td>-</td>
<td>RPHY4p.6,7,10,13, 4,16,21,28, 44</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Teaching/learning Milieu</td>
<td>FGLOp6, 7</td>
<td></td>
<td>SSPP 2014, HY4p.6, 24, 25, 39, 40, 41</td>
<td>4-Topical Pedagogies (3 Sub-themes)</td>
</tr>
<tr>
<td>13</td>
<td>Practice Dilemma</td>
<td>FGLOp6</td>
<td>HY4p.31, 35, 36, 37.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Critical Incident</td>
<td></td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>
Columns (5 and 7) in the said table show the exact section(s) in the document (columns 4 and 6) that has/have been in circulation or used by the participant(s). Sections and name of documents are put abreast of the Sub-themes (column 3) they capture. Read horizontally, the table is meant to show ADEC and College documents that give support to the information constructed from the semi-structured interviews data as shown in Table 4.1. In other words, these documents serve as triangulation to ensure that the participants' account is rich, robust, comprehensive and well-developed. The other columns: 1, 2 and 3 (as well as the last two columns) bear the same descriptions as in Table 4.1.

It is worth noting, that the table is void of participant pseudonyms because the documents analyzed are generic: The College documents are produced and used globally for the practicum and internship; the content of ADEC documents are adopted as guidance for the participants.

### 4.2.3 Observations data

A third source of information for the study is Observation. Unlike document analysis, observation analysis of each participant is allocated a distinct table (Appendices H to L). This is because the information gathered from the individual observations varied with respect to the handling of reflection in almost all of the five sessions/events observed. However, for the sake of facility, the information in the five tables is presented in one table (Table 4.3).

As can be seen, table 4.3 bellow is slightly different than tables 4.1 and 4.2 in the sense that it addresses two Analytic Categories instead of three. This is because the observations did not focus the Perceptions; it rather focused on the second aspect of the study i.e. the roles the participants perform to promote reflective practitioners.
### Table (4.3): Observations Data Analysis and Organization

<table>
<thead>
<tr>
<th>Analytic Categories</th>
<th>Sub-themes (7)</th>
<th>Participants: 5</th>
<th>Themes (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>R No</td>
<td>Method ((4 Sub-themes))</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Peer/Group Discussion</td>
<td>Study Group Students we work with</td>
<td>Open Discussion</td>
</tr>
<tr>
<td>9</td>
<td>Guided Reading/ Writing</td>
<td>Reading Articles</td>
<td>Reflective Journal</td>
</tr>
<tr>
<td>10</td>
<td>Structured/unstructured Thought Process</td>
<td>Question</td>
<td>Question</td>
</tr>
<tr>
<td>11</td>
<td>Action research</td>
<td>Conducting Presenting Action R</td>
<td>Conducting Presenting Action R</td>
</tr>
<tr>
<td>12</td>
<td>Teaching/learning Milieu</td>
<td>School Observation</td>
<td>A student Shadowing</td>
</tr>
<tr>
<td>13</td>
<td>Content Dilemma</td>
<td>Self-reflection Questionnaire</td>
<td>Self-reflection Sheet</td>
</tr>
<tr>
<td>14</td>
<td>Critical Incidence</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Hence, the focus is on the Methods the participants employed to make their student teachers reflect, and the Contents they enticed their student teachers to reflect upon.

The first column (column 1) from the right in table 4.3 follows the same vertical numbering as the other two tables (4.1 and 4.2), it starts with number 8 where the first of the 7 Sub-themes (column 3) in the two Analytic Categories (column 2) is marked. As in the other two tables: (4.1) and (4.2), Sub-themes are
aligned with the Analytic Categories which helped give them birth as well as with the participants’ observed activities/tools/events (columns 4-11) which are used as evidence. Headings of Columns 4-11 also present the participants’ pseudonyms. Columns 12 and 13 show the Themes just as in the other two previous tables.

The activities/tools/events (columns 4-11) used by the participants in activating or initiating reflection are 15 (see below).

Their use by participants differs slightly; this is why placement of the activities/tools/events in the table is not uniform. For example, the Sub-theme “peer/group discussion” in column 3 is evidenced from the five observations by three different activities/tools/events (Study Group, Open Discussion, and Pre-conference) as columns 4-11 show.

Following is an explanation of the activities/tools/events used by the participants:

Activities refer to the tasks the participants engaged their student teachers in to practice reflection. There are five activities introduced by the participants:

1) Reading Articles: articles suggested by participants for their student teachers to read;
2) Oral Questions: questions posed ad lib by the participants; (see Appendix M)
3) Action Research: prescribed in the course RPHY4 (Research Project Edu 4003 B.Ed Year 4) (Emirates College for Advanced Education, 2012);
4) Student Shadowing: prescribed in the course IHY4 (Internship Handbook, B.Ed Year 4) (Emirates College for Advanced Education, 2013);
5) School Observation: prescribed in the course IHY4 (Internship Handbook, B.Ed Year 4) (Emirates College for Advanced Education, 2013);
Tools refer to pre-determined instruments either prescribed in the course or devised by the study participant(s) to engage student teachers in reflection, these are:

1) Reflective Journal: a broadly framed instrument prescribed in the course IHY4 (Internship Handbook, B.Ed Year 4) (Emirates College for Advanced Education, 2013);

2) Self-reflection Sheet: an instrument with specific prompts prescribed in the course PHY3 (Practicum Handbook Year 3,) (Emirates College for Advanced Education, 2014) (see Appendix E);

3) Self-reflection Questionnaire: an instrument- Professional Performance Standards- adapted from the Ten Wisconsin Teaching Standard; it contains 52 questions on various aspects of teaching. (Appendix N);

4) Reflective Teaching Notes: unplanned form of writing the participant encouraged the student teachers to do and keep.

Events refer to a frame of work staged by the participant to engage student teachers in a performance that includes others, and that would eventually entice the student teachers in reflection. Events found by the study are:

1) Pre-conference: a convening of a participant with his/her student teacher(s) before the start of the school day;

2) Study Group: a study session organized by the participant for students teachers to discuss a certain topic;

3) Open Discussion: a meeting during the school day where participants lesson to the teacher students discuss issues relating to their experiences in the practicum/internship;
4) Mentor’s Lesson Observation: a lesson delivered by the school mentor where student teachers observe, take notes, and later discuss their observations;

5) Peer observation Conference: student teachers observe a lesson delivered by a colleague then they convene to reflect on the lesson;

6) Co-teaching: two student teachers teach the same lesson.

This section organizes and presents the findings, whose data are drawn from various sources, in categories to produce a readable narrative. As can be seen, two Analytic Categories (Methods and Content) have guided the analysis of observations; and the information gleaned are used, along with the information from the document analysis, to support the interpretation and discussion of the findings from the semi-structured interviews as in the subsequent section.

4.3 Interpretation and discussion of findings

In this section, I will interpret and discuss the study findings gathered from the three sources shown in the previous section (4.2).

Interpretation, as posited by Volpe and Bloomberg (2012), ultimately involves reading through or beyond the findings. It "requires more conceptual and integrative thinking than data analysis" (2012: 132). That is because interpretation entails identifying and abstracting significant understandings from the detail and complexity of the findings (2012); whereas the discussion, as previously indicated, seeks to integrate findings, literature, research, and practice.

The purpose of this study is to explore with eight EMI teacher educators their perceptions of RP and of their roles in developing reflective practitioners. To this effect, the findings, gleaned from the semi-structured interviews in response to the
three research questions, are summarized in Table 4.1 (Semi-structured Interviews Data Analysis and Organization), and will be further presented in sub-tables (4.1.1, 4.1.2, and 4.1.3) that separately depicts the findings relevant to each one of the three Analytic Categories (Perceptions, Methods, and Contents). These three Analytic categories represent the 3 RQs. The information provided in tables 4.2 and 4.3 (Documents Data Analysis and Organization, and Observations Data Analysis and Organization, respectively) will be used pertinently in the discussion to incorporate the findings in the above-said sub-tables. Following are the responses to each of the three research questions.

**RQ1:** The following table (Table 4.1.1) restates the question, shows the Analytic Category used for analyzing the data, summarizes the responses to this question into Sub-themes, and displays the percentage of participants whose responses has helped extrapolate the Sub-theme. The Sub-themes are finally collapsed into Themes that form the bases of discussion.

### Table 4.1.1 Semi-structured Interviews Responses to RQ1

<table>
<thead>
<tr>
<th>Analytic Category</th>
<th>7 Sub-themes</th>
<th>% of Participants</th>
<th>Themes (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceptions</td>
<td>Knowledge of own beliefs</td>
<td>50</td>
<td>1- Self-awareness</td>
</tr>
<tr>
<td></td>
<td>Critical thinking</td>
<td>75</td>
<td>(4 Sub-themes)</td>
</tr>
<tr>
<td></td>
<td>Self-analysis</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Self-expression</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Deep learning process</td>
<td>75</td>
<td>2-Conceptual understanding</td>
</tr>
<tr>
<td></td>
<td>Evaluating pedagogy</td>
<td>100</td>
<td>(3 Sub-themes)</td>
</tr>
<tr>
<td></td>
<td>Self-directed inquiry</td>
<td>50</td>
<td></td>
</tr>
</tbody>
</table>
To answer this question, the Analytic Category (Perceptions), which is driven from the RQ itself, is used to guide the coding of the semi-structured interview data whose verbatim transcription is provided as pertinent in the section. It has been found in the study that participants have multiple perceptions of (RP). These seven perceptions (supported by evidence from the institutional documents) will be reported under relevant headings preceded by a discussion of the appropriate emerging Theme (Self-Awareness or Conceptual Understanding). Each one of the two themes individually subsumes one set of these perceptions. Self-awareness comprises four Sub-themes or aspects of perception, while Conceptual Understanding encompasses three Sub-themes or aspects of perception vis-a-vis RP. Relevant information from table 4.2 is introduced as and where appropriate to support the evidence from the interview data.

4.3.1 Self-awareness

Self-awareness is the exploring of our feelings, behaviours and thoughts. It is about recognizing our skills and limitations and what impact this may have upon others. It is also recognizing how external and internal events affect us and how we respond to them. (Sharples, 2013). Hayes (2004) states that “the more we are aware of our values, beliefs and attitudes (and how these affect the assumptions we make about ourselves, others and the situations we encounter), the better equipped we will be to read the actual or potential behaviour of others and to construct effective courses of action in accordance with our reading” (2004: 37). Developing self-awareness helps practitioners to "establish personal boundaries, explore prejudices, and develop goals" (South, 2007:9).

For Duval & Wicklund, self-awareness refers to the capacity of becoming the object of one’s own attention (Duval & Wicklund, 1972, as in Morin, 2011). In this
state, as Morin explains, one actively identifies, processes, and stores information about the self. Morin further elucidates that "One can perceive and process stimulus from the environment (e.g. a color, food) without explicitly knowing that one is doing so (consciousness). One becomes self-aware when one reflects on the experience of perceiving and processing stimuli (e.g., I see a blue object; I am eating food and it tastes good)" (2011: 808). Such distinction was also discussed by Vallacher (1978) who distinguished between subjective self-awareness and objective self-awareness: according to him, the former referred to focusing attention on salient aspects in the environment, whereas in the latter attention is focused on salient aspects of the self (1978).

Morin asserts that self-awareness represents a complex multidimensional phenomenon that comprises various self-domains and corollaries. To illustrate, he posits "one can think about one’s past (autobiography) and future (prospection); similarly, one can focus on one’s emotions, thoughts, personality traits, preferences, goals, attitudes, perceptions, sensations, intentions, and so forth" (2011: 808). The sociologist George Herbert Mead (1934) proposed a classic distinction between focusing attention outward toward the environment (consciousness), and inward toward the self (self-awareness).

The linkage between Self-awareness and practice is evident in the fact that each one nurtures the other in numerous ways in the context of teaching (Zalipour, 2015). As posited by Brookfield, Self-awareness helps educators identify and scrutinize the assumptions that undergird their teaching and the way they work as teachers (1999). As discussed by Osterman and Kottkamp (1993), behavioral change occurs through self-awareness of previously "unrecognized assumptions lying in the theory-in-use, unrecognized habitual behaviors, and unrecognized
negative outcomes of these behaviors” (Osterman and Kottkamp, 1993:15).

According to these authors, change is a process started:

“not by learning a new idea from an expert but by recognition that something is not exactly ‘right’ in one’s own professional practice. It is initiated not through a standard set of information received in a large group but through careful attention to individual practice” (Osterman and Kottkamp, 1993:15).

These writers further assert that “The motivating force behind change is not the goodness or usefulness of an idea from an external source but the desire to function well in a professional capacity coupled with the awareness that current behavior is not fully reaching this goal” (Osterman and Kottkamp, 1993:15).

Self-awareness is widely considered a necessary condition for competent practice, because it involves three approaches: (a) simple conscious awareness (awareness of whatever is being experienced), (b) reflective awareness (awareness of a self who is experiencing something), and (c) reflexive awareness (the self's awareness of how his or her awareness is constituted in direct experience).

Each of these approaches corresponds to an implicit conceptualization of ‘self’: a term "self," used to referring to both a "sense of personal identity" as well as to assumptions about the sort of person one is (Kondrat, 1999: 452).

In this study, the emerging theme (Self-awareness) subsumes four Sub-themes (Knowledge of own beliefs, Critical thinking, Self-analysis, and Self-expression) that have been yielded by the data analysis. These Sub-themes are presented and interpreted in following sections.

4.3.1.1 Knowledge of own beliefs

Beliefs constitute teacher’s cognition; and they are essential in defining teacher’s performance and dispositions (Borg, 2012). Beliefs, as defined in Tato and
Coupland (2003), refer to tenets held by a group, and as a conviction of the truth of reality or phenomenon.

The concept of RP as knowledge of one's own beliefs has been reported by four participants i.e. 50% of the participants in the current study. Rita, for example, says:

“when we’re reflecting we’re not {reflecting} only on the practice; we’re reflecting on the other dimensions of the profession which are the aesthetic values, the fairness values, the very abstract values related to the ethics of the carrier. Ethics of the carrier {is} very important, the citizenship which comes within ... within ... you call it belief, I call it maybe the ethics of the profession; which ... which is not separated from the practice” (R1).

In her response, Rita attaches RP to thinking about the abstract notion of 'citizenship' which, for her, spans values of aesthetics, fairness, and ethics.

Interestingly, Andrew has given a practical example of reflecting on his own beliefs:

“Often, I can struggle with theoretical ... concepts ... as I said I’m a practical person and so when I’m in the theoretical realm wondering about thing, … uh .. I can have ... I get a little bit lost, I guess. (...)Yeeh ... I mean I try to write or produce information that can pave things, so I make videos, I write menus, I teach people by showing the knowledge that I have and I learn in the same way: on the basis of reading and investigating through the internet, watching videos and things like that. But I also investigate by doing, by fiddling if something breaks I take apart and try to fix it. And I investigate machines I Know I’ll deal with” (A2).

Evidently, when Andrew is applying the concept of RP to his own beliefs, he is actually betraying an understanding of RP as knowing of beliefs.

This concept of RP is found by the study to also span areas beyond the profession. As explicitly proposed by Geoffrey, RP in this sense is not confined “only {to} the area of education and at work but essentially {spills} outside of
education” (G1), explaining that “… being a reflective person is not boxed in one area of your life but it's something […] spread[s] throughout all your life” (G1).

In this, the participants are actually seeing clear link between reflection and knowledge of own beliefs: both are a means to eliciting implicit cognitions of a practitioner.

Two of the institutional documents (see Table 4.2) that have been analyzed tally with the participants' perception of RP as being knowledge of own beliefs.

Teachers in the document entitled INSM (Introduction to NEW School Model, N.D., p.5, 6) are prompted, by way of engaging in RP, to ask questions about their beliefs and understandings of teaching and learning: As a teacher working in the New School Model, what will be the educator's understandings about teaching and learning? What key understandings will such an educator need to hold in order to be a powerful and effective teacher? The document further sets out the key beliefs about learning and other aspects a teacher needs to consider as necessary to better serve students in NSM (INSM, N.D., p.5).

The other document, SLH (for full forms, see pages: 131-132), also incites educators to consider beliefs about learning. It raises issues pertaining to learning as lifelike, as a process; and issues relating to the alignment between curriculum, pedagogy and assessment (SLH, N.D., p.6).

**4.3.1.2 Critical thinking**

In the literature, critical thinking is defined as the art of analyzing and assessing thinking with a view to improve it (Paul and Elder, 2008). In this study, the concept of critical thinking has been associated with RP by 75% of the participants. As Flora asserts, “you can’t really divide critical thinking and reflection because it’s
all kind of [ties] in” (F2). Kelly further elaborates on this idea and qualifies critical thinking as reflecting on the principles he stands by:

“And once you have those {principles}, you should then be able to reflect as far as like checking in with these principles: Am I doing these things? You know …, I learned these things at one point in my life, .. you know ... I thought then and saw things now, you know, these are the core ideas or beliefs, and .. by reflecting you’re checking in again with those principles” (K1).

Geoffrey even delineates a framework for critical thinking as way of engaging in RP. He eloquently explains:

“Reflection essentially involves a person thinking about thinking, I’d say, ... metacognition: whereby a person has thought, this thinking [maybe] involve[s] solving a problem, (thong) a procedure, or explain, or a set of actions, then the person will think about it: how they carried out the procedure, how they solved the problem, there. So, this is what we understand by the term reflection” (G1).

Fras is even more practical in attempting to set for his student teachers a framework for critical thinking to activate their reflection:

“So, if [they] the students [make] {practice} any form of reflection, the framework should include first, general description: what’s the event or what’s the situation; and then show directly what’s your opinion on each piece and why? And, then, the overall decision. And even they can arrive to a level of prediction.. at the end. So, this’s in general, I can say, is a kind of framework of reflection for student teachers [education students]” (Fr2).

It is clear that Fras perceives RP as a kind of critical thinking that can, legitimately, be imbedded in teacher education programmes in a systematic fashion.

Document analysis (Table 4.2) supports this perception. In INSM, it is stated that the goal of developing students with strong problem-solving and analytical abilities is at the core of the education reform introduced. More specifically, critical thinking is cited as a key priority in the initiative. Likewise, SLH proposes thinking and problem solving as life-long learning skills that need to be developed in students
by the educator. Critical thinking is embedded in these institutional documents where teachers are challenged to "produce an in-depth critical reflection teaching and learning experiences" (SLH, N.D. p, 6). This, then, corresponds with participants' understanding of RP as critical thinking.

4.3.1.3 Self-analysis

Self-analysis could be seen as a review of one's cognitive style, attitudes towards change, interpersonal orientation, and values (Lewis, 2000).

The study revealed that RP is perceived by 50% of the participants as a practice of self-analysis. RP "seems to be more about looking inward and say: Ok I need to correct these things" (K1). To Kelly, one needs to have an "internal ability ... intuition built in there ... some kind of mechanism or ... a set of principles" (K1) to indulge in this form of RP.

Associating RP with self-analysis, Rita confirms that such indulgence in Self–analysis would help her students "be able to tell what are the pitfalls, their drawbacks ... {what} their weaknesses are, so that they can focus on that for self-learning" (R2). She, even categorically, adjudicates that "if they {students} don’t reflect, they can’t assess themselves. And if they don’t assess themselves, they can’t become good learners" (R1). In this, Rita associates RP with self-analysis and development as well.

Geoffrey seems to have established this link between RP and self-analysis from his experience as a UK born and bred Arab:

"since I was a young child I think the environment in which I was brought up really pushed the individual to think and contemplate and to ask questions there ... so, I’ve been brought up in the UK being different from the other students and maybe not exactly fitting in everywhere: different culture, different (…), different behaviours. And so that for questioning … questioning and reflecting was very much instilled from a very very early age" (G1).
In practicing self-analysis by way of reflecting, Geoffrey talks about challenges as key drivers. His insight in this regards is vividly captured in this rather long and interesting quote:

"I’d say with the challenges that I faced in terms of learning. I learned in the English Language where both of my parents didn’t speak English; and that has made me more of being a reflective thinker rather than saying that the methodology which was used a bit of in the schools there .. umm ... so therefor, you know, we can find there some of school students who excelled in school, -you know why? Because their parent knew the English Language, they could give support, they could fill in the blanks where the teachers hadn’t taught the students completely, there was support for them. Whereas for myself, it was very difficult, it was very challenging. So, therefore, I used to think about issues of learning, and why? and the problems people face with learning. Because learning is a key, a key for your life and how you progress and so forth, and you know if you don’t have the key there, you’re locked inside and this can be a problem. So, you’ve to think about it" (G5).

RP for Geoffrey, in this sense, is likened to self-analysis in an atmosphere of fundamental challenges. May holds the same notion, but from her perspective as a lecturer rather than a learner:

"Thinking about my practice, the way that I do things, the way that I say things; even the words that I use ... because ... I know ... being from New Zealand, roughly kind of talk too fast. And we have some a lot of words that’re ... they are English ... but very localized and doesn’t ... don’t sometimes cross over even to other English speaking people" (M2).

In practicing RP, May analyses her communication with students in the understanding that her accent might be peculiar to the students and incomprehensible as she comes from a country where the accent, according to her, is different than the familiar and widespread British or American accent. Of real interest here, is her conflating RP with self-analysis.
As in Table 4.2, the document IHY4 states as a learning outcome the expectation for the student teachers to identify strengths and areas for improvement. Evidently, one way to achieve this is via self-analysis, which is understood by the participants to be an engagement with RP. Further, self-analysis as synonym to RP is also recommended in the PM (for full form, see pages: 131-132). This document makes it incumbent on the educators to exhibit tolerance and respect to individual of different political or religious convictions. They are also expected to understand and respect local culture and Islamic values and the values of other religions. This can only be achieved by making self-analysis to understand own biases i.e. the educator needs to engage in RP that involves the self and the macro context.

4.3.1.4 Self-expression

Self-expression, signaling out and showing one's mental state (Bar-on, 2011), is a way people designedly show what's within (Green, 2011). 50% of the participants in this study tie this idea of Self-expression to RP. Flora, for instance, says in her speculation about students' thinking process:

"I think their thinking processes are not necessarily as visible as they might be. And I wrote an article about … umm … this phenomenon: making reflection visible. You can’t see reflection happening … so, you have somehow to make that reflection overt, if you like. (F1)

Obviously, Flora concedes that RP as a process cannot be seen, but she calls for expressing one's self to make RP overt rather than covert via self-expression. As though in completion to Flora's speculation, Kelly expressly proposes a fashion to make visible RP:

"Typically though, I think to me reflection is sitting with your laptop or a piece of paper and taking sometime out and writing what you can … what you … think of … thinking and writing down kind of your reflective thoughts about that topic, you know' (K3).
The concept of RP as self-expression has been viewed by Fras as making visible the subject-matter of reflection:

"Some of them, I can say, couldn’t differentiate between reflection and description. So, we ask them to reflect on an issue or a process or an event; … most of the time they talk about description; so, they describe the things, but if you go to the concept of reflection, I assume I’ll see in their reflection first of all their opinion" (Fr1).

Fras is critical of the kind of RP some of his students embark upon. He laments the descriptive nature of their RP and, alternatively, urges them to make vivid their own ideas and opinions that result from practicing reflection i.e. to express themselves by way of RP.

Analysis of the document IHY4 shows that student teachers are required to develop a product portfolio to include their reflections and to act as a show case for future job interviews. Self-expression is encouraged via exhibits in portfolios (see Table 4.2).

4.3.2 Conceptual understandings

Conceptual understandings are what practitioners as learners know and understand about a concept, that is; the generalisations learners/practitioners can develop about the nature or properties of that concept. Some people refer to them as “big ideas”. A range of conceptual understandings can be associated with any one concept. By selecting particular bundles of concepts as the focus of RP, practitioners can develop networks of connected knowledge structured around those concepts. (Gilbert, 2004a).

Hiebert and Lefevre (1986) provide a useful definition of conceptual understanding, describing it as “knowledge that is rich in relationships … so that all pieces of information link to some network”.

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Concepts and conceptual understandings are described as “the most productive means of accessing and framing knowledge” (Gilbert, 2004a). A concept, as defined by Barr, et al. (1997), is a general idea, understanding, or thought embodying a set of things that have one or more properties in common. A concept can be expressed in a single word, such as democracy or needs, or a simple phrase, such as social decision-making or cultural practices (Barr, et al, 1997, as cited in David, 2009). A concept is an abstraction, which pulls together a number of facts. Concepts group certain facts together and help organise them and make sense of them by revealing patterns of similarity and difference. To be understood, concepts need to be constructed by the learner under the guidance of the teacher (Barr, et al, 1997, as cited in David, 2009).

Gilbert argues that “concepts allow us to identify, label, classify and relate phenomena to construct systems of ideas that we can apply to new situations and use to ask questions and solve problems” (Gilbert, 2004b: 84).

Concepts help learners to organise new information by categorising groups of facts according to patterns of similarity and difference. From these patterns, learners form their framework or schema for each concept. This process is a method of enabling students to develop their own way of viewing the world. In an information-based society, there is an endless amount of accessible information. Pupils are faced with the enormous task of making meaning out of a sea of seemingly unrelated facts. They need mechanisms for categorising and organising information, connecting ideas and identifying or constructing patterns (Stoll, Fink, and Earl, 2003: 58). To develop new conceptual understandings, students need to build connections with other concepts that they already know (David, 2009). These conceptual frameworks or theories provide different perspectives on the world, and the kinds of questions
and solutions we see in any situation depend on the systems of concepts we use (Gilbert, 2004b).

Conceptual understanding compares to RP in the sense that they both allow learners to "apply and possibly adapt some acquired ideas to new situations" (National Research Council 2001).

This emerging theme (Conceptual understanding) spans three Categories (Deep learning process, Evaluating pedagogy, and Self-directed inquiry) which will be presented in the following section.

4.3.2.1 Deep learning process

Marton and Saljo (1984) distinguish between two different approaches to learning: surface level learning and deep level learning. Researchers such as Craik and Lockhart (1972) and Craik and Tulving (1975) have shown that information processed to a ‘deep’ level will be better remembered than information processed only to a ‘shallow’ level.

Deep learning is an approach and an attitude to using higher-order cognitive skills such as the ability to analyze, synthesize, solve problems, and think metacognitively in order to construct long-term understanding (Hermida, 2014). Fry et al (2003) posit that deep level learning is associated with those learners who attempt to relate ideas together to understand underpinning theory and concepts, and to make meaning out of material under consideration.

Moon (2001) establishes the relationship between deep learning and reflective practice. She explains that in deep learning the learner is willing to integrate the new knowledge in his/her existing body of previous ideas and understandings, and is able to reconsider, alter his/her understandings if necessary. This contrasts with a surface approach to learning the craft of teaching, which is
centered on memorizing as opposed to understanding. RP, like learning, is a way of interacting with the world: it is about conceptual change, not just the acquisition of information.

In this study, Six (75%) of the participants at various instances expressed their understanding of RP as deep level learning. The study shows that RP for participants is "[T]hinking about what’s happened, and why, and then what does that mean: what the next step is ... What will I do with that information to improve or to change things?" (M1); in other words, it is deep learning process.

With more elaboration, Rita espouses the same notion:

"What I’m trying to say is that reflection is not only [professional] for the delivery of things. I’m talking about a set of things: you’re reflecting not only on your ... how your teaching/learning in the classroom, you’re reflecting on several things: was I fair with the students, I was unfair with the students, [...] do the explanation as far as how the teamwork works or not? Did I communicate with this parent or this colleague correctly? What I’m trying to say, you don’t reflect only on the subject matter that you’re teaching and the content: it’s very multi-layered: it deals with several aspects of teaching/learning which is not only the curriculum and whether I taught the right thing in the right way: it’s more than this" (R4).

Elsewhere, Rita, using the term ‘correctness’, depicts the profound nature of RP i.e. betraying her understanding of RP as deep learning process. Enthusiastically Rita argues:

“Correctness! Correctness. I think by reflecting you can be correct. Correct in terms of: ethically correct; professionally correct; collegially correct, socially correct. And when we’re talking about the teaching profession, it’s very multi-layered: it deals with communication with others, it deals with curriculum, it deals with teaching/learning, it deals with the community. So, if you’re not correct as far as these areas, you wouldn’t be able to proceed. And here correctness, I don’t mean wrong and right: it means performing better: correctness of the performance, correctness... the performance itself. ... umm ... it’s not development here: it’s whether you’re taking the decisions the right word, the right attitude, the right initiative in a given situation” (R2).
Unmistakably, the idea of multi-layeredness features high in the excerpts as part of deep learning/RP. Interestingly, Geoffrey extends this notion further by adding the component of change as part of deep learning which he equates with RP in his following insight:

"When you think about something you’ve done, you’ve carried out, and thought about it quite well and discussed about it, it’s more likely that the individual will remember this. And as a result will have more [an] effect on the change of behavior; because reflection will allow the students to think about their actions for what they have done ... think about their wrong thinking. And when they’ve done that, they would’ve been able to, hopefully with the help of the supervisor, find out the, if you want to call them, errors or mistakes and find and seek solutions ... alternative solutions" (G2).

For Geoffrey, RP should be a vehicle for finding alternative solutions: a clear association of RP with deep learning process.

Fras, on his part, gives a practical example that is elicited from his teaching to elucidate his understanding of RP:

“[…] first, to be reflective you have to give details ... not summaries ... not short cuts; they {the students} have to give elaboration, they have to talk about one issue in different ways from different viewpoints. Like when tackle {ing} any topic in class, I tell them to look at it from {the} front view, side view and top view. At least this a three-dimension figure; if you look at from different sides, you can explore it more, you can speak about it more, you can reflect on it better. This’s one thing, the other thing you can use comparisons: (…) comparison is one of the techniques that they can use in reflection” (Fr1).

On rather a different note, Sean uses the notion of accumulative knowledge to portray the linkage between RP and deep learning process:

“{It is} to make an interesting contribution. And to make sure that you’re not reinventing the wheel! I mean it reduces the effort. If you want to build a car you would look at other cars, and wouldn’t start thinking about engines could be built or they should be structured. Obviously, I think when a new car company comes they take all the information they have about previous cars and they have for the
problems they could fix, the things they could make better or the costs they could reduce, the safety they could improve” (S1).

This indicates that, for Sean RP is to learn things in depth in order to be able to effect change. For him, to make change is not just superficial acquisition of knowledge that can result, solely, in a ‘reinvention of the wheel’, as he puts it, or doing the superfluous.

Three of the analyzed documents (INSM, TGLO, and IHY4) give evidence that deep learning process, understood by participants to be RP, is embedded in the reform initiative (see Table 4.2). INSM specifies that students are to be developed into independent, well-educated and morally-conscious citizens of the world. Deep learning, as further defined in TGLO, focuses on student health and safety, well-being, and individualized learning to produce a well-rounded person who is adept in languages, capable of critical thinking, problem-solving and creativity, while continuing to preserve cultural and national identity. The IHY4 is specifically intent on helping the student teachers reflect on the impact they have upon the student learning, and on enhancing "a life of reflective practice that will continue after the student teacher leaves the college" (IHY4, p.3).

4.3.2.2 Evaluating pedagogy

Teaching involves knowledge about techniques, strategies, and methods. Reflecting on pedagogical is concerned with the technical aspects of how to teach. Teachers who are reflecting in this mode are developing their craft. Henderson (2001) refers to the term “craft reflection” as a teacher’s thinking about instructional study. A teacher who focuses on the nuts and bolts of the classroom process is experiencing pedagogical reflection (Brookfield, 1995). According to Van Manen (1977), the effective application of skills and technical knowledge in the classroom
are a part of this mode. Reflection, in this sense, is restricted to the retrospective comparison of the effectiveness of pre-specified instructional strategies. Wellington and Austin (1996) explain that this level of reflection focuses on the development of instructional methodologies that maximize efficient and effective delivery of prescribed educational ends. In the same vein, it is common for teachers reflecting on pedagogical issues to reference past experiences (Taggert & Wilson, 1998).

In the current study, there seems to be convergence on perceiving RP as evaluating pedagogy: all participants have betrayed using the same perspective in considering RP.

In doing so, some of the participants, as shall be seen below, have referred to engaging students (Kelly), others to teaching materials (Sean), while a third group have identified the presentation and delivery of information as a focus for RP (Kelly, Rita, and May).

Kelly, for example, hints at the notion of reflecting-in-action and changing path when he realizes that his students are off task or not engaged. For consideration, he numerates:

“Sometimes the personality of the class dictates that you change ... sometimes you’re in a different mood you wanna change something, or you see students off task and you switch gears; that happens a lot; and that’s something that you can’t ask an experienced teacher that you realize “was it you do it?” that “I don’t have to follow the exact lesson plan here you know”. And too that you know how to do it; why to do it! Like, if something that’s not working, it’s not the end of the world! You ... you can change your approach; you can change your strategy. And that’s something I do quite a lot of; and that’s maybe more of informal reflection; but you’re looking, you’re thinking” (K1).

Sean, in handling non-engagement of students, shifts the focus to the teaching/learning materials. He professes to employ RP by way of evaluating these materials:
“… I’m teaching, a course on methodology; sometimes you give a worksheet and the students don’t give it in, so you think ‘how can I make this more interactive?’ ‘How can I make it creative?’ How can I change, maybe, the topics that I’m using?’ to list behavior to find a more appropriate, relevant interesting topic for my students” (S2).

Kelly echoes the same inclination when choosing his materials:

“… so, the information is all there, but, it’s, as a teacher now, I think is one: how to present the information, and then, well … from all the information there about the topic, you need pick the parts to, like, synthesize the product. So, you as a professional you need to know what’s out there; what you’re going to pick to present to your students” (K3).

Evaluation of delivery and presentation, as a component of pedagogy, can summon RP as advised by Rita and May. The former, Rita, declares expressly that in case her students repeat the same question in two different sections, she “’ll, then, have to go back and review: why are they repeating the same questions?” (R1); pronouncing “then, I’m reflecting: I’m reflecting on delivery” (R1). May also says she engages in RP when evaluating her:

“… delivering methods, and the students reactions to those. The course ... I think mostly of. Just because I often do the same course every year... just refining it ... or finding different ways of approaching it ... if there’s .. if I can find a video that assists what I’m saying ... just a sort of refining it ... umm based on either the new things that I come across or students’ reaction to how it’s been done before: if it’s a good reaction and they’re engaged and involved, I’ll keep that going, if it didn’t work whatever my method was, then I work it out to figure why and I changing it accordingly” (M4).

Delivery for Kelly represents a subject matter for RP and evaluation. Speculating about the issue, he theorizes:

“… ok this really isn’t working! Or hey! This is working really well! ... I’m gonna do this again. And then what’re the reasons for that: why did it go so well. But [...] that’s why teaching is such an art; that, it’s just not about what you have on paper; it’s about … because anybody can fill out a piece of paper ... it’s about how you present it” (K2).
Going further afield, Fras prescribes RP be applied to evaluating a wide range of pedagogical aspects at all times and levels:

“I believe that reflection happens at all steps of teaching-learning process. It’s a continuous process: from planning … during preparing the resources, during the teaching, and at the assessment, and then the evaluation of the whole process and re-plan again. So, I think reflection happens all the time, but at different levels and different [deepness] {depth} let’s say” (Fr1).

In these revealing statements, the participants appear to have a perception that conflates both RP and the process of evaluating a whole host of pedagogical issues.

With reference to Table 4.2, this idea of RP as evaluating pedagogy is captured in the document entitled C1TGLO. In delineating a feature in the New School Model named 'Gradual Release', the said document posits that this approach expects the teacher to make careful reflections and observations "of each student's learning and to use professional judgments in order to plan learning opportunities" (C1TGLO: 9). TGLO also stipulates that teacher in NSM should create healthy learning environment via valuing students, supporting individual needs and risk taking, and providing learning opportunities that are inclusive and differentiated. Compliance with these requirements would entail evaluating the pedagogy or engaging in RP.

Analysis of IHY4 shows that evaluating pedagogy features high on the internship programme. Student teachers are required to engage in RP in analyzing the curriculum to give examples of evidence that certain components are present in the curriculum and are corresponding to NSM initiative.
4.3.2.3 Self-directed inquiry

Self-directed inquiry or learning involves three key constructs: 1) Agency which means that the practitioners be engaged in an inquiry learning process based on their sense-making of it as opposed to adopting a predetermined theoretical version; 2) Practical Knowledge where the practitioners’ practical knowledge [PK] plays a significant role in the self-directed process; their preference was generally to build from and on their PK or through that of others; and 3) Situated-Learning: practitioners' learning is situated in the context of their individual and collective teaching; which creates an authentic environment (Chapman, 2013).

Participants in the study report such an understanding of RP. Rita for instance asserts that: "[r]eflection is the basis for self-learning, it’s basis for PD Professional Development in the future. [The] reflection is the basis for self-learning" (R1).

Rita, here, explicitly associates reflection (hence RP) with self-learning; and when she refers to professional development (PD), she seems to be, inadvertently, combining the three above-mentioned components: agency, practical knowledge, and situated learning, as these are essential ingredients in RP. She further elaborates on the idea of paralleling RP with self-inquiry by emphasizing that:

"[r]eflection is at the basis of ... of ... of all these skills that they [students are] carrying along: as [they] graduates and as learners inside the college. So, reflection is the basis ... is the basis. If they don’t reflect, that means they can’t do neither self-assessment ... nor learn{ing} ... nor develop ... and nor continue to learn" (R2).

Kelly pinpointed the notion of independency and agency when talking about RP. He believes engaging student teachers in RP "… is almost like saying: look! You don’t need a teacher to tell you what to think here! ... Have your own thought, what do you think?" (K1). Evidently, Kelly is viewing RP to be an endeavour of a self-directed enquiry.
Kelly becomes, even, more vocal about the idea of independency when he proposes research as means of self-directed inquiry or RP:

"... I think it’s one idea of giving you some independence as a researcher, as a student, as a person; to say this isn’t what you should be thinking; you can have your own thoughts, you put them down on paper, sometime it’s just a stress reliever.. sometimes it’s a guide to what come for the next semester or next whatever, you know, when you’re coming up to goals it could be I wanna research this topic; that could be one professional role it has many professional roles depending on what value you place on it. But certainly there’s something to be said for doing something and reassessing about how it can be done better, and then either passing the information on to your colleague or keeping it for yourself and try to improve yourself. I mean, at a personal level, I’m such a reflective person, but obviously I’d tend to think so we learn from our mistakes we turn out on the same mistake over again, so that’s also reflecting …" (K3).

In this excerpt, Kelly accepts research as being an endeavour that is initiated by the practitioner to assess PK for the betterment of practice. It is understandable, then, Kelly perceives RP to be a self-directed inquiry in the form of research that is initiated by the practitioner him/herself.

Flora, on her part, hails reading as a means for RP with a view to acquiring knowledge:

"... read for learning for knowledge … I mean I think we’re just deceiving ourselves if we think we can compete without reading. We constantly read. We have to build our knowledge base on which to reflect; otherwise we become stagnant" (F4).

As per Flora's perception, RP is, then, a self-directed inquiry as both tend to build knowledge and to cordon off 'stagnation'.

Self-directed inquiry for Geoffrey can take the form of 'thinking' and 'contemplating'. In his words, "… reflection is a very important tool to be used in the classroom essentially because it’s about students to think and to contemplate. And when you’re allowed to do that, you strengthen your understanding in the area of
your study, there" (G1). So, as he is talking about his understanding of reflection about practice as being a king of thinking and contemplating, Geoffrey is actually equating RP to self-directed inquiry since thinking and contemplating, on the part of the practitioner, are self-enhanced endeavours.

Analysis of institutional documents (Table 4.2) indicates that self-directed inquiry is embedded in the school curriculum where students are encouraged to reflect on their own work to be able to solve problems and to direct their own learning (INSM: 28). Schools, in the NSM, are also envisaged with learning centres and resources that cater for self-learning and exploration (TGLO: 5). Approaches to learning in SAM (p.4) are also foreseen to enhance creativity in an original and imaginative way.

As interpreted above, the participants have communicated seven perceptions of RP in their responses to RQ1: Knowledge of own beliefs, critical thinking, self-analysis, self-expression, deep learning process, evaluating pedagogy, and self-directed inquiry. These perceptions of RP are found to have relevance to the analyzed institutional documents.

Following is the interpretation of the participants' responses to RQ2 followed by evidence form the institutional documents analysis and observations analysis (tables: 4.2 and 4.3 respectively).

**RQ2:** As with the previous question, the following table (Table 4.1.2) restates the question (top row), shows the Analytic Category (Column 1) used for analyzing the data, summarizes the responses to this question into Sub-themes (Column 2), and displays the percentage (Column 3) of participants whose responses has helped extrapolate the Sub-themes. The Sub-themes are finally collapsed into a Theme (Column 4) that forms the base of discussion.
To answer this question (RQ2), the Analytic Category (Methods), which is driven from RQ2 itself, is used to guide the coding of the semi-structured interview data whose verbatim transcription is presented in addition to the analysis and presentation of the data gleaned from the institutional document (Table 4.2) and the data from the observations (Table 4.3). As summarized in the table above, it has been found in the study that the participants use four methods to engage their student teachers in RP. These four methods will be reported, but preceded by a discussion of the Theme (Scaffolding) that subsumes these methods (Sub-themes).

### 4.3.3 Scaffolding

Scaffolding is a strategy that is based on Vygotsky’s constructivism. In scaffolding, a more knowledgeable other (MKO) provides support to a learner to promote learning a concept or mastering a skill. When the learner successfully grasps the knowledge, the MKO gradually removes the support so that the learner can perform on one’s own without assistance, increasing the actual development level (Leonard et al, 2010).

According to Benson (1997), “Scaffolding is actually a bridge used to build upon what students already know to arrive at something they do not know. If scaffolding is properly administered, it will act as an enabler, not as a disabler” (Benson, 1997, as in Leonard et al, 2010).

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**Table 4.1.2 Semi-structured Interviews Responses to RQ2**

<table>
<thead>
<tr>
<th>Analytic Category</th>
<th>6 Sub-themes</th>
<th>% of Participants</th>
<th>Theme (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer/group discussion</td>
<td>75</td>
<td>3- Scaffolding</td>
<td></td>
</tr>
<tr>
<td>Guided reading/writing</td>
<td>50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structured/Unstructured thought process</td>
<td>87.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Action research</td>
<td>25</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**RQ2:** What methods do these EMI teacher educators use to engage their student teachers in reflect practice?
The intent of scaffolding is to help a learner/practitioner undertake a task or goal that is beyond the present level of his/her capacity (Lepper et al., 1984; Wood et al., 1976, as in Bean and Stevens, 2002). Both a knowledge of learners and a nurturing style are crucial components in effective scaffolding; helping learners discern critical features of a task through direct instruction and modeling is also crucial (Wood et al., 1976, as in Bean and Stevens, 2002).

This Vygotskian model of learning recognizes developmental processes which are ‘deeply rooted in the links between individual and social history’ (Vygotsky, 1978) and the role of the ‘other’ or mediator in learning. (Tharp and Gallimore, 1991, as in Edward and Brunton, 1995). The concept of scaffolding was used to describe the support and guidance provided by a teacher to a student to assist in conceptualizing problems and constructing knowledge (RP in our case). It was conceived initially with an “adult to child” emphasis (Vygotsky, 1978; Wood, Bruner, & Ross, 1976, as in Mason, 2012). It has now evolved in meaning to also include assistance provided by peer learners in the development of understanding and the construction of knowledge (Cohen, Manion, & Morrison, 2004). In our case, scaffolding involves the EMI teacher educators and their student teachers in internship/practicum setting. In both meanings, scaffolding is therefore concerned with techniques and tools used to assist in the development and maturation of understanding associated with learning. Thus, the process of scaffolding is much like the traditional definition of scaffolding as a temporary support system used until the task is complete and the building stands without support (Lipscomb, Swanson, & West, 2004).

Reflective learning is an important as it is a difficult endeavor for teachers to undertake (Bazerman et al. 2013), which may be taken as a sign of the importance of
scaffolding it (reflective learning). Orland-Barak and Yinon (2007) and Korthagen and Vasalos (2005) convincingly argue about the necessity of scaffolding reflective learning in pre-service contexts to overcome such difficulty.

Scaffolding can be done via various methods; writing, for instance, is a powerful means of promoting such scaffolding (Bazerman 2009; Pereira 2014). Indeed writing has received renewed interest in the context of the acknowledgment of the cognitive role of language in reflective learning from experience. Scaffolding reflection through writing also has importance in pre-service learning contexts and can be conceived of as a way of going further beyond providing guidelines to include the familiarization and study of exemplary cases of situated written reflective learning (Shulman, 1992). Socratic questioning can also be seen as a key foundation of the critical thinking movement and scaffolding techniques within constructivist literature (Mason, 2011; Paul & Elder, 2007; Paul, 1990; Wood, Bruner, & Ross, 1976, as in Mason, 2015).

As the above examples indicate, scaffolding in pre/in-service learning contexts shows the significance of the decisive role played by language as an inescapable mediating tool. Scaffolding is clearly done with a complex pedagogical intent, which is the transformation and enhancement of the student teacher’s lived experience; and student teacher, who goes through the process of scaffolding of reflection, can be the main witness and beneficiary of the renewed meanings that he/she actually builds (Darling 2001).

This emerging theme (Scaffolding) spans, in this study, four categories (Peer/group discussions, Guided reading and writing, Structured/unstructured thought process, and Action research) which will be presented in the following section.
4.3.3.1 Peer/group discussion

According to Tsang (2011), group reflective discussion is not a new pedagogy per se. Other authors believe that elements of group reflective discussion are embedded into various teaching and learning approaches including peer coaching, cooperative learning, community of practice, peer learning and collaborative learning (Wenger et al., 2002; Godinho, 2008). Nevertheless, as Godinho (2008) puts it, although learning is said to be a social phenomenon, interactive talk is being undervalued as a pedagogy which contributes to better learning outcomes for learners.

Findings in the study by Sai (2012) shows that the results of a reflective peer group discussion following the viewing of the videoed teaching session covered the salient findings of a major review of videoed teaching sessions around some aspects of reflection. These aspects included preference for a collaborative reflective approach. From the author's perspective, an established space (both cognitive and temporal) was highly helpful in reflecting on the videoed session. The two-dimensional framework of multimodality and reflective peer review created a nuanced and structured approach for discussion and reflection. The collegial approach to an agreed set of guidelines for collaborative reflection created a strong sense of ownership and peer support in this activity. The role of the educator was one of a facilitator using open-ended group discussion and enabling learners' questioning beyond the confines of a curriculum. Contrasting this with Skinner's approach, the behaviourist approach could involve repetitive rote learning strategy in the classroom with a measurable outcome. The role of the educator in this example was to train the learners to produce quantifiable results in response to a specific form of assessment.
The key benefits of reflective group discussions perceived by students in Tsang's (2011) study included peer learning, peer and/or tutor support and multi-perspective critical thinking. Students, as the study shows, welcomed the inclusion of reflective group discussions into their curriculum, not as a substitute of, but rather, complementary to reflective writing. Students invoked that reflective writing and reflective group discussions were beneficial in different ways. The interactive, supportive and multi-perspective nature of reflective group discussions was particularly appealing to students (Tsang, 2011). In all cases, it is necessary, as confirmed by Schaub-de Jong (2012), that meaningful materials are provided as a point of departure for analysis and discussion.

In the present study, Fras reports arguing with his students "... to be a good reflective person in practicum, you need ... let’s say ... discussion... discuss things with others; then, you will see the views of others" (Fr1). He further divulges urging his students to use both structures: peer and group discussion "I ask them to discuss in pairs; and also, [like a] group discussion among the student teachers who go to [the] same school" (Fr2).

Peer/group discussion as a structure to facilitate reflection is also brought about by Geoffrey, who bluntly says "and we try to structure in such a way that reflection becomes a group reflection rather than just a (...)" (G2). He explicitly, with an explanation, likens peer/group discussion to "... a group reflection so that, for the ideas of circulation between the students, [so that] the experiences are mixed so they can learn from each other" (G3).

Rita details how she urges her students to discuss things together out of her sheer belief that peer/group discussion is one method of doing RP:

"I ask them to share lesson plans, to share work with others, get peer assessment and through peer assessment, they get a ... a self-
assessment, a ... reflection. I mean, sometime it’s hard for them to reflect unless they see it through the eyes of others; because also peer and coach thinking is a way. I tell them think together, think together and then reflect on it (…) which is helping each other think on a certain thing. But I think also most of the time ... like I’ve done with the PGDE students where we ask them to do a peer assessment, sit with another person, give the other person a feedback, so this other person can focus on the feedback taken from a peer and reflect on her or his own work” (R1).

As a method for engaging students in reflection, Andrew explains that "... self-reflection and peer reflection will be intertwined to be physically encouraged in ICT information literacy courses" (A1).

Geoffrey proposes group discussions as opportunities for his students to express their views about issues relevant to the school setting and to lessons as well:

"...and which I try to do, I try to do ... give students more opportunity to able to speak out within groups and talk about what’s taking place in the schools, in the lessons and ..." (G1).

Additionally, peer/group discussions, which is seen by the participants as a manifestation of RP, is found in the study to be one of the methods adopted by the participants to engage their student teachers in RP (see Table 4.3).

As the five observations summarized in Table 4.3 reveal, the participants have used different strategies to engage student teachers in RP through peer/group discussions. Kelly, Fras, and May, for examples, used Study Group strategy to that end. Each one of the three participants arranged for his/her Study Group to actively engage in discussing a topic of their own selection. Kelly's Study Group discussed the topic Students We Work With; Fras’ Study Group discussed Class Management; whereas May's worked with Higher Order Thinking (See Table 4.3).

Andrew opted for an open discussion where the student teachers brought about issues and problems they encountered in their internship/practicum. There was not pre-set agenda, but, rather, the student teachers reflectively discussed any
worries/issue/problem vocalized by a colleague. Geoffrey used a pre-conference strategy to make his student teachers engage in RP on issues pertaining to pedagogy or the school setting.

The document IHY4, which has been prepared by the college educators, is found to set the atmosphere for collective work. Standard IV (Communication and Community), in the said document, requests evidence for participation in parent conferences and meetings; school events; and in parent communication via letters, notes, progress reports (p. 41). IHY4 also states that:

"The student teaching/internship experience also parallels ECAE's commitment to develop teachers who are reflective practitioners, committed to the teaching profession. During these practical placements in schools, student teachers are guided, assisted and supervised by visiting College faculty mentors and supported by school mentor teachers and other member of the school community" (p. 3)

Such events provide opportunities for student teachers to engage in peer/group RP.

4.3.3.2 Guided reading/writing

Reflective guided reading and writing are linked with professional development and self-understanding. Cognitive or psychological research conceptualizes writing chiefly as a problem solving activity, attempting to describe the internal mental processes that occur (Myhill, and Watson, 2011). Writing, according to these authors, "is a mirror of the self, the soul and the world. In other words, through writing, we can give voice to our most intimate thoughts and give free rein to our imagination; through writing, we can shape and articulate new knowledge, new ideas, and new philosophies; through writing, we can reflect on the past and imagine the future" (Myhill, and Watson, 2011: 58).
Sociocultural approaches aim to study the writer in context, acknowledging that writing is a social act, using socially constructed tools (languages, genres, technologies of writing) for social purposes. (Cook-Gumperz, 2006). Socio-cultural researchers are concerned with the diverse experiences that learners have. They argue that differences in social experience often far outweigh differences in the cognitive abilities of learners, citing factors such as motivation, self-confidence and perceptions of the value of assignments as significant influences on writing development (Ball 2008).

The general purpose of reflective reading is “to elicit your informed opinions about ideas presented in the text and to consider how they affect your interpretation. (Further), reading reflections offer an opportunity to recognize – and perhaps break down – your assumptions which may be challenged by the text(s)” (Trent University, 2014: 1).

In a multicultural adult learning context, educators are constantly challenged to provide meaningful reading materials that provoke inquiry, inspire personal reflection, and open a diverse learning community to growth and change. Through guided reading, for example, student teachers learn active, inferencing, thinking/reflecting aloud, problem solving, and interpretation (Naome, 1999).

One type of combining reading and writing is a journal commonly used in teacher education programs for professional learning. In the reader response journal, learners read recommended content in the form of written text or view a film and then record their responses in their journal. These responses may then be used in multiple ways but usually they are shared at some stage with their lecturer and often orally with their peers in order to make further meaning from the text and to
articulate connections between new information and what they already know’ (Kerka 1996: 2).

Kerka (1996) claims that writing is a critical aspect of knowledge processing and that the learner’s journal can become a text in itself for later metacognitive learning and community knowledge building.

In this study, Rita, ardently, proclaims "Reading! Reading. Reading. Reading… Uh.. reading is very important! It helps people reflect. It gives them … that people who do not read can’t reflect" (R1). She goes to explaining how he enmeshes reading with reflection:

"When … when we read, uh … in light of what’s … the given topic, it helps you become more … in-depth … with with with what you’re trying to … to … achieve. Let’s say: I tell them go read about Bloom’s Taxonomy and why is it a failure, let’s assume. OK, now we come to the class and I want them to reflect on their lesson plans, and then they use these readings to reflect; because there’s depth. What I’m trying to say the more we give them to read, the more they be able to learn and reflect and become independent; because a person can’t reflect if he doesn’t have a bag of depth of knowledge" (R1).

Fras also explicates that "I encourage them to work on line on blogs and educational forums … all the times, I provide them with some sites, for example: Teachers Teaching Teachers" (Fr1). Evidently, Fras adopts reading as a method for RP.

Similarly, May confirms that "in the integrated course, they reflect on a number of different things, they’re given some readings that they reflect upon; they reflect on their experiences" (M2). In this, May clearly assert that guided reading is an adopted vehicle for RP.

Flora has reported using written texts, evidently, as a means to facilitate: guided reading, guided writing, and RP. She says "I’ve also given them models of
written paragraphs or sentences of reflection umm ... where they have sort of probed or analyzed or evaluated a piece of written reflection" (F3).

Guided writing has, also, been reported by Fras who confirms asking his student teachers to "write their diaries, their memories; I want you to practice without worrying about grades" (Fr2).

Interestingly, May reports that she combines both guided reading and writing to facilitate RP. She explains " if it’s just purely information like a reading: ‘summarize four points’ or tell your friend what you think the main point of there is. Just some way to engage with the ... with the writing" (M1).

As Table 4.3 shows, some of the educators (Kelly and Geoffrey) use reading and writing as a method for RP. They suggest articles for their student teachers to read and to reflect upon. Others (Fras, May, and Andrew) ask their student teachers to make regular entries in their Reflective Journal which will be part of their Internship/Practicum Portfolio. In parallel to that, document analysis (RPHY4) also makes it duty of the student teacher to "keep a reflective journal of things happening around you" (p.22).

4.3.3.3 Structured/unstructured thought process

Structured/unstructured thought process is a kind of scaffolding provided by a knowledgeable other. Providing a clear structure for reflective practice is considered crucial for positive outcomes for students (Russell 2005). Structure is about providing students with a clear sense as to the purpose of the activity, the learning outcomes for the activity, examples of good reflection, and prompts to direct their thinking during the activity. However, structure in this sense should not constrain the unstructured and complex nature of reflective thinking, for example it should not
simply be an exercise of answering numerous specific questions (McNamara and Field, 2007a).

Providing prompt questions is a useful tool for fostering students’ thinking as they reflect on their experiences. For example, Lay and McGuire (2010) give structure to their students’ reflective journals by asking that they ‘describe’ their experiences and ‘examine’ the learning objectives of the course in relation to those experiences (2010: 550). Alternatively, the 4Rs (Reporting and responding, Relating, Reasoning, and Reconstructing) framework of reflective writing (O’Conner et al, 2015: 80) can be used to provide guidance as to structure and relevant questions to prompt student thinking at each stage of reflection. It is suggested that such guidance be scaffolded so that in final reflections students are able to reflect without the benefit of such guiding questions. Appropriate reflective guiding questions to assist early development of reflective practice skills are highly needed at the beginning.

Hume (2009) advocates pre-teaching reflective practice as it is considered necessary for students to learn these skills well (Hume 2009). Hume more specifically suggests pre-teaching reflective skills in workshops and classes in order "to scaffold students’ learning and promote more useful reflection" (2009: 247). She provides multiple structured exercises, ‘timetabled slots solely for reflective writing’, ‘exemplars of reflective writing, reflective frameworks and regular written feedback and feedforward comments’ for this purpose (Hume 2009: 258).

Guidance and coaching overcome the difficulties of conceptualization for students. Hanson (2011) found that first year students had often never encountered the concept of reflection before and equated it with mirror images (2011, 297-298).
Thus, good practice requires guidance by providing exemplars, templates, and clear directions to students on ‘what reflection is and what it is not’ (Dyment and O’Connell 2010, 237).

In this Study, this Sub-theme (Structured/unstructured thought process) captures 29 quotes given by seven participants i.e. 87.5% of the participants in the study have reported using structured/unstructured thought process as a means for engaging their student teachers in RP.

May, in a telling quote, explicates that she uses both fashions in instigating student teachers' RP "... But it’s mostly their written weekly reflection. But every week they would send in and every week I’d write comments or whatever and I’d send it back. And In the beginning there were many more ‘why’; why do think this? How do you know?" (M6).

In another instance, May confesses that RP in the courses she teaches are using structured thought process, declaring that:

"It’s quite directed ... guided. I mean the ops are open. We left it completely open the first time, and we didn’t quite get back what we wanted, so, now it’s a little bit more guided: ‘What does this mean for you?’ ‘What does this mean for your planning?’ ‘Would ... Is this something you would use?’ So, this CS2 is a more guided, but at least they are thinking now ... about what they will do in future" (M7).

The concept of structured approach is also reported by Sean:

"Right now I’m doing practicum I and practicum IV, and I know they’re built on a lot of reflection. So, in practicum I students go ten school visits, in each visit they’ve some paper work to do, some forms to fill out with information they collect about the students they observe, things like this. But with each task of the ten tasks, the final three or four questions are reflective. So, now I’d say these’re the only things I’ve done that explicitly target reflective thinking among the students" (S1).

It seems that Sean feels comfortable with using RP structure that is built in the course, because he further stresses that "I mean for me I didn’t write the
practicum curriculum, but it’s built into already; so, I just follow the instructions; you know the forms they fill out when I observe a teacher teaching” (S2).

Contrary to that, Flora calls for opening up the vista for the student teachers rather than confining them to structured fashion of thought process or a prescribed 'recipe' in exercising RP:

"… Um … but I do believe that different students will get different things from the learning: you know, they will learn differently. So, what they will bring back to the classroom will be important; I mean everything that they bring back to the classroom will be important. They may have gone out in their own different directions, but what they bring back will be important and ... and valued. So, I don’t believe it has to be a recipe kind of approach. It can work quite well where students are given much more freedom and flexibility" (F1).

Flora seems to be satisfied with the liberty her student teachers are given in her RP approach. She brags that:

"[t]hey start to bring resources from library into class; they’re starting to integrate reading into their assignments. They are starting to enjoy experiential learning activities; they’re starting going out and explore beyond the boundaries. I think one good thing’s many women now have cars; they can drive, and seems to be fewer constrains in terms of their own ability to learn, if you like, outside the regular confines. So, I think that all very positive" (F2).

In this, Flora widens the view and ascribes this inclination to practicing unstructured thought process in RP to factors that transcends the micro context (classroom and school). Looking at the macro context (the wider community), Flora invokes the evident absence of constrains on her female student teachers who enjoy driving their own cars around the city.

Like Flora, Rita advocates using unstructured thought process as an approach to RP; she even asserts doing so by: "Making them [the student teachers] draw ... uh ... uh ... do a brainstorming about things help in the reflection" (R2).
Rita terms brainstorming: "cognitive tools"; because, she reasons, "they (student teachers) can’t reflect unless ... if they scratch their minds ... on any level, it doesn’t have to be on what I’m teaching them. It could be on a personal level" (R2). Rita, just like Flora, is also widening the scope by calling for RP that transcends the confines of the teaching/learning milieu. This view seems to be congruent with the understanding of RP as self-analysis, self-expression, and knowledge of beliefs discussed elsewhere. In fact, Rita is critical of the structured thought process as a means of RP. She, expressly, points out that:

“Giving them direct answers to issues they have, is a problem; is a problem because we need to deconstruct this model of answer questions, feedback, spoon feeding thing; otherwise, they are not learners. Even if I’m not teaching the content, they will reach a stage, if I’m teaching them how to search, how to look, how to think, they will become independent learners, they will learn on their own even if they don’t attend the college” (R6).

With this understanding in mind, the participants seem to for using both structured and unstructured thought process as a means for reflection.

With regards to unstructured thought process, they seem to uniformly adopt questioning as a method of engaging their student teachers in RP as revealed in the observations (see Table 4.3). The questions posed by participants as prompts for RP revolved around lesson plan, students, and teaching strategies (examples: Did the stages of the lessons build students' knowledge?; Were the students engaged? Why? Why not?; How effective were your strategies for presenting language?) (Appendix M).

Document analysis (Table 4.2) is found to be tallying with the Observations Analysis with respect to this Sub-theme (structured/unstructured thought process).
RPHY4, for instance, states as a course description: "This project (Action Research) requires that student teachers define a problem or topic of inquiry, collect data, discuss the findings, and reflect on the research process" (p. 6). The same idea is also emphasized in Summary Sheet of RPHY4 (p. 39). Structured/unstructured thought process, in the form of a Gradual Release of Responsibility Model (INSM, p.10 and 13), is defined as ADEC'S pedagogical approach for teaching school students that seeks to support the individual instructional needs of each learner "while progressively moving them from a state of dependence to one of independent practice and skills application" (p. 10). According to the document analysis, The New School Model further recognizes that learning is not confined only to remembering facts, but "in addition to academic outcomes, the New School Model will also develop positive approaches to learning which will enable students to be academically successful and to become lifelong learners" (INSM: 13). TGLO asserts the same inclination in NSM. In numerating the elements in this model, the document explains that "Learning experiences should include the full range of thinking opportunities, with focus on deep understanding wherever possible" (p. 6).

4.3.3.4 Action research

Action research (AC) is defined as "a collaborative approach to inquiry or investigation that provides people with the means to take systematic action to resolve specific problems" (Stringer, 1999: 17). This approach to research enables people (a) to investigate systematically their problems and issues, (b) to formulate powerful and sophisticated accounts of their situations, and (c) to devise plans to deal with the problems at hand (Stringer, 1999).

AC focuses on methods and techniques of inquiry that take into account people’s history, culture, interactional practices, and emotional lives. It has come to
be seen as a means for teacher practitioners to be engaged in self-reflective and investigative approaches to understanding and researching their working environments (Cochran-Smith, et al. 1999). AC is seen by Hitchcock & Hughes to have its emphasis on: practice, participation/collaboration, reflection, interpretation, and, often, emancipation (Hitchcock & Hughes, 1995, as in Burn, 2011).

Despite the fact that AC features high on course handbook, only three participants have cited it as a method they use in teaching RP. This could be ascribed to the probability that the participants view AC as a natural component of the practicum that is too evident to be identified as a tool for RP.

However, one of the participants expressly qualifies AC as an important tool for RP: "action research is a very important tool for.. for reflection. Because if they don’t reflect on their own practice, they wouldn’t be able to make an action plan based on a problem they’re facing" (R1). In this quote, Rita is contented that AC is essential for RP. She even stretches it further by looking at the flip side of it: RP can help in conducting the AC (rather than just the other way round).

In another instance, Rita illustrates her rationale for making her student teachers conduct AC: "we ask them to do the action research; when they reflect to pick a problem they’re going through, to improve their practice" (R2). AC for Rita is tool that is used to engage her Student teachers in RP.

Similar to Rita's view about the relationship between AC and RP, Sean maintains that:

"[r]each has to be reflective, I mean, right from the beginning you have to go to the literature and see what other people have done. To see what has been accomplished before, where the evidence is lacking, to see if I’ve any ideas for how I can solve the problem or the lack of evidence. You know, you look at the different instruments that have been used by people, you evaluate them and see could ... would you use it? Would you not? Would you make it better? Would you change it?" (S1a).
He, then, firmly asserts that "The whole process of research IS reflective, I think. Based on ... not reflection on what YOU’ve done, but reflection on what other people have done" (S1).

It is interesting to notice that this symbiotic relationship between RP and AC is identified by the participants.

Researching as a tool for RP is also pointed out by Kelly, who sees the process of conducting research as a subject- matter of reflection. He delineates that by saying:

"Giving them these tools they need, they need researching tools, and ... we can talk about different ways to access information... but also we need to give analytical skill: what sources do you trust? Which ones? Why? And why shouldn’t I trust these courses? Why shouldn’t I use only one source? Why should two three four five...? And then (…) following that you … you make your opinion about what you think is right" (K1).

As can be seen, researching in general is an effective tool of RP according to Kelly, and can be particularly used for reflecting on the process of research as well.

Document analysis (Table 4.2) shows that AC is an essential part of the internship programme. RPHY4 is a handbook carefully developed to introduce and enhance student teachers' ability to understand and conduct an AC. As a course objective the handbook states that: "The course aims at: 1. Provide student teachers with the skills needed to explore a particular research problem or topic within the school context" (RPHY4: 6). As a learning outcome, the handbook envisages that on successful completion of the course, the student teacher will be able to: "Plan an AC project based on a real life situation which links educational theory with the synthesis of information gained during their education program." (RPHY4: 7). Pages 10, 13, 14, 16, 21, 28, and 44 all give clear structure and guidance to conducting AC.
The five observations (Table 4.3) revealed that all the participants conducted introductory sessions to explain and engage student teachers in the process of AC.

**RQ3:** The following table (Table 4.1.3) restates the question, shows the Analytic Category used for analyzing the data, summarizes the responses to this question into Sub-themes, and displays the percentage of participants whose responses has helped extrapolate the Sub-themes. The Sub-themes are finally collapsed into a Theme that forms the bases of discussion.

**Table 4.1.3 Semi-structured Interviews Responses to RQ3**

<table>
<thead>
<tr>
<th>Analytic Category</th>
<th>3 Sub-themes</th>
<th>% of Participants</th>
<th>Theme (1)</th>
</tr>
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<tbody>
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<td>Teaching/Learning milieu</td>
<td>75</td>
<td>4- Topical Pedagogies</td>
</tr>
<tr>
<td></td>
<td>Practice Dilemma</td>
<td>50</td>
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</tr>
<tr>
<td></td>
<td>Critical incident</td>
<td>37.5</td>
<td></td>
</tr>
</tbody>
</table>

To answer this question (RQ3), the Analytic Category (Contents), which is driven from RQ3 itself, is used to guide the coding of the semi-structured interview data whose verbatim transcription is presented in addition to the analysis and presentation of the data gleaned from the institutional document (Table 4.2) and the data from the observations (Table 4.3). As summarized in the table above, it has been found in the study that the participants introduce their student teachers to three types of Content in order to engage them in RP. These three types of content will be reported, but preceded by a discussion of the Theme (Topical Pedagogies) subsuming these aspects of Content.
4.3.4 Topical pedagogy

It is widely accepted by educators and researchers that learning becomes more effective and meaningful when it takes place within an appropriate context that displays real world attributes (Westera, 2011). In the practicum setting, where RP is essential part of it, topical pedagogies like problem-based learning (Barrows & Tamblyn, 1980), action learning (McGill & Beaty, 1995), situated cognition (Brown, Collins & Duguid, 1989; Lave & Wenger, 1991), and experiential learning (Kolb, 1984) all stress the importance of context for learning.

Such context enables learners to directly link concepts with their real world counterparts and put knowledge into action. Also, the more general model of competence-based learning that is highly topical today supports this, since it deals with the combined application of knowledge, skills, and attitudes within real world contexts (Westera, 2001).

Theory of Learning has moved, over the years, from stimulus-response/classical conditioning theories to context based theories such as actor network and cultural historical activity theories – a major shift from decontextualized to intensely context oriented approaches (Babur, 2014). Context is no longer seen as an impassive or detached container, but as co-evolving; it is considered as embedded, shaping and being shaped up simultaneously; the distinction between content and context is getting diffused, and the traditional roles of educators and learners have come under tremendous pressure (Babur, 2014).

This understanding of context as blurred with content brings any emerging context closer to the theory of situated cognition which represents a major shift in learning theory from traditional, individualistic views to views of learning from the social perspective (Greeno, 1998; Lave & Wenger, 1991; Salomon, 1996). Brown,
Collins, and Duguid (1989) are credited as the founders for situated cognition theory and define it as the notion of learning knowledge and skills in contexts that reflect the way they will be used in real life" (Collins, 1988: 2). Situated cognition theory takes place within a dynamic learning community in which each individual can take on a variety of roles: student, teacher, coach, and expert. Learning communities can exist in many environments including the home, school, business, local community, and the electronic or virtual world community. Because of its emphasis on learning, albeit learning in a specific external context, it is still a learning theory (Orey, 2010).

This notion of situated learning is in keeping with social constructivists perspective which emphasizes the importance of culture and environment on the learning process (Orey, 2010). The basis of the theory of social constructivism assumes that reality is constructed through human activity, knowledge is created through interactions with others, and their environment and learning are more meaningful when the learner is socially engaged. Four perspectives of social constructivism include: cognitive tools perspective, idea-based social constructivism, pragmatic or emergent approach, and transactional or situated cognition (Orey, 2010).

Under this overarching theme (Topical pedagogy), three sub-themes have emerged in this study: Teaching/learning milieu, Practice dilemma, and Critical incident. These sub-themes shall be discussed in the following sub-sections.

4.3.4.1 Teaching/learning milieu

Every situation may be a learning milieu. The learning milieu has been defined in the formal educational setting as:

"[t]he social - psychological and material environment in which students and teachers work together [it] represents a network or nexus of cultural, social, institutional, and psychological variables. These
interact in complicated ways to produce, in each class or course, a unique pattern of circumstances, pressures, customs, opinions and work styles which suffuse the teaching and learning that occur there. The configuration of the learning milieu in any particular classroom depends on the interplay of numerous different factors... "(Parlett and Hamilton, 1972 as in Boud, and Walker, 1990: 64).

The notion of milieu can be easily extended to informal learning situations where there are no teachers or facilitators and no requirements of others that pertain to learning. There may still be norms and rules of behaviour and expectations of others, but other people present may not be aware of any learning content to their interactions. When in formal situations, students and teachers become learners and facilitators and classes or courses become opportunities for learning.

This definition captures the complexity of the learning milieu. The milieu is much more than the physical environment; it embraces the formal requirements, the culture, procedures, practices, and standards of particular institutions and societies, the immediate goals and expectations of any facilitator, as well as the personal characteristics of individuals who are part of it.

This theme focuses more on the interaction between the learner and the milieu than on the milieu itself, and is an effort to take a systematic look at how the learner interacts with the milieu. In addition to defining the milieu, the intent here is to single out several important aspects of the interaction that takes place with it. The learning milieu is taken here to be all those entities, human and material, which provide the context and events within which the learner operates.

These consist of far more than the immediate players who may be present. They include the history, values and ideologies of the culture as well as the manifestations of these in particular events. Issues such as gender, race and class are all potentially significant elements of the milieu. Learning is a function of the
relationship between the learner and the milieu and is never something determined by one of these elements alone (Marton, Hounsell and Entwistle, 1984).

In any experience there may be reflective activity occurring in which what the learner perceives is processed and becomes the basis of new knowledge and further action. Information is associated with previous knowledge, is integrated with it, and may then be tested in the event. Reflection is a normal on-going process which can, if desired, be made more explicit and more ordered.

Andrew in this study, forthwith, refers to the teaching episode (classroom learning milieu) as forming a subject matter for RP. He affirms:

"I maintain with the students that when they’ve taught a lesson at the end of any lesson, they must go through it themselves and think: well what I do can be done better, especially because I’m going to be teaching that in the afternoon, you have a morning class you’re gonna do it again in the afternoon, and it gotta improve; you know, they need to be involved in doing it" (A3).

Andrew posits that he presents the teaching event for his student teachers to reflect upon. Kelly illustrates how he helps his student teachers use this teaching and learning milieu to engage in RP:

"So, I like to listen to what they have to say, because things ... because I observed certain things I wanna ask them: this is what I observed and this is what I thought ...What do you think too? Myself I’m not the expert; obviously, I got training as a teacher, but I’m here to help them not just ... this is what you should do. They too have understanding of the classroom and what’s going on there. So, I ask them what did you think?" (K1).

He names questioning as a structure he uses to instigate RP on the teaching/learning milieu.

Geoffrey, on his part, goes further to give his rationale for engaging his student teachers in reflecting on teaching/learning milieu. He says the drive for that:

"[e]ssentially, is try to produce an environment where, in terms of education and with our students, is to provide an environment whereby
the students are able to think the problems they have solved in the classroom, or the topics that they.. they have just covered there; where you give them the opportunity to go back to (dare) their understanding which maybe in the long term memory and to weigh up those concepts or ideas or beliefs, and to sift through them again which will allow them to understand the idea much more clear..." (G1).

Giving student teachers the opportunity to practice RP for Geoffrey justifies introducing the teaching/learning milieu (represented here by planning, material development, and delivery) as content for RP.

Geoffrey, further, elaborates on the feasibility of introducing teaching/learning milieu as content for student teachers' RP:

"While our teacher, our students there, have put a lot of effort in writing the lesson plan, producing the materials, implemented the lesson plan, as such ... everything is being very very good there; but at the end of the day, the end results weren’t there. So, in that situation and allowing the students to think about what’s taking place there: to think about and to ask certain questions to students, so that the students themselves arrive to a point whereby they will say ‘well, the problem was that our speeding..’ or if we’re able as lecturer to allow the student to vocalize this to come out with the incorrect action.. what the student was doing, that’s even more better rather than just telling them this is the mistake" (G2).

Identifying ailments in the teaching/learning milieu by the student teachers through RP, is thought by Geoffrey to be essential, and is preferable if compared to explicit teaching and telling. A la fin, the target, as succinctly put by May, is that:

"… they reflect on the activities that they’re doing in the class and their own progress" (M1).

Notably, Flora, in her call for flexibility and refrain from spoon feeding, expands her conceptualization of the teaching/learning milieu to span areas beyond the classroom. She enthusiastically proclaims:

"(high pitch) Oh. Well, it’s not imparted! I mean knowledge is not imparted: knowledge grows; you know you need to have a lot of resources and you need to have a lot of flexibility; because it's definitely not the one-man show in the classroom! That’s not how
people learn! And curiously, ahh not not so curiously, I admire the students who are going out … they’re working at KITAB” (F2a).

This KITAB, apparently an extramural activity, is regarded by Flora to be a milieu equally adequate for practicing RP, because (student teachers):

"They’re going here they’re going there. We’ve got one section in Year Three who are much more productive than your regular assessment or assignment. There’re people who are going out, they’re communicating, they’re interacting; they’re teaching within the community, I mean they’re building their reflective capacities through their exposure, if you like” (F2b).

She ardently hails their going out, being exposed, and interacting in the wider community instead of being confined to classroom walls:

"I mean it’s a classroom without walls, is what I’m trying to say. You know, the moment you shut the door and call it [is]a classroom, is the moment that you’re uh uh creating boundaries to learning. And learning simply doesn’t happen that way" (F2c).

It is evident, then, that the teaching/learning milieus, small or large, are grasped by the participants as an optimal content for engaging students in RP.

In corporation of this, document analysis (Table 4.2) shows that teaching/learning milieu is used as content for engaging student teachers in RP. In describing the Learning Environment, TGLO emphasizes: "The power of the learning environment to influence and promote learning is significant and the learning spaces and the learning resources provide important opportunities for students to explore ideas and knowledge, collaborate, solve problems and develop skills" (p.7). ADEC sees the learning/teaching milieu as affordances for school students to learn and to enhance their "capacity to take risks and to learn independently" (TGLO: 6). Participants, as shown in the Observations Summary (See Table 4.3), engage their student teachers in reflecting on certain events and activities. For example, Kelly engaged his student teachers in observing and reflecting on the school environment (School Observation). Fras made his student
teachers to shadow a student and to engage in RP. May used a different milieu for her RP. She required her student teachers to observe and reflect on a mentor's lesson. Andrew used Peer Observation Conference strategy to engage his student teachers in RP. Another strategy, Co-teaching, was employed by Geoffrey for the same end. All这些 milieus (School observation, A Student Shadowing, Mentor's Lesson Observation, Peer observation Conference, and Co-teaching) were used to engage student teachers in RP following certain protocols (see Table 4.2) that are outlined and structured in the IHY4 (pages: 6, 24, 25, 39, 40, and 41).

4.3.4.2 Practice dilemma

Practice dilemma in this study spans issues pertaining to various areas: classroom management, instructional method, curriculum and content, and the micro context in general. Such issues arise as a result of the tension between the practitioner's beliefs and the societal expectations. The interaction between societal expectation and personal beliefs potentially presents grounds for differing ideas and hence tensions. In light of the complexities of teachers' beliefs and practice, attention needs to be given to inspect the dialectical relationship between teachers’ beliefs and assumption based on the context that they live in, their decision making and practices (Tang, et al, 2015).

Talking about practice dilemma, Kelly admits in a long turn that "… there is a list of things, but I think classroom management is one of the biggest" (K1a). In explanation, he cites student teachers’ struggle with attention in classroom and their constant strive to get the attention of every student:

“… you know, … They {student teachers} feel a bit insecure about the classroom management; they think all the students all the time should be on task, and as a teacher I know you can’t; very … very weary: can you get every single student switched on and engaged into what you’re doing?” (K1b).
He, further, illustrates “it’s just kind of when it’s the first time you start off you kind of, think this is gonna be a perfect class, and this is not” (K1c). Kelly makes use of such a situation and invites his student teachers to reflect on things like “IT issues, sometimes their English skills especially their questions, you know, they … ‘Yeh, I didn’t … Yeh my questions weren’t right, they weren’t grammatically correct’” (K1d). Kelly appears to be very much aware of the dilemmas involved in practice: he vividly elaborates:

"[t]here’s a million things going on the classroom and one of them is the teaching, but every one of these kids has a life, you know, there’s a million factors going on about their behavior, what they’re doing, and the teacher is just one factor of many that are in the classroom" (K1e).

Evidently, there is a latent inclination on Kelly's part to using such practice dilemma as content for RP.

Andrew adds another dimension to the content of RP. He says "I like them to be questioning, for example, why they will be teaching certain information, and whether the methodology is appropriate at the time" (A1).

Curriculum as content for RP has also been invoked by Fras "I mean … I want them to reflect on the curriculum itself… the content … I want them to criticize … I want them to reflect on the curriculum itself" (Fr1).

Practice dilemmas that are usable for RP are seen by Andrew to comprise areas like positive re-enforcement; he shares that "certainly I’ll be encouraging [them] to reflect on how much praise they’re giving; and whether it’s negative re-enforcement or whether it’s positive" (A3a). More specifically, he says "I’m trying to encourage them to think about (…) have I used praise throughout the class. I’m trying to encourage that sort of behavior" (A3).
So, practice dilemmas vary and differ in terms of depth and width just as asserted by Geoffrey:

"[t]heir reflecting will be about the pedagogy of teaching: what are the methods they’re using for teaching and learning? About management of the classroom, there; about the school in general, the administration there: the positives the negatives. So, in terms of areas of reflection there, there, it varies in terms of the depth of reflection" (G2).

May reports making her student teachers reflect even on issues brought about by ADEC; she further asserts that she tries to keep her distance when introducing such topics for reflection: "I try not to give my opinion so much in the class. But I’ll say like: this is what ADEC is saying. What do you thing and I get them to reflect on it" (M1).

Practice dilemmas for Flora also span areas and issues beyond the classroom. According to her insight: "[w]ell you know… if we need to have competences in teaching, we all have to reflect on … you know... whether our social environment set up is [correctly]" (F1).

Analysis of both observations and institutional documents revealed that participants introduced Practice Dilemma to engage their student teachers in RP.

To achieve this, participants employed various tools: Self -reflection Questionnaire, Self-reflection Sheet, Post-Reflection Questions, and Reflective Teaching Notes (see Table 4.3). All of these tools contained prompts, points or questions relevant to Practice Dilemma. Prompts like ‘I am thoughtful and responsive’ in the Self-reflective Questionnaire opened the door for the student teachers to reflect on various aspects of practice particularly problems and issues that occurred in the practicum/internship. A question in the Reflective Sheet like ‘What techniques went well or badly?’ did the same and instigated RP. It was noticed during the observation that Geoffrey’s student teachers were keen on writing
Reflective Teaching Notes. Their notes, which are beyond the scope of this study, generally revealed responses to issues and problems that occurred during the school day. It seemed that Geffrey wanted them to focus their Reflective Teaching Notes on issues relevant to the school day rather than the broad internship experience.

Institutional documents like TGLO and IHY4 are found to be helpful in putting structure for student to engage in RP. TGLO, for example, talks about “the understanding of the impact of culture, social, emotional, intellectual and physical differences on learning and how educators must be prepared to cater for these differences and must develop learning experiences which can be accessed appropriately by all students” (p.6). IHY4 provides prompts and templates for student teachers to use issues in the internship/practicum for engaging in RP (IHY4: 31, 35-37).

4.3.4.3 Critical incident

Critical incident, as McAteer et al suggest, "is one that challenges your own assumptions or makes you think differently" (2010: 107). But for an incident to be defined as critical, "the requirement is that it can be described in detail and that it deviates significantly, either positively or negatively, from what is normal or expected" (Edvardsson, 1992), as in Spencer-Oatey, (2013: 3).

Critical incident, as posited by Cope and Watts, can be "essentially an emotional event, in that it represents a period of intense feelings, both at the time and during its subsequent reflective interpretation" (Cope and Watts, 2000, as in Spencer-Oatey, 2013: 4).

The above features are evident in an incident narrated by one of the participants. Kelly elaborately and vividly depicts what has happened to one of his student teachers in the internship:
"I had one of my students last week call me up and she was crying on the phone and 'Dr. Kelly I heard that was the worst lesson, the students wouldn’t be quiet, they’re big boys', ... you know, BanYa [name of a local rural area] (laughter), I think she was a good student but I think she was having a bad day; and I had to calm her down a little bit and I said 'look Ash...!' She was probably in B.Ed. 4, 'but ... calm down! Relax!'. 'Someone with the student now?' she said 'yes, the teacher is there' I said 'Why you don’t just go to your break room, just relax? If you want, I can come to school tomorrow and ... I ... we can discuss this and maybe talk to the teacher and see what happened, you know, up to you and you let me know' She said OK OK. She was obviously still crying; but she texted me about half an hour later and she like 'Ah! Thanks Dr. Kelly! I feel much better now! I just took all my frustrations out on a quick reflection' (laughter). As I wait to see that reflection … She said she was able to vent her feelings through her reflections, you know" (K1a).

This account shows how a critical incident can be used for RP. The efficacy of RP on such critical incidents has also been conveyed by Kelly:

"I have yet to wait and see her reflection; but in that ... it served a purpose in that she right away entered into evaluating what went right, what went wrong in that class, basically what went wrong; and then she used that reflection as a way to kind of compose herself, calm herself and get back in there the next day, and I didn’t have to go to school. So, in that case reflection served as kind of a channel to let out frustrations and note to herself, you know what I mean ... like ... she can go back and reread what happened, and hopefully it will happen less, in future" (k1B).

It seems that Kelly understands critical incident to be an outstanding event that involves intense emotion, and which can be used as content for RP.

Rita considers getting, unexpectedly, a low grade to be a critical incident that can entice her student teacher in RP:

"[s]ometimes it’s situational ... it’s the situation, something happens, and I think they need to reflect on what they have done; like: Try to think. When they get a low grade, I tell them 'write down 3 reasons why do you think you’ve done wrong? What did you do wrong in the exam to get it (when they’re unhappy)?' And this happens in situations; like they would say ‘Maybe it’s my handwriting’, ‘maybe I didn’t read the question correctly’, ‘maybe I didn’t ...’. So, here it becomes situational" (R1).
Such incident for Rita is critical since it ignites emotions; and, thus, it can legitimately be a subject for RP (RP has been found elsewhere in this study to mean self-analysis and critical thinking as well).

Flora narrated a personal experience which shows how she sees the relationship between RP and critical incident:

"[r]ecently, I was observed by my line manager. When I came out of that lesson, I knew for many reasons that lesson was not a star lesson. Uhh but when I went to my line manager I heard this 'it was a GOOD lesson!' etc... etc ... . Now, after that lesson, I was so disappointed that it wasn’t a really good lesson for various reasons. I reflected on why it wasn’t. And it involved a number of different people: it wasn’t purely me: it involved technology: it failed or didn’t work really well. It involves students’ space; it involves so many aspects that make a good learning environment; … I talked to IT about XYZ; I thought about space within the classroom. And actually, I wrote an article that pronged from that lesson. And part of it because I was disappointed: it didn’t go as well as I wanted it to. I’m not that I’d always do that, and that would always happen, but it’s interesting when you got a real observer like your line manager; you know, you become much more reflective" (F1).

This unexpected default to perform at the level Flora is accustomed to, manages to set her examine her setting reflectively. Based on this divulgence, we can assume that Flora will be inclined to gearing any such critical incident into a rich quarry for engaging her student teachers in RP.

As shown above, a critical incident need not only be a dramatic event: usually it is an incident which has significance for the educator. It is often an event which made you stop and think, or one that raised questions for you. It may have made you question an aspect of your beliefs, values, attitude or behaviour. It is an incident which in some way has had a significant impact on your personal and professional learning. However, it is worth noting here that no one of the five observations has revealed any use of critical incidents by participants as means to foster or to engage
student teachers in RP. Participants have only uncovered their understanding of critical incident to be a method of learning through engaging in RP.

4.4 Summary of the chapter

In this chapter, I present the constructed qualitative evidence in a way that makes it both easy to read and capable of reflecting the social reality of the phenomenon under investigation.

Findings uncovered by this study were organized according to the three research questions. Data from the semi-structured interviews, institutional documents, and observations revealed participants' perceptions vis-à-vis RP and their roles in creating prospective reflective practitioners. As is typical of a qualitative research, extensive samples of quotations from participants are included in the report. By using participant’s own words, the researcher aimed to accurately represent the reality of the phenomenon studied. Literature is used simultaneously to illustrate and discuss the themes emerging from the study.
CHAPTER FIVE
CONCLUSIONS AND IMPLICATIONS

5.1 Introduction

This chapter intends to summarize and interpret the findings in light of the theoretical background and the conceptual framework grounding this study. Subsequently, it aims to reach conclusions and to draw implications for the development of practice; and, further, to suggest implications for future research.

5.2 Summary of findings

As an educator interested in reform, I undertook this study to better understand reflection in teacher education. I wanted to gain further insights into the EMI teacher educators’ perceptions of RP and into the roles they perceive themselves performing to prepare prospective teachers; the specific objectives of the study were:

- To explore EMI teacher educators’ perceptions of reflective practice.
- To explore EMI teacher educator's roles in promoting reflective practitioners.

These objectives were translated into three research questions:

1- How do the EMI teacher educators perceive and understand the concept of reflection practice?

2- What methods do these EMI teacher educators use to engage their student teachers in reflect practice?

3- What do they engage their student teachers reflect upon in their practice?

Each question focused on one aspect of RP: understanding, method, and content- respectively.
The use of a qualitative research was the perfect tool to uncover the perceptions and the roles of the participants in the study because of the nature of the phenomenon. By selecting the socio-cultural perspective as a theoretical approach to present, analyze and interpret the data, I wished to squeeze out the essence and details of the phenomenon being studied. The socio-cultural perspective allows rich and vivid portraying of the nature of RP and of the roles educators undertake to help their student teachers become reflective practitioners.

Using this socio-cultural perspective and qualitative research tradition, the study yielded four themes that individually subsumed a number of sub-themes:

1. Self-awareness spanned 4 sub-themes:
   a. Knowledge of own beliefs
   b. Critical thinking
   c. Self-analysis
   d. Self-expression

2. Conceptual understanding spanned three sub-themes:
   a. Deep learning process
   b. Evaluating pedagogy
   c. Self-directed inquiry

3. Scaffolding spanned four sub-themes:
   a. Peer/group discussion
   b. Guided reading/writing
   c. Structured/unstructured thought process
   d. Action research

4. Topical pedagogy spanned three sub-themes:
   a. Teaching/learning milieu
b. Practice dilemma

c. Critical incident

These four themes are further squeezed and produced two broad topics: Heutagogy (Blaschke, 2012) and Transformation (see below) which will be discussed in the following section.

5.3 Conclusions

While interpreting and elaborating on the findings, in relation to the EIM teacher educators’ perceptions on reflective practice and on their roles to nurture reflective practitioners, certain principles that cut across these issues in RP emerged. In other words, the findings on the EMI teacher educators’ perceptions of RP and of their roles in promoting reflective practitioners generated a further dimension of factors that were found to be important for reflection in pre-service teacher education. These aspects that were derived from the findings were organized into the following two major themes: Heutagogy and Transformation. Heutagogy refers to a form of self-determined learning with practices and principles rooted in andragogy; it has recently resurfaced as a learning approach after a decade of limited attention (Blaschke, 2012); whereas, Transformation (an understanding based on Mezirow’s 1991 theory of transformative learning theory) refers to the development and change on the part of a practitioner that results from learning via RP. These two topics are found to permeate throughout the study four themes (Self-Awareness, Understanding, Scaffolding, and Topical Pedagogy); and are mutually conducive i.e. they have positive relationship with one another where either can be a cause and a result of the other.

Hence, in this section, based on the results and the literature, the conclusions are discussed under these thematic categories.
5.3.1 Heutagogy

Educators today are faced with the task of developing lifelong learners who can survive and thrive in a global knowledge economy; i.e. learners who have the capability to effectively and creatively apply skills and competencies to new and evolving situations in an ever-changing, complex world (The World Bank, 2003; Kuit & Fell, 2010). Traditional educational methods epitomized by pedagogy, even andragogy (Knowles, 1978, as cited in Moore & Kearsley, 2012), are no longer fully sufficient in nurturing learners for thriving in the workplace; and a more self-directed and self-determined approach is needed, i.e. one in which the learner reflects upon what is learned and how it is learned and in which educators teach learners how to teach themselves (Peters, 2001, 2004; Kamenetz, 2010).

The concept of heutagogy from this perspective presents certain principles and practices that could be considered as a response to the developments within education. Heutagogy, based on the Greek for “self”, (Blaschke, 2012: 58), was defined by Hase and Kenyon (2000) as the study of self-determined learning. Heutagogy applies a holistic approach to developing learner capabilities, with learning as an active and proactive process, and learners serving as “the major agent in their own learning, which occurs as a result of personal experiences” (Hase & Kenyon, 2007: 112).

The heutagogical approach can be viewed as a progression from pedagogy to andragogy to heutagogy, with learners likewise progressing in maturity and autonomy (Canning, 2010). More mature learners require less instructor control and course structure and can be more self-directed in their learning, while less mature learners require more instructor guidance and course scaffolding (Canning & Callan, 2010; Kenyon & Hase, 2010). Cognitive development of learners is a requirement
for critical reflection and discourse to occur; and it develops progressively in parallel with learner maturity and autonomy (Mezirow, 1997). With its basis in andragogy, heutagogy further extends the andragogical approach and can be understood as a continuum of andragogy. In andragogy, curriculum, questions, discussions, and assessment are designed by the instructor according to the learner needs. As in an andragogical approach, in heutagogy the instructor also facilitates the learning process by providing guidance and resources, but fully relinquishes ownership of the learning path and process to the learner, who negotiates learning and determines what will be learned and how it will be learned (Hase & Kenyon, 2000; Eberle, 2009). Heutagogy emphasizes development of capabilities in addition to competencies (just like andragogy). Heutagogy builds upon and extends andragogy.

Heutagological learning environment facilitates development of capable learners and emphasizes both the development of learner competencies as well as development of the learner’s capability and capacity to learn (Ashton & Newman, 2006; Bhoryrub, Hurley, Neilson, Ramsay, & Smith, 2010; Hase & Kenyon, 2000, as in Blaschke, 2012). An understanding of RP in teacher education based on this concept of heutagogy has to be further enhanced in the field. Time, space, and effective structure of RP in pre-service teaching need to be catered for.

Further, learning from this perspective, as I see it, encompasses three concentric circles: ‘myco’ context (the self), micro context (immediate one: student, classroom, and school), and macro context (the broader socio-cultural setting of teaching/learning).

Generally speaking, Zeichner (1983) and Zeichner and Liston (1987) regards reflection as a clarification of the practitioner’s daily routine from the standpoint of both the pedagogical and the wider dimensions. In other words, reflection should
incorporate the question of how the teacher sees his/her activity in relation to the wider context involving ethical, moral and political principles. In even a more practical term Zeichner and Liston (1996) point out that reflective teaching involves teachers in examining, framing, attempting to solve problems of classroom and school, and asking questions about assumptions and values they bring to teaching. For these authors, reflective teaching also involves attending to school and cultural context in which teachers interact and participate in curriculum development. These authors have transcended the micro level discernible in the previous definition which associated reflective practice with the immediate environment of the teacher.

Myco context, for me, is the Self-Awareness as revealed by the study in response to RQ1 which deals with perceptions. Myco involves knowledge of own beliefs, critical thinking, self-analysis, and self-expression. In this regards, the practitioner is looking inward, making of the 'self' the topic of reflection, with a view to achieving an understanding of own self.

Self-awareness is seen by Nagata (2004) as a form of Self-Reflexivity. It is "the way to instruct ourselves about how to be critically and explicitly conscious of what we are doing as intellectuals" (2004: 147). In other words, self-reflexivity is about having an "ongoing conversation with your whole self about what you are experiencing as you are experiencing it" (Nagata, 2004: 139); it depicts the ability to direct one's thought back onto oneself; "to examine one's theories, beliefs, knowledge, and actions in relation to [...] practice" (Barry and O'Callaghan, 2008).

For Aron (2000) reflexive self-awareness is both an intellectual and emotional process. It involves both conscious and unconscious mentation and draws on symbolic, iconic, and enactive representations. "It also involves the mediation of the self-as-subject with self-as-object, the "I" and the "me," the verbal and the bodily
selves, the other-as-subject, and the other-as-object" (2000:1). When “I” becomes “me”, the “blind spots” (Carr, et al, 2008: 31) become evident. Blind spots, as defined by this author “are those aspects of our thinking and behavior that we do not always perceive. They are hidden from our view and our consciousness but may indeed have an influence on how we teach and lead” (2008: 31). Quenk (1993, as in Carr et al, 2008: 33) employed the term “shadow” to qualify those blind areas in people’s personalities; and it is suggested that acknowledging and exploring the shadows may help practitioners engage in a higher quality of practice (2008).

This notion of combining the myco context with the other levels of context (micro and macro) seems to be in keeping with a key concept in heutagogy: double-loop learning and self-reflection (Argyris & Schön, 1996, as cited in Hase & Kenyon, 2000). In double-loop learning, learners consider the problem and the resulting action and outcomes, in addition to reflecting upon the problem-solving process and how it influences the learner’s own beliefs and actions. Double-loop learning occurs when learners “question and test one’s personal values and assumptions as being central to enhancing learning how to learn” (Argyris & Schön, 1978, as cited in Hase, 2009: 45-46).

Consistent with the socio-cultural perspective adopted in this study, dialogic mediation, scaffolded learning, and assisted performance support student teacher’s conceptual development and lead to more productive practice (Johnson, 2009). It is believed that creating mediational space for student teachers to engage in “on-going, in-depth, systematic, and reflective examinations of their teaching practices” (Johnson, 2009: 95) including the school context and the culture in which student teachers’ accounts of classroom experience emerge is an approach conducive to development and transformation.
Findings in this study revealed that educators have a well-rounded understanding of RP; but when it came to their roles in nurturing reflective practitioners, the tool of observations showed that they focused mainly on the technical/pedagogical aspect of the practice. They introduced their student teachers to the micro context/level, whereas the other two contexts -myco and macro- were not duly handled. This implies that it is worthwhile for teacher education programme to revamp an internship/practicum curriculum that is conducive to pre-service teachers’ reflectivity development at both myco and macro levels. The findings also challenge the EMI teacher educators to expose their student teachers to these two levels: myco and macro levels.

5.3.2 Transformation

As stated above, transformation refers to the development and change that occurs on a practitioner as a result of learning via RP. In this study, transformation is based on Mezirow’s (1997) Theory of Transformative Learning. This theory was introduced by Mezirow (1997) as a change process that transforms frames of reference (Imel, 1998). His theory defines frames of reference as "the structures of assumptions through which we understand our experiences. They selectively shape and delimit expectations, perceptions, cognition, and feelings" (Mezirow, 1997: 5). According to this view, "actions and behaviors will be changed based on the changed perspective (Cranton, 1994: 730).

A number of key elements of the transformational learning process are discussed frequently in the literature. Initially, a disorienting dilemma, or "an activating even that typically exposes a discrepancy between what a person has always assumed to be true and what has just been experienced, heard or read" (Cranton, 2002: 66) and may contribute to a readiness for change (Taylor, 2000). Cranton (2002) views this
as a "catalyst for transformation" (2002: 66). It could be a single event or a series of events that occur over a much longer period as in "an accretion of transformation in points of view" (Mezirow, 1997: 7). For example, engaging in problem solving may challenge and expose discrepancies (Mezirow, 1997; Taylor, 2000).

The literature highlights the central importance of nurturing a process of critical reflection with certain key elements (Mezirow, 1991; Sokol & Cranton, 1998). "Critical reflection is the means by which we work through beliefs and assumptions, assessing their validity in the light of new experiences or knowledge, considering their sources, and examining underlying premises" (Cranton, 2002: 65). Cranton (1994) explicates, "Transformative learning theory leads us to view learning as a process of becoming aware of one's assumptions and revising these assumptions" (1994: 730). Cranton (1994) posits, "If basic assumptions are not challenged, change will not take place" (1994: 739), and further explains that we are more likely to have sets of assumptions that guide our teaching practices. Sokol and Cranton (1998) argue, "As transformative learners, they question their perspectives, open up new ways of looking at their practice, revise their views, and act based on new perspectives" (1998: 14). Mezirow (1997) cautions, "learners need practice in recognizing frames of reference and using their imaginations to redefine problems from a different perspective" (1997: 10). Several authors point out the necessity of making the time necessary for critical reflection (Pohland & Bova, 2000).

To learn from the events in our lives we must reflect on the situation, understand it and learn from it. Authors like Sherwood and Horton-Deutsch (2012) focus on reflection in the learning process. They look at how reflection provides a process for asking critical questions that can lead to improvements in quality and safety. They expand on current pedagogies with a learner centered focus; and offered exercises
that are adaptable to most work settings and will help guide both interactive group work as well as individual reflection that may be shared with a coach or mentor.

In addition to critical reflection that challenges assumptions, transformative learning requires a trusting, social context for the dialogue referred to as reflective discourse (Mezirow, 2000) or critical discourse (Grabove, 1997). Cranton (1994) argues that the most promising transformative learning potential in faculty development work is long-term work with others, including "a group of faculty genuinely interested in teaching" (1994: 735). Taylor (2000) found that the key ingredient most common in the process of transformational learning was the context of relationships.

As in Reis (2005), several authors emphasize individual agency; learners having their own design (Taylor, 2000); autonomous thinking; and control and choice (Grabove, 1997; Mezirow, 1997). Mezirow (1997) posits that the educator serve as a facilitator or provocateur, in order to foster the self-direction and control needed for transformative learning. The role of the educator or faculty developer in transformative learning processes changes from that of a directive expert by shifting power, responsibility, and decision-making to the faculty (Cranton, 1994). Robertson (1997) writes extensively on the importance of creating a helper relationship. According to Baumgartner (2001), action on the new perspective, as in "living the new perspective" (p. 17), is critical for transformative learning to occur.

As opposed to the elements critical for the process of transformative learning, the outcomes indicative of transformation may include Cranton's (1992) framework of three types of change: change in assumptions, change in perspective, and change in behavior. Boyd (1989) claims an outcome of transformative learning includes a change in self.
Self-awareness, as argued by Zeichner and Liston (1987), is an important element in becoming a reflective teacher. They explain that in the process of self-awareness, pre-service teachers become aware of themselves as teachers and of their environments, which consequently, lead to transformation in perception towards the practice.

Collaborative inquiry is regarded as an important form of learning and development. It is a process of transformation, in which the pre-service teachers become aware of their assumptions and expectations, and they evaluate and reconstruct their understanding of teaching (Miller, 1990). Collaboration is regarded as a vital ingredient for reflective courses and programs. It is viewed that reflection has a collaborative nature in which contributors have a chance to become aware of alternative perspectives (Glazer et al., 2004). Vygotsky’s zone of proximal development (ZPD) supports this view by explaining that working with competent peers helps maximize student’s own growth (Bruner 1984; Oerter, 1992, cited in Yost et al., 2000). Hill (2000) adds that it is essential to have a supportive atmosphere in collaborative interaction in seminars, pointing out that “effective teaching-learning relationships are collaborative rather than authoritative driven” (2000: 53).

Transformation, like heutagogy, is a distinguishing attribute of RP; but both transformation and heutagogy require solitary and scaffolded reflectivity as revealed by this study.

5.4 Pedagogical implications

In light of the findings and the literature in the field of RP, the following implications were drawn for the development of reflective practicum/internship courses in teacher education:
1. Introducing student teachers to reflecting on the different layers of contexts: myco, micro and macro contexts. In the study, participants revealed an understanding of RP that encompasses a notion of myco, but this understanding was not translated into agendas to widen the scope in which their student teachers are led to engage in RP. Student teachers in this study were found to be introduced to reflecting mainly on the micro level. This gap between myco -at the level of understanding- and the micro is to be bridged with regards to the methods and content introduced by the EMI teacher educators i.e. to keep a dynamic connection between awareness and action where changed awareness of assumptions unearthed through RP lead to changed practice (Fook and Gardner, 2007). Furthermore, the macro level is to be included in nurturing student teachers’ reflectivity.

2. Enhancement of heutagogy through providing more time, space, and effective structure of RP in pre-service teaching should be catered for. The participants in this study revealed an understanding of RP as being self-learning, but in practice limited space and time was given to student teachers to guide their own learning process. It is essential that an understanding of RP in teacher education based on this concept of heutagogy be further enhanced in the field.

3. More emphasis on critical reflection should be given. The study indicated that participants made their student teachers focus mainly on the micro context (classroom practice and school environment). This led to limiting RP to professional artistry and to testing espoused theory. The domain of RP can better be expanded to include the macro context (the wider socio-cultural and political context in which practice takes place). This will give student teachers an opportunity to indulge in critical reflection which essential for the present globalized world.
5.5 Implications for research

1. This study was conducted within two academic semesters, which is a limited time for full exploration of RP among EMI teacher educators and also their students. Thus, a longitudinal study could be carried out to analyze the application of RP further. This will provide more in-depth insight into reflection with regards to its developmental process in student teachers;

2. In this study, due to the nature of the study, observation was limited to activities outside the classroom, subsequently, neither educators’ nor student teachers’ adoption of RP in teaching was explored. Hence, in order to analyze their engagement in reflection further, it is suggested that a similar study is conducted with pre-service teachers who have the opportunity to teach for an extended period of time in school environment. Lessons by educators can also be observed to better understand their application and adoption of RP in actual settings.

3. Following the argument initiated by Orland-Barak (2005), a comprehensive discourse analysis could be conducted on the analysis of reflective discourse, involving both written and oral reflection. In this way, the impact of genre on reflection and on reflection frameworks could be analyzed, which will be a great and essential contribution to the literature.

4. Implications of the socio-cultural foundations on reflection and on reflective development merit further analysis.

5. Despite the abundance of literature on the EMI teacher educator’ role in the promotion of RP, still, there is a need for more empirical studies so that EMI teacher educators are provided with more data and guidance with regard to their roles concerning pre-service teachers’ needs.
5.6 Closing Remarks

In its exploration of reflective practice, this study has focused attention on the issues – conceptual as well as practical – which surround it and render its application complex and challenging.

The key is how effectively reflective practice is perceived, done or taught. The study sought to determine whether RP embodies professional artistry, encourage critical self-aware and embrace transformation and change, or that reflective practice is only bland and mechanical with practitioners disinclined to ask awkward questions. It has also opened the door for questions such as: How should models of reflection be used and in what context? The study encourages us to continue reflecting critically on these issues and questions.

Contemplating and researching such questions and issues, will, then, make reflective practice fulfill its potential to help us “make sense of the uncertainty in our workplaces” and offer us the “courage to work competently and ethically at the edge of order and chaos” (Ghaye, 2000, p.7).
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## Appendices

### Appendix (A)

#### Demographic Data

##### Interviewees Profile

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<th>Academic degree</th>
<th>Experience in UAE</th>
<th>Experience outside UAE</th>
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<td>15</td>
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<td>8</td>
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Appendix (B)

Solicitation Letter to Teachers

Understanding Reflective Practice

You are invited to participate in a study conducted by Mr. Hassan Alzubair, English Language and Education Studies Faculty at Emirates College for Advanced Education, Abu Dhabi, UAE. This study intends to explore your perceptions, as an EMI teacher educator, on reflective practice and how you help your student teachers become reflective practitioners.

The research tools used in this research are semi-structured interviews, observations and document analysis. In order to assure quality and authenticity of data collection, the interviews will be conducted face to face and will be recorded. Triangulation will also be sought via using observations and document analysis. Individual responses will be written and voice recorded to assure reliability and validity of the data collected. The data will be collected at the college and 45-60 minutes will be allocated to gather responses for the semi-structured interviews. One observation of stimulated recall session will be held with each participant. This will be arranged at the convenience of the participants. All information obtained in this study that can be identified with you will remain confidential at all times and will be disclosed only with your permission or as required by UAE law.

Brief description of the research

This research represents an exploratory study on how the EMI teacher educators understand reflective teaching and how they perceive their role in promoting reflective future school teachers. The study has the potential benefits of enhancing and developing teachers’ practice at schools through investigating their educators understanding of and roles in reflective practice.

There will be no compensation or risks for taking part in the study.

Your decision whether or not to participate will not prejudice your future relations with the Emirates College for Advanced Education. If you decide to participate, you are free to withdraw your consent and to discontinue participation any time before or during the study. The Research Committee at the Emirates College has reviewed and approved this research

Thank You

Mr. Hassan Alzubair
Appendix (C)

Informed Consent Form

College of Graduate Studies

Sudan University of Science and Technology

I have read and understood the research aims, purposes and benefit to the field. I understand that my participation in this research is entirely voluntary and I may withdraw my participation at any time. I have the right to refuse permission for the publication of any information about me. All the information I provide will be confidential and for study purposes only. I am also aware that my participation in the study will be anonymous.

(Signature of participant) ..................................................

(Date)..................................

(Printed name of participant) ..........................................................

One copy of this form will be kept by the participant; a second copy will be kept by the researcher.

Contact phone number of researcher(s): 0506717150

If you have any concerns about the research that you would like to discuss, please contact: Mr. Hassan Alzubair at E-mail: hassanalzubair@yahoo.com
Appendix (D)

Selections of Core Question Areas

- Notion of knowledge, and…
- How knowledge can be acquired;
- Understanding of learning process;
- Understanding of reflective learning;
- Role of mentor in reflective practice.
- What is the meaning of reflection?
- What do teachers reflect on?
- Is reflection learned from self or significant others?
- When do you normally reflect: on action, in action or for action?
- Is reflection based on personal beliefs and educational theory?
- Modes of reflection: oral, written or both?
Appendix (E)

Self-Reflection Sheet
Sample of Student Practicum Portfolios, 2014

WEEKLY REFLECTION

Each week choose any two lessons (individual or integrated) that you taught and reflect on the following areas and answer these questions in a paragraph format:

5 Grade:

Lesson Topic:

A. Students
- Were you able to address the needs of your individual students? If so, how?
- How did the students work within their small groups?
- Were the students engaged in learning? How do you know?

This week I started full teaching for both sections. First I teach English lesson which was about how to write paragraph. I focused more in individual works when I told the students to write sentences and they make a paragraph from these sentences. I noticed that the students were engaged and love the lesson because they wrote any sentence they want.

In the next day also in English lesson I taught the students more about paragraphs. In this lesson I focused more in group works were I show them first example of paragraph and the students work in groups to write short paragraph together. The students also were engaged in this lesson because they had more chance to talk and discus.

B. Teaching
- How did you build from students’ prior learning or background?
- What worked well in your lesson and why?
- What would you do differently and why?

From both lessons i build the lesson by asking the students questions about the sentences and how we write the sentences. Also I show them many different examples of paragraphs.

In the first lesson many things went well because many students felt easy to write sentences and then connect them in to paragraph. In addition, If I had chance next time I will teach the students more about how to write the sentence correctly and I will give them some pictures to help them.

In the second lesson many things worked well because the students liked to work in groups and they get many sentences. Next time if I
will teach this lesson I will give each group specific topic to write about because all of the groups was writing about the class.

C. Planning and Management
   - Was the time sufficient for the lesson? How do you know?
   - What behavior management strategies did you use? How did it work?
   - How do you know if you made progress towards the outcomes?

In the first lesson I had good management of the students and time because the students were working individually and I gave them specific time to finish. Also I choose the jewels chart to manage the students behaviors. I noticed that all of the students know how to connect the sentences together which made fell feel happy about the outcomes.

In the next lesson I had some difficult to manage the class and the time because the students were work in groups and they take long time in writing and thinking about different sentences. Also in this lesson I was happy about the outcomes because all of the groups started writing the paragraph.
Appendix (F)

Sample Interview Script

Q: in your teaching what are you trying to achieve?

A: Ah. Well.. Definitely to actually .. I mean I believe there are outcomes that are measurable I also believe there is such a thing as liberal education where students are actually growing into like as people in many different areas of expertise and I see though our students aren’t necessarily primed with skills base and knowledge base and sort of the holist picture of the person if you like we still got to develop the whole person. So a lot of that is within our domain I believe. I don’t believe everything every outcome is measureable. And I think the area of reflective practice is something to do with developing the whole person. If you reflect on your .. what you do on a daily basis, you know, before you go to stage you know it makes us a whole that part of you is a person if you like. If you’re a reflective person, you can grow in ways that you can’t if you aren’t reflective. I think part of our reflection comes from reading and knowledge that you absorb over years. And I think our students may be lacking a little of that growth from their school system. So when I stage, much as I read there should be measureable outcomes on our course outline and son and so forth. I think what we are doing is developing the whole person. I think that involves a lot of reflection. Our students don’t fully comprehend you know I mean the whole meaning of reflective practice there isn’t one there are many reflective practices. And I believe our students are not necessarily in tune with being reflective with reading and reflecting based on reading on knowledge, I mean it’s a generalization perhaps there are a little bit limited in their growth. Let’s say, um.. you need to expand their horizons for them be reflective person.
Q: Before talking about reflective practice, you called yourself a reflective person, could you elaborate on that?

A: Am I reflective person by nature? I’d say that I am … I’d say that my educational background in the UK fosters that kind of reflectivity if you like. Umm… It may be that I am excessively reflective: It may be that I’m reflective beyond the norm, you know. I’m not necessarily the sort of pragmatic and the realistic if you like. I do believe you do learn from experience by reflection on your own practices I also do believe you learn through reading and that informs your reflection; I mean can you be reflective if you don’t have knowledge to reflect on, if you like.

Q: From this perspective, how do you define reflection itself?

A: I think it’s thinking back. I think it’s action and reaction! I think it’s understanding what could be done better… improving. It’s about …uh…..uh … thinking about theeeeee …. whole: I mean I see it as very holistic, I mean to me, a reflective person is actually somewhat with doubt … [not clear]. I see it as being a positive… umm.. umm phenomenon.
Appendix (G)

Interview Guide

EMI Teacher Educators’ understanding of reflective teaching and their perceptions of their roles in preparing reflective future teachers

Interview guide

Questions:

1. What are you trying to achieve in your work with your students?
2. What do you understand by the term ‘reflection’? (means to you)
3. What do you understand by the term ‘reflective practice’?
4. Do you consider yourself a reflective person? Why?
5. How do you reflect on your practice?
6. What do you reflect on?
7. Do you think your students have opportunities to think?
8. How has your own (or your students’) practice developed as a result of reflection?
9. How do you help your students become reflective practitioners?
   (approach) (Structure, activities.)
10. What areas do you encourage your students to reflect on?
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<tr>
<td>11. How do you define learning?</td>
</tr>
<tr>
<td>12. What are the best ways to acquire a new knowledge?</td>
</tr>
<tr>
<td>13. What kind of students do best in your classes?</td>
</tr>
<tr>
<td>14. What kinds of exposure to knowledge facilitate learning in your classes?</td>
</tr>
<tr>
<td>15. What kinds of learning strategies do you encourage in your learners?</td>
</tr>
<tr>
<td>16. What are the ones you do not encourage in your learners?</td>
</tr>
<tr>
<td>17. What role are students expected to assume in your classroom?</td>
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## Appendix (H)

(Observation Data Analysis - Kelly)

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<td>Deep and surface learning process</td>
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<td>6</td>
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<td>7</td>
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<tr>
<td>8</td>
<td></td>
<td>Peer/group discussion</td>
<td>Study Group</td>
<td>3- Scaffolding (4 Sub-themes)</td>
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<tr>
<td>9</td>
<td></td>
<td>Guided reading/writing</td>
<td>Reflective Journal</td>
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<td>Structured/unstructured thought</td>
<td>Q: tell me the three most things you have learnt this week?</td>
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<tr>
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<td>3 introductory sessions, and students conducting and submitting an action research</td>
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<td>12</td>
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<td>Mentor’s Lesson Observation</td>
<td>4- Topical Pedagogy (3 Sub-themes)</td>
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<td>13</td>
<td></td>
<td>Practice Dilemma</td>
<td>Self-reflection Sheet (see Appendix 7)</td>
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# Appendix (K)

(Observation Data Analysis - Andrew)

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<th>Sub-themes (14)</th>
<th>Observation: Participants (6)</th>
<th>Themes (4)</th>
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<td>Andrew</td>
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<td>Deep and surface learning process</td>
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<td>2- Understanding (3 Sub-themes)</td>
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<td>Open Discussion</td>
<td>3- Scaffolding (4 Sub-themes)</td>
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<td>Guided reading/writing</td>
<td>Reflective Journal</td>
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<td>Q: What kind of language styles and strategies did you encourage in your class?</td>
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<td>3 introductory sessions, and students conducting and submitting an action research</td>
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<tr>
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<td>Peer observation conference</td>
<td>4- Topical Pedagogy (3 Sub-themes)</td>
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<td></td>
<td>Practice Dilemma</td>
<td>Self-reflection Sheet (see Appendix 7)</td>
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### Appendix (L)
*(Observation Data Analysis - Geoffrey)*

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<th>Themes (4)</th>
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<td>1- Self-awareness (4 Sub-themes)</td>
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<tr>
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<td>5</td>
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<td>Deep and surface learning process</td>
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<td>2- Understanding (3 Sub-themes )</td>
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<td>6</td>
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<tr>
<td>7</td>
<td></td>
<td>Self-directed inquiry</td>
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<tr>
<td>8</td>
<td></td>
<td>Peer/group discussion</td>
<td>Organizing pre-teaching session to discuss tasks, expectations and plans.</td>
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<tr>
<td>9</td>
<td></td>
<td>Guided reading/writing</td>
<td>Assigned students portions to read and present to the group.</td>
<td>3- Scaffolding (4 Sub-themes)</td>
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<tr>
<td>10</td>
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<td>Structured/unstructured thought</td>
<td>Q: What kind of language styles and strategies did you encourage in your class?</td>
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<td>3 introductory sessions, and students conducting and submitting an action research</td>
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</tr>
<tr>
<td>12</td>
<td></td>
<td>Teaching/learning milieu</td>
<td>Students co-teach a lesson and have a reflection session of the event.</td>
<td>4- Topical Pedagogy (3Sub-themes )</td>
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<tr>
<td>13</td>
<td></td>
<td>Practice Dilemma</td>
<td>Students write a reflective note on their teaching.</td>
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<tr>
<td>14</td>
<td></td>
<td>Critical incident</td>
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<td></td>
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</tbody>
</table>
Appendix (M)

Post Reflection Questions

(Post-Lesson Reflection)

Target language / skill

- Was this appropriate?
- Was it achievable?

Lesson Plan

- Did the stages of the lessons build students’ knowledge?
- Was each stage effective? Why/why not?
- Were the activities suitable for each stage?
- Were the activities differentiated? How?
- Was the timing correct? Why/why not?

Students

- Were they engaged? Why/why not?
- Were they active? Why/why not?
- What problems did they face in language production? Why?
- Were they challenged? How?
- What language did the strong and weak students produce?

Teaching strategies

- How effective were your strategies for:
  - Presenting language?
  - Asking questions?
  - Monitoring?
  - Giving feedback?
  - Correcting?
  - Scaffolding learning?
  - Managing the class, especially the beginning, end and transitions?
  - Managing resources?
  - Managing students’ behaviour?
Appendix (N)
(Self-reflection Questionnaire)

Pre-Service self-reflection on Professional Performance Standards

This questionnaire attempts to describe your professional performance. It is not a test. This self-reflection on performance standards helps you explore yourself professionally, as a novice pre-service teacher. This research tool consists of a questionnaire that embodies 40 statements that describe educators’ performance and a five open ended questions. For each description, tick only one box.

Thank you for your participation

<table>
<thead>
<tr>
<th>The Curriculum:</th>
<th>Almost Always</th>
<th>Often</th>
<th>Sometimes</th>
<th>Seldom</th>
<th>Almost never</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I create teaching-learning opportunities to enhance the successful implementation of the assigned curriculum.</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2. I constantly monitor and adjust my instructional strategies in response to students’ feedback and learning progress.</td>
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<tr>
<td>3. I create learning experiences that are differentiated to meet all (different) students’ needs and abilities.</td>
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<td>4. I plan learning experiences that encourage student creative and critical thinking.</td>
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<tr>
<td>5. I contribute to the preparation of lessons, planning and construction of teaching-learning resources, within the team I work with.</td>
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<tr>
<td>6. I understand the major tools of inquiry in my discipline.</td>
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<td>7. I create learning experience for my students that connect them to the knowledge base of my discipline.</td>
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<td>8. I create interdisciplinary learning experiences that integrate knowledge from several disciplines.</td>
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<td>9. I Know about strategies to support learning of students whose first language is not English.</td>
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</tr>
</tbody>
</table>
1. I ensure that students engage in learning.

2. I create a safe environment where all students can learn.

3. I know how to stimulate the different cognitive processes involved in learning through different instructional techniques, technologies, and resources.

4. I value my students’ active learning.

---

### The Profession:

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Almost Always</th>
<th>Often</th>
<th>Sometimes</th>
<th>Seldom</th>
<th>Almost Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I am a thoughtful and responsive listener.</td>
<td></td>
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<tr>
<td>2.</td>
<td>I engage in professional discourse about children learning in my discipline(s).</td>
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<tr>
<td>3.</td>
<td>I keep abreast of new research and development in my discipline(s).</td>
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<tr>
<td>4.</td>
<td>I take part in professional development organized by the school and I understand its significance to improve my practice.</td>
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<tr>
<td>5.</td>
<td>I undertake all assigned school responsibilities.</td>
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<td>6.</td>
<td>I know the content I teach.</td>
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<td>7.</td>
<td>I know the pedagogy related to the content I teach.</td>
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<td>8.</td>
<td>I take responsibility for establishing a positive climate in my school as a whole.</td>
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<tr>
<td>9.</td>
<td>I engage in professional discourse about children learning in my discipline(s).</td>
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### The Classroom:

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<th>Description</th>
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<th>Often</th>
<th>Sometimes</th>
<th>Seldom</th>
<th>Almost Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I ensure that students engage in learning.</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>2.</td>
<td>I create a safe environment where all students can learn.</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>3.</td>
<td>I know how to stimulate the different cognitive processes involved in learning through different instructional techniques, technologies, and resources.</td>
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<tr>
<td>4.</td>
<td>I value my students’ active learning.</td>
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</tbody>
</table>
5. I encourage my students to become independent, critical, and creative thinkers.
6. I understand the principles of effective classroom management.
7. I use a range of strategies to promote positive relationships, cooperation, and meaningful learning experience in the classroom.
8. I know how to ask questions and stimulate discussion in different ways and for different purposes.
9. I create an environment that makes prudent use of resources.
10. I give constructive feedback to students.

<table>
<thead>
<tr>
<th>The Community:</th>
<th>Almost Always</th>
<th>Often</th>
<th>Sometimes</th>
<th>Seldom</th>
<th>Almost never</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I provide constructive feedback to parents/guardians regarding student progress that is clear and accurately reflects student achievement.</td>
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<tr>
<td>2. I participate in wider school community.</td>
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<tr>
<td>3. I establish respectful and productive relationships with parents/guardians of all my students.</td>
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<td>4. I provide information to parent/guardians about the instructional curricular program.</td>
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<td>5. I am willing to consult with other professionals regarding the education and well-being of my students</td>
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<tr>
<td>6. I use community resources to foster student learning</td>
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<tr>
<td>7. I contribute the professional learning community</td>
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<td>8. I am able to take contextual consideration (i.e. individual student interests and community resources) into account in planning instruction.</td>
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<tr>
<td>9. I value short- and long-term planning with colleagues.</td>
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</table>
OPEN ENDED QUESTIONS:

1- How do you describe yourself as a teacher? Your professional traits/ attributes?

2- What Knowledge do you have about the professional standards expected of you as a teacher in the future? (e.g. expectations/ roles as far as the curriculum, communicating with parents, teaching learning, assessment, team work).

3- What are your strengths professionally speaking? Which professional standards you see yourself excelling at? Why? Give examples?

4- What are your weaknesses professionally speaking, in relation to the professional standards expected from you (classroom management/ student-teacher relationship / school community relationships/ assessment/ planning/ creating resources/ team playing/ technical- language/ pedagogical…?)

5- Which professional standards you may face difficulties with? What makes you think so, why? Give examples relevant to the difficulties you may face in certain professional standards. Would these difficulties hinder you from meeting the professional standards? How? Elaborate.