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Chapter Four

Data Presentation, Analysis and Discussion

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Introduction

The purpose of analyzing data is to obtain useable and useful information. The analysis may describe and summarize the data, identify relationships between variables, compare variables, identify the difference between variables, and forecast outcomes. As previously stated, the data was obtained through the first and second phases of the study. The collected data and information were analyzed in relation to the overarching research question posed in this research. This analysis could ensure validity and reliability of the gathered data.

Table (4.1): ReliabilityStatistics(learners questionnaire)**:**

Reliability Statistics (learner questionnaire)	
Cronbach's Alpha	**N of Items**
.13	35

In order to validate the data collection tool (**Learner** questionnaire), SPSS reliability analysis was used to examine the questionnaire reliability. The questionnaire utilized scored 13% on Cronbach's Alpha scale that is a Score

deemed low than 0.50 (weak). (See table 4. 1). The statistical analysis seems logical on the base of nonexistence of correlation between the different parts that constitute the questionnaire administered to the learners.

Table (4.2):Correlations VARIABLES CLIL:

Hemodialys findings	VARIABLESCLIL			
	Mean	Std Deviation	Pearson Correlation	sig
Learner	15.81	3.05	0.61^{**}	0.00
Motivation	6.50	1.81	0.096	0.50
Second Language Development	9.69	3.38	0.025	0.88
Attitude towards subject taught in English	25.95	4.69	0.76^{**}	0.00

4.1.ReliabilityStatistics:

Highly correlation Sig: Significant $P < 0.05$.

When reading this table we are interested in the results for the Continuity correction. We can see here p-value= 0.00(Less than p_value=0.05). This tells us that there is no statistically significant association. We can accept the alternative hypothesis(Learner), and say that variables are related.

When reading this table we are interested in the results for the Continuity correction. We can see here p-value= 0.50(more than p_value=0.05). This tells us that there is no statistically significant association. We can accept the null hypothesis(Motivation) and say that are not related.

When reading this table we are interested in the results for the Continuity correction. We can see here p-value= 0.88(more than p_value=0.05). This tells us that there is no statistically significant association. We can accept the null hypothesis(Second Language Development) and say that are not related.

When reading this table we are interested in the results for the Continuity correction. We can see here p-value= 0.00(Less than p_value=0.05). This tells us that there is no statistically significant association. We can accept the alternative hypothesis(Attitude towards subject taught in English), and say that variables are related.

4.2.1. Attitudinal aspects

The first question of the questionnaire aims to find out the CLIL learners' attitude towards CLIL (Appendix 1). The CLIL learners were asked only one open-ended question, namely: *What do you think about learning subjects in a foreign language? Please, express your opinion in three to five sentences paying attention to the advantages and disadvantages of learning subjects in a foreign language.* The question was asked in English and there was no language barrier in providing honest answers.. **50** CLIL learners provided an answer to the above mentioned question. On the basis of the answers it can be said that all the CLIL learners who filled in the questionnaire had a very positive attitude towards CLIL. **27** of them enumerated only advantages of learning subjects in a foreign language and only **4** of them provided both advantages and disadvantages. The advantages that the CLIL learners provided while answering the question were the following:

- "acquiring the ability to think in English";

- "possibility to learn more vocabulary";

- "no language barrier";

- "better opportunities in the future – possibility to study and work abroad";

- "possibility to learn more specialised vocabulary which would be impossible to learn while taking part in language courses";

- "possibility to listen to real English every day";

- "quick development of all language skills such as writing, speaking, listening and reading comprehension";

- "possibility to be at the proficient level of English when finishing the school";

- "improvement and development of pronunciation";

- "the lessons are more challenging and interesting";

- "easier life in the future and a well-paid job";

- "possibility to acquire knowledge in two languages";

- "possibility to get to know the language from the practical point of view";

- "possibility to learn more specialised vocabulary which would be impossible to learn in everyday life";

- "helps to take part in different kind of discussions";

- "no problems with speaking or reading in English";

- "helps to gain more self-confidence";

- "a natural way of acquiring a foreign language";

- "great experience";

The disadvantages concerning bilingual were the following:

- "misunderstanding especially in mathematics";

- "possibility of getting lost during the lesson";

- "learning in a foreign language is hard, it requires more thinking";

- "a lot of material to be covered";

- "more time spent on learning";

- "very difficult vocabulary";

- "problems with pronunciation";

- "more studying at home and less free time";

- "language mistakes made by the teacher who are not language teachers";

- "misunderstanding of the lessons";

- "difficulties with learning the material in English, especially mathematics";

- "lots of studying by heart";

As can be seen from the above given opinions, most of the CLIL learners had a very positive attitude towards learning subjects in a foreign language. Nearly all of them mentioned the possibility of studying and working abroad which may mean that they are instrumentally motivated.

The CLIL learners seemed to have more mature attitude towards learning subjects in a foreign language. The CLIL learners also noticed some disadvantages concerning learning subjects in a foreign language. The disadvantages which were most often enumerated were connected with the difficulties of learning subjects in a foreign language as well as with understanding some concepts. Having more experience of learning subjects in a foreign language, the CLIL learners could honestly express their positive and negative opinions.

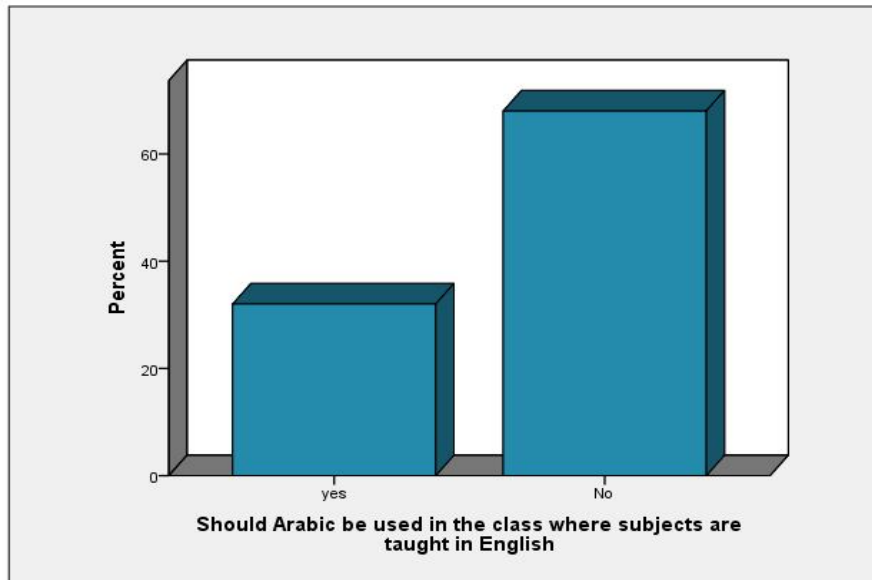**4.2.2 Part one: The use of L1 (Learner)**

Figure 4.1: Should Arabic be used in the class where subjects are taught in English?

In the case of the 1st question concerning the use of Arabic during the lessons where subjects are taught in English, **3% of** CLIL learners chose answer *"yes"* and **68% of** CLIL learners chose answer *"no"*. The percentages show the position of L1 in CLIL classes and the learners attitudes towards this issue in another word, CLIL learners prefer that most of the classroom talk has to be in the target language and cod switching has to take place occasionally. This question share some kind of relation with question two and three which aimed to explain the average use of Arabic in CLIL classes and the reasons for implementing them in classroom practice.

For most of the CLIL learners Arabic is useful and it probably facilitates learning difficult geographical, biological or mathematical concepts.
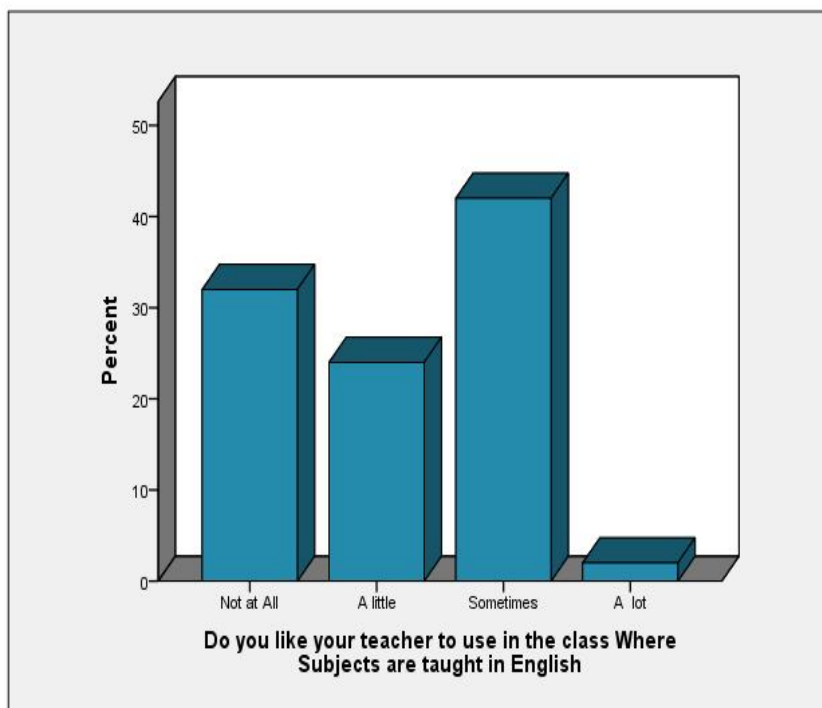
Figure 4.2: Do you like your teacher to use in the class Where Subjects are taught in English

Having analysed the answers concerning question number 2 which concerned the use of Arabic language by the teacher,**3% of** CLIL learners chose the answer *"not at all"*, **4% of** CLIL learners chose the answer *"a little"* and **4% of** CLIL learners chose the answer *"sometimes"*. **2% of** CLIL learnerchose the answer *"a lot"*. It can be also said that most of the CLIL learners like when their teachers use Arabic. All the CLIL learners who chose answer *"yes"* in the 1st question also chose answer *"sometimes"*. Some of them even wrote additional information next to the answer, namely, *"when needed"* or *"in case of difficult vocabulary"*. The CLIL learners who chose answer *"no"* in the 1st questions either answered *"not at all"* or *"a little"* in the 2nd question. The fact that only one learner chose the answer *"a lot"* may mean that the CLIL learners' level of English was high.
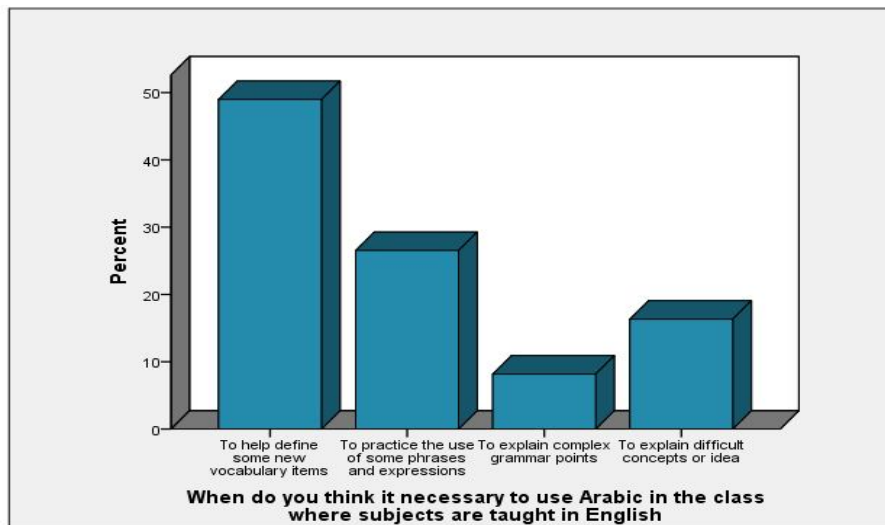
Figure 4.3: When do you think it is necessary to use Arabic in the class where subjects are taught in English?

When having been asked when they thought it was necessary to use Arabic in the classroom, **24** CLIL learners chose answer a "*to help define some new vocabulary items (e.g. some abstract words),* **13** CLIL learners chose answer b *"to practise the use of some phrases and expressions (e.g. doing translation exercises)",* **4** CLIL learners chose answer c *"to explain complex grammar points),* **8** CLIL learners chose answer d *"to explain difficult concepts or ideas),* **nobody** chose answer f *"to give instructions"* **nobody** chose answer f *"to give suggestions on how to learn more effectively"* **nobody** chose "other, specify". The additional answers were: "*when explaining the rules*" and "*when having problems with understanding something*"

In most cases, the CLIL learners find Arabic useful because it helps them to understand difficult concepts and new vocabulary items. The CLIL learners who did not circle any answer also answered "*no*" in question number 1 when being asked if Arabic should be used in a CLIL classroom. Nevertheless, when having been asked if Arabic helped the CLIL learners to learn the subjects **26** CLIL

learners chose answer the *"a little"* and **1** CLIL learner chose answer *"a lot"* and only **5** CLIL learners chose the answer *"no.*

On the basis of the data given, it can be seen that the CLIL learners find Arabic the most useful -when they have problems with new vocabulary as well as some difficult concepts or ideas. The reason why so many CLIL learner chose this answer could be due to the fact that vocabulary is very essential in a CLIL classroom and misunderstanding any new words means misunderstanding the whole concept. The reason why so few learners chose the other answers could be connected with the fact that most of the CLIL learners did not associate a CLIL lesson with explaining new grammar concepts. They had 6 hours of English lessons during a week. As far as instructions and suggestions are concerned, the language is not very difficult so there was no need to use Arabic.
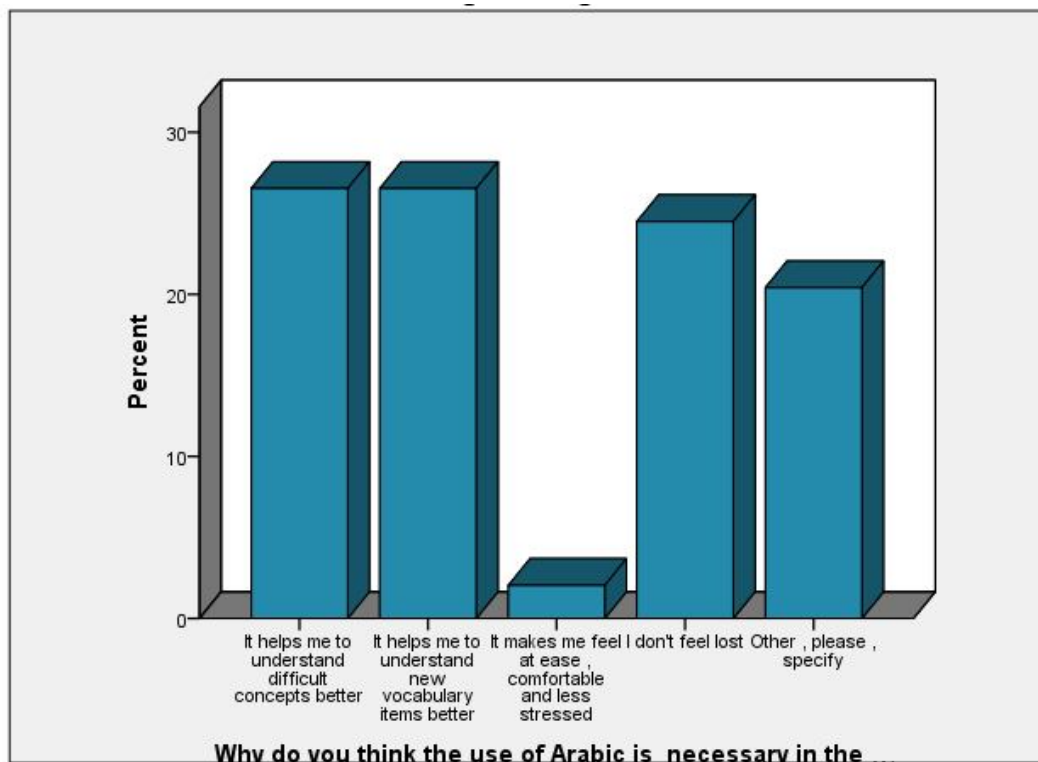

Figure 4.4: Why do you think the use of Arabic is necessary in the class where subjects are taught in English

When having been asked when they thought it was necessary to use Arabic in the classroom, **26** CLIL learners chose answer a "*to help define some new vocabulary items (e.g. some abstract words),* **8** CLIL learners chose answer b *"to practise the use of some phrases and expressions (e.g. doing translation exercises)",* **6** CLIL learners chose answer c *"to explain complex grammar points),* **19** CLIL learners chose answer d *"to explain difficult concepts or ideas),* **nobody** chose answer d *"to give instructions"* **3** CLIL learners chose answer f *"to give suggestions on how to learn more effectively"* **3** CLIL learners chose answer g *"other, specify".* The additional answers were: "*when explaining the rules"* and *"when having problems with understanding something";*

On the basis of the data given, it can be seen that the CLIL learners find Arabic the most useful when they have problems with new vocabulary as well as some difficult concepts or ideas. The reason why so many CLIL learner chose this answer could be due to the fact that vocabulary is very essential in a CLIL classroom and misunderstanding any new words means misunderstanding the whole concept. The reason why so few learners chose the other answers could be connected with the fact that most of the CLIL learners did not associate a CLIL lesson with explaining new grammar concepts. They had 6 hours of English lessons during a week. As far as instructions and suggestions are concerned, the

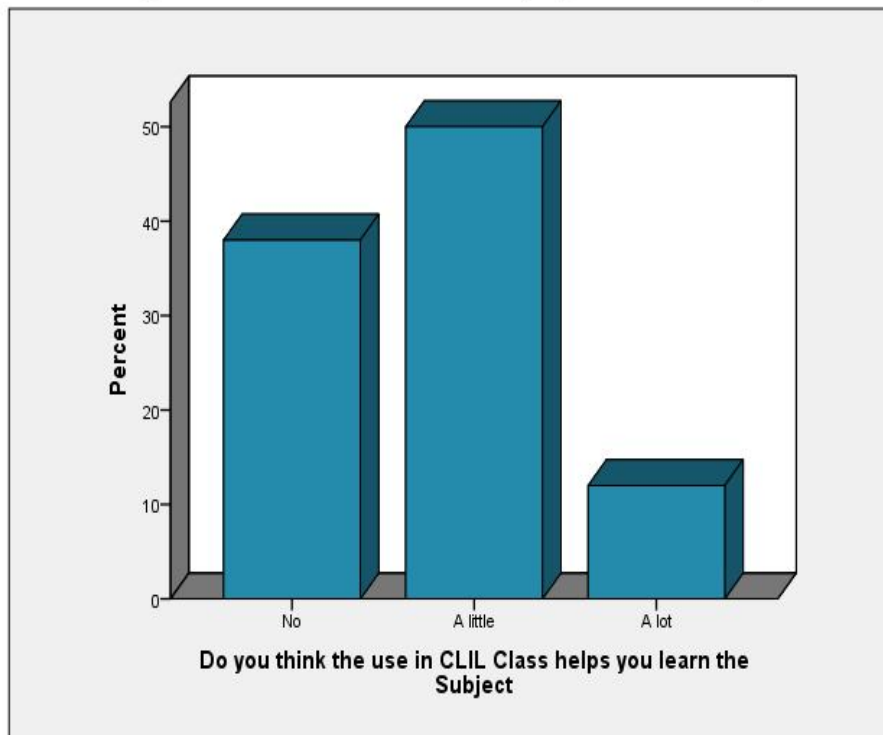language is not very difficult so there was no need to use Arabic.

Figure 4. 5: Do you think the use of Arabic in CLIL Class helps you learn the Subject

Having been asked about the frequency of Arabic used in a class where subjects are taught in English **19 (38%)** CLIL learner chose answer *"no"*, **25 (50%) of** CLIL learners chose answer *"alittle"*, **6 (12%) of** CLIL learners chose answer *"alot"*. In the case of percentages,most of the respondent regard using Arabic must be very restricted or may not use at all.
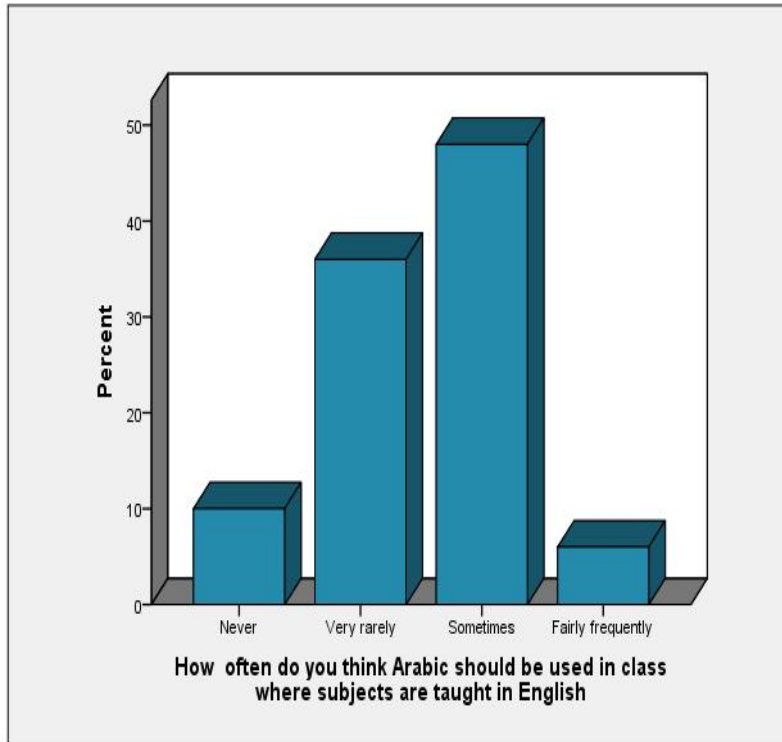
Figure 4. 6: How often do you think Arabic should be used in class where subjects are taught in English?

Having been asked about the frequency of Arabic used in a class where subjects are taught in English **5 (10%) of the** CLIL learners chose answer *"never"*, the **18 (36%) of** CLIL learners chose answer *"very rarely"*, **24 (40%) of** CLIL learners chose answer *"sometimes"*. **3 (6%)** CLIL learners chose"fairly frequently"**.** According to the graph, the respondent have a positive view of making the target language as the language of giving instruction despite the fact that some CLIL learners agreed that should never be used in giving instructions.
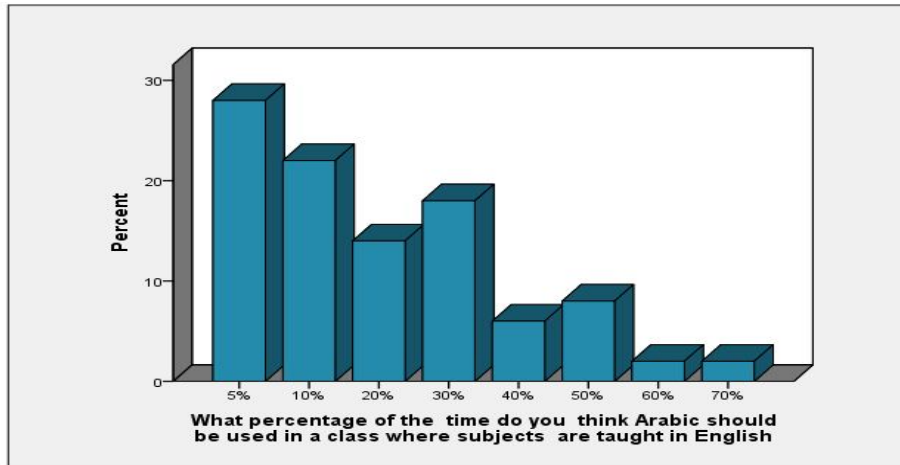
Figure 4.7: What percentage of the time do you think Arabic should be used in a class where subjects are taught in English

In the case of percentages, **14** CLIL learners chose *5%*, **11** CLIL learners chose *10%*, **7** CLIL learners chose *20%* and **9** CLIL learners chose *30%*. **3** CLIL learners chose *40%* **4** CLIL learners chose *50%* **1** CLIL learners chose *60%* **1** CLIL learners chose *70%*. *Nobody chose 80% and 90%*

On the basis of the data, it can be seen that most of the CLIL learners prefer Arabic to be used very rarely during the CLIL classes which may also indicate their high level of English.
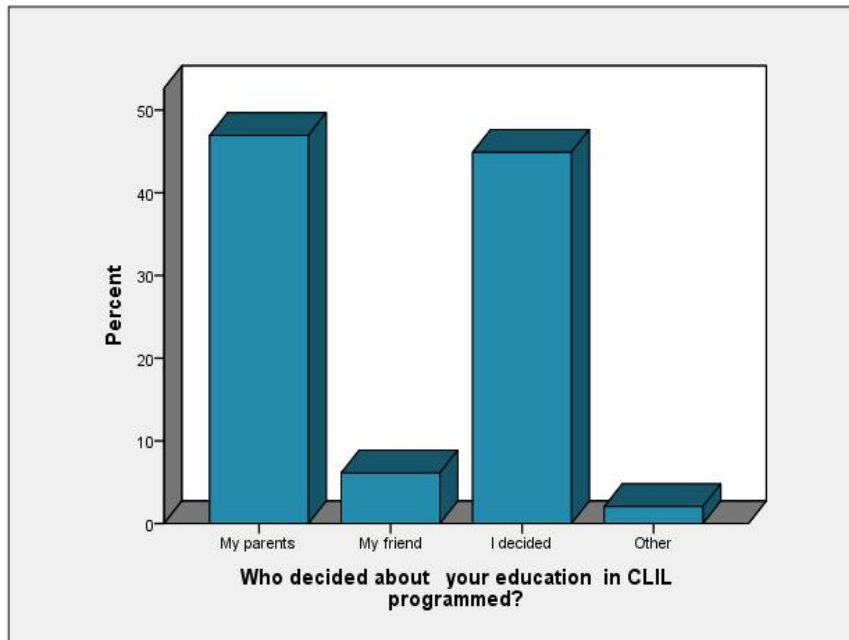
4.3.1. Part two: Motivation

Figure 4. 8: Who decided about   your education in CLIL programme?

A question number 1 was a close-ended question: *Who decided about your bilingual education?* The learners had a choice between: **23 (46%)***my parents ,this variable represents the majority of the respondents* **3(6%)** *my friends, this item represent very few number . 22 (44%) made the choice   I decided, they form the vast majority* and *1 (2%) chose other.*

From the data provided above, it can be seen that most of the learners are extrinsically motivated due to the fact that most of them decided to choose bilingual education because of the future possibilities. It should be also pointed out that most of them took the decision concerning bilingual education on their own which means that these students are mature and fully aware of their future prospects. However, in my opinion most of them must have discussed their choice with their parents due to their age – when taking the decision, the learners were at

the age of 16. What is more, all the learners were satisfied with their bilingual education, however, all of them claimed that they were more motivated in the beginning (of the school). From the data provided above, it is obvious that they all wanted to continue their bilingual education yet they were fully aware of its drawbacks due to their one year experience. The most motivating factor turned out to be the possibility to learn English which is the lingua franca. The most de-motivating factor was the amount of material they have to learn. All in all, the learners seemed to be still motivated to continue their bilingual education which "opens the door" to the future world.
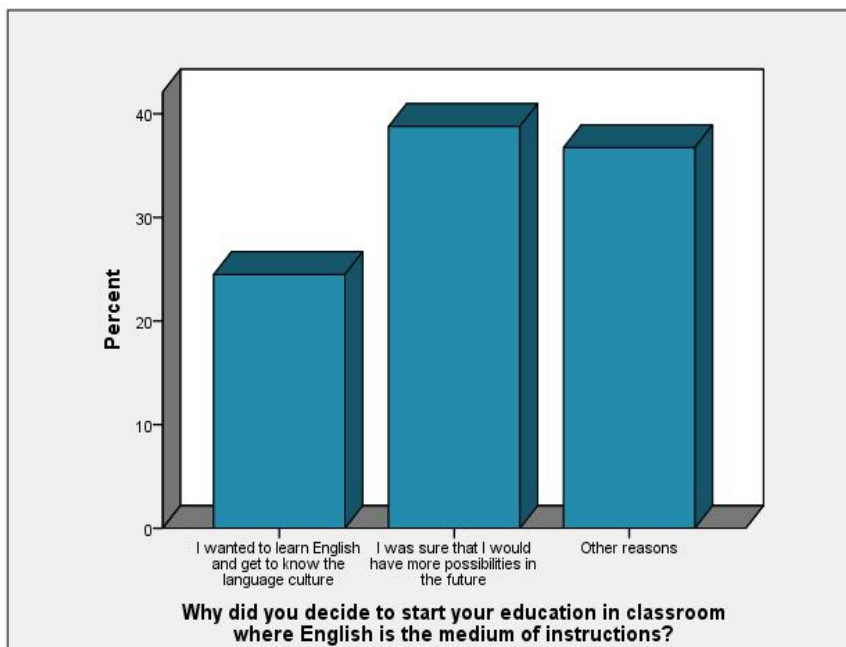

Figure 4.9: Why did you decide to start your education in classroom where English is the medium of instructions

A question number 2 was also a close-ended question which was the following: *Why did you decide to start your education in a bilingual classroom?* The learners could choose: **24**% of the learners chose "*I wanted to learn English and get to*

know the language culture",38% tick "I was sure that I would have more possibilities in the future" and the variable *"other" was* **36%** of learners.

The reasons that seem convenient for CLIL learners to join the type of bilingual education were another factors which motivate learners.
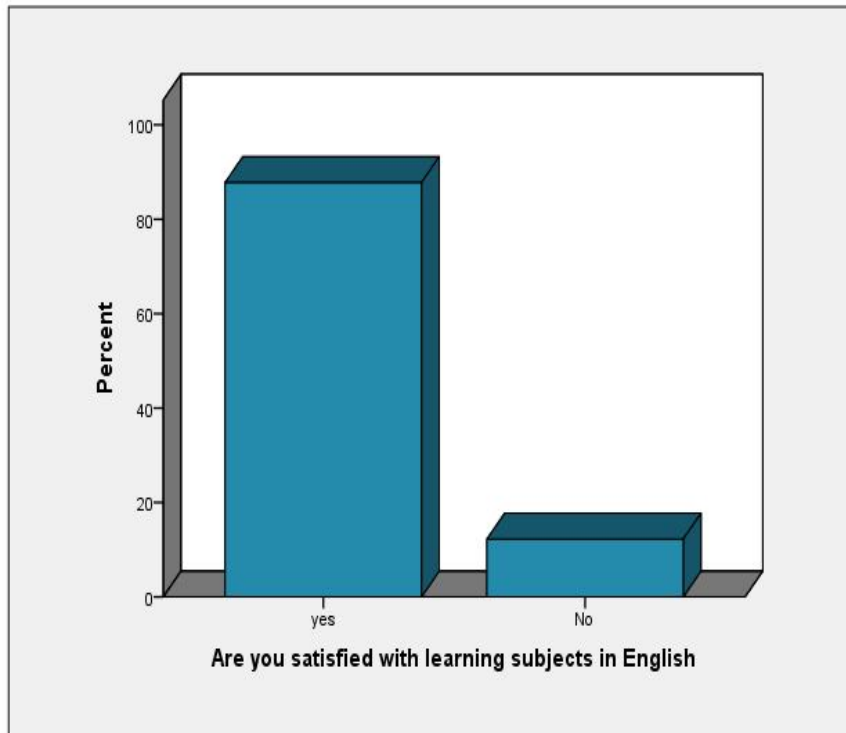

Figure 4. 10: Are you satisfied with learning subjects in English

A question number 3 was the following: *Are you satisfied with learning subjects in English? Justify your answer.* **43** of the respondents, form **86%** answered *yes* and **6** respondent **12%** chose no. The reasons did not differ much. The following were the most often mentioned, e.g.

Yes

- "learning subjects in English is interesting – I can read various books";
- "my English is much better";
- "I have learnt a lot of different words";

- "there are just advantages";

- "I can improve my speaking skills";

 - "I will have more chances abroad";

 No

-"I can't follow the lesson"

-"I feel lost when I fail tests"

-"I have problems with speaking"

A question number 4 was the following: What do you like about the lesson in English?

 It was open question and the most common answers were the following:

- "we get to know new vocabulary";

- "we practice different skills – speaking, listening, reading and writing";

- "we watch a lot of films, e.g. geography";

- "the lessons are more interesting, e.g. we prepare projects for biology";

- "English – the most beautiful language in the world";

- "satisfaction when I understand my maths teacher";

A question number 5 was the following: *What don't you like about the lessons in English?* **The most** common answers were:

-"some subjects are boring";

- "language mistakes made by the teachers";

- "teachers' accent and intonation – it's not natural";

- "sometimes I have no idea what the teacher is talking about";
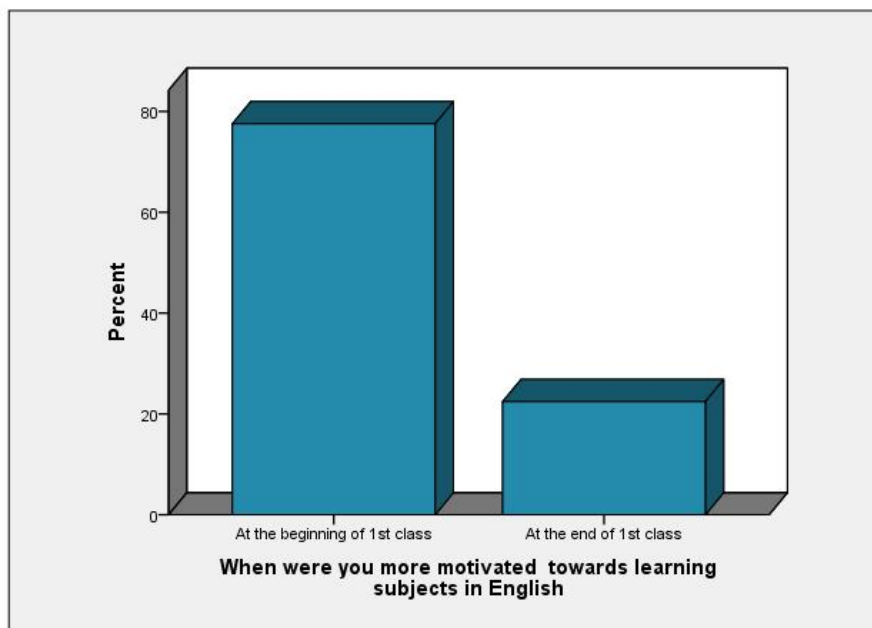
- "a lot of new vocabulary";

Figure 4. 11: When were you more motivated towards learning subjects in English

The last question was a close-ended question: *When were you more motivated towards learning subjects in English?* The learners could choose one of the following answers: *at the beginning of the 1st class* or *at the end of the 1st class*. **38** of the learners(76%) chose answer *A – at the beginning of the 1st class*. **11** of the learners (22%) chose answer B- at the end of the *1st class.*

From the data provided above, it can be seen that most of the learners are extrinsically motivated due to the fact that most of them decided to choose bilingual education because of the future possibilities. It should be also pointed out that most of them took the decision concerning bilingual education on their own which means that these students are mature and fully aware of their future prospects. However, in my opinion most of them must have discussed their choice with their parents due to their age – when taking the decision, the learners were at the age of 16. What is more, all the learners were satisfied with their bilingual

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education, however, all of them claimed that they were more motivated in the beginning in the second year. From the data provided above, it is obvious that they all wanted to continue their bilingual education yet they were fully aware of its drawbacks due to their one year experience. The most motivating factor turned out to be the possibility to learn English which is the lingua franca. The most de-motivating factor was the amount of material they have to learn. All in all, the learners seemed to be still motivated to continue their bilingual education which "opens the door" to the future world.

4.4.1. Part three: Second Language Development:

The aim of this part of the questionnaire was to find out the CLIL learners' opinion concerning their development of L2 abilities as well as to find out which CLIL subjects they considered the most difficult (Appendix: 1).

In the 1st part of the questionnaire the CLIL learners were asked whether they had made progress in particular second language skills such as speaking, writing, listening comprehension and reading comprehension. They were also asked in which areas, if any, they had made progress. In the case of speaking, writing and reading comprehension, the range of the answer yes was **34** to **38** CLIL learners answered that they had made progress. In the case of listening comprehension **27** CLIL learners answered that they had made progress and only **3** answered that they had not made any progress.

Most of the CLIL learners provided additional information concerning areas in which they had made progress or had not made any progress. The additional answers were the following:
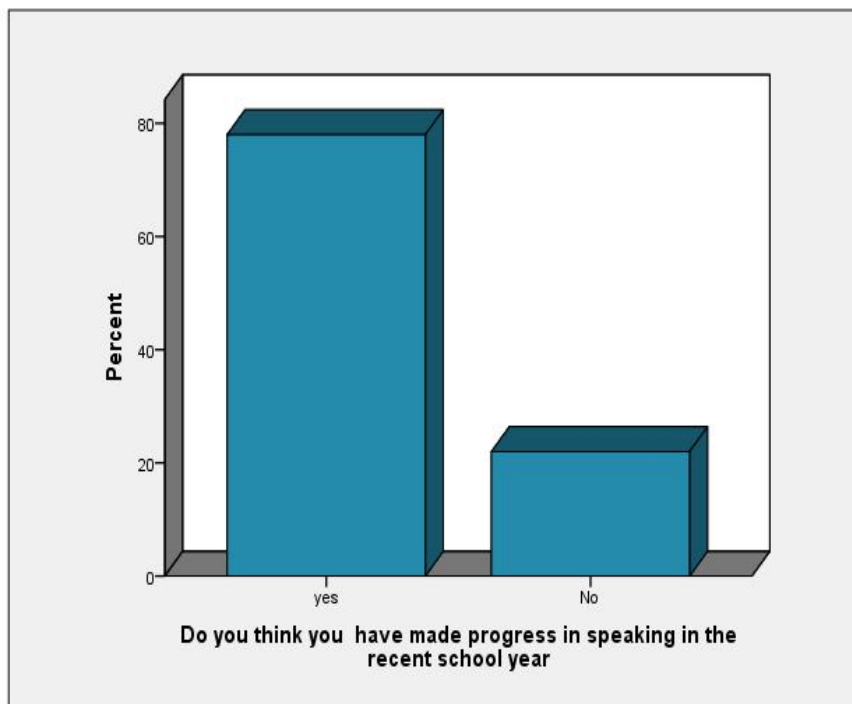
Figure 4. 12: Do you think you have made progress in speaking in the recent school year

Speaking: The frequencies explained that 80% answered they have made progress in speaking while 20% answered they didn't made progress in this skill, bellow are the reasons they mentioned:

- "we know more vocabulary and as a result we are better in communication especially with native speakers";
- "the bilingual classes were very helpful because we had to speak in English all the time";
- "we are more fluent";
- "there is no language barrier anymore in case of speaking";
- "we are much better in using linking devices";
- "we are much better in explaining things in English and in translation";

- "The student exchanges were really useful";

- "we have no problems with expressing ourselves";

- "we know more synonyms";

- "pronunciation is much better";

- "we are used to thinking in English";

- "more self-confidence";

- "we understand questions that the teachers ask us";

- "British pronunciation";

- "our grammar has really improved";

- "now we know lots of expressions which are useful in discussion";

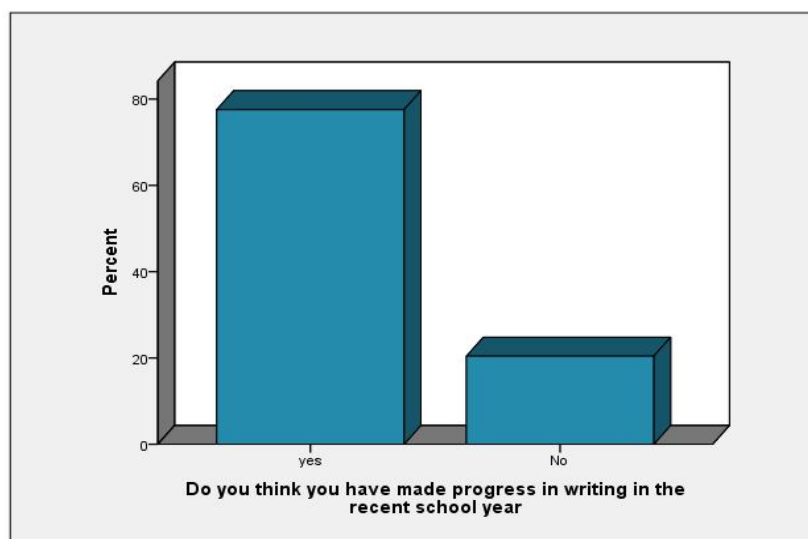The CLIL learner who chose answer "no" did not provide any explanation.

Figure 4. 13: Do you think you have made progress in writing in the recent school year

76% of the respondent chose the answer "yes" and 22% of the respondent chose " no" , here are some reasons the respondent have offered to justify their choice.

- "our spelling is much better";

- "we have no problems with using linking devices";

- "our grammar has definitely improved – I'm not afraid of using conditionals, passive voice or indirect speech";

- "we got to know different styles of writing";

- "now we know the layout of particular written forms";

- "everywhere – I haven't written many compositions before";

- "we write a lot";

- "we are really good at writing reports, articles and descriptions";

- "we rather don't have any problems with writing formal compositions";

The CLIL learner who chose answer "no" provided the following answer:

- "I know how to write because I already passed CAE and we had to write a lot of compositions. Nothing can surprise me anymore. I don't think that I can make any progress here";
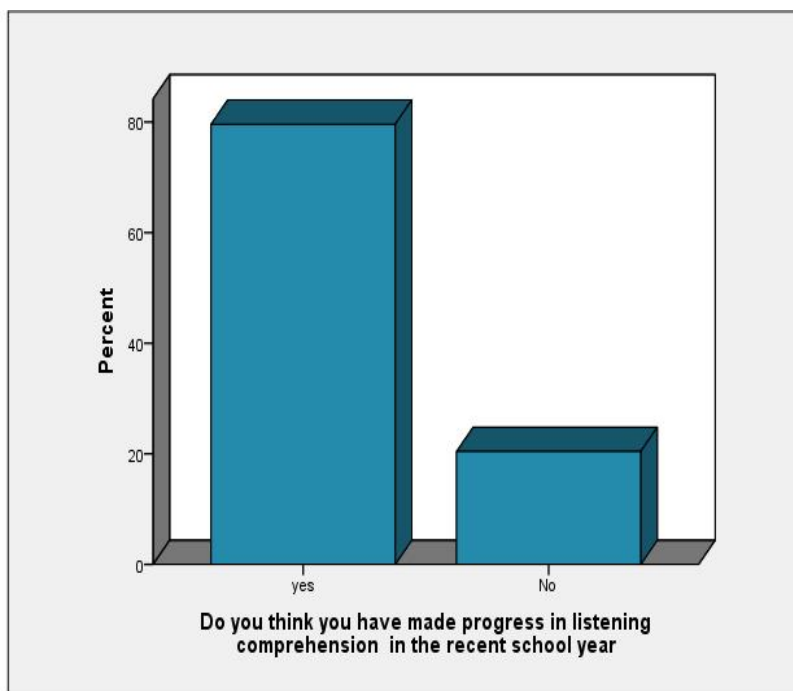

Figure 4.14: Do you think you have made progress in listening comprehension in the recent school year

The majority of the respondent (78%) confirmed they had made progress as far as listening comprehension is concerned while 20% of them had disapproval of making advancement in listening comprehension, The reseasons the presented reveal actual causes of the advancement they students had made:

- "we can understand different accents – British, American, Indian etc.";

- "I'm much better at getting the details while doing some listening comprehension tasks";

- "we can associate words";

- "we understand native speakers who speak really fast";

- "I can understand Scottish";

- "I don't pay attention to accents anymore, I just understand them";

- "we have a lot of listening comprehension tasks during our bilingual lessons";

- "we have no problems with talking to native speakers";

- "we are used to the sound of English now";

- "I have no problems with English songs";

- "Foreign exchanges really helped us with listening";

- "I know more words so I understand more";

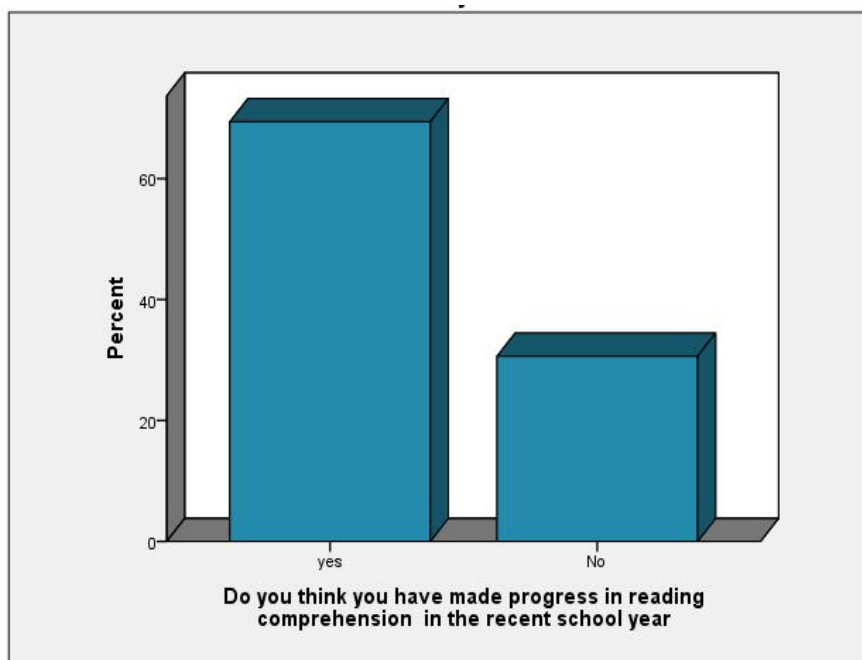The CLIL learners who chose answer "no" did not provide any explanation.

Figure 4.15: Do you think you have made progress in reading comprehension in the recent school year

The percentage concerning the progression in reading comprehension are: 68% chose "yes" and 30% chose "no" and reasons are as follow:

- "more vocabulary";

- "we got used to sophisticated grammar because of the number of articles that we had to read";

- "we have fewer problems with reading comprehension";

- "I have no problem with reading British or American newspapers";

- "we are more fluent and quicker while reading";

- "I have started reading books in English, e.g. Harry Potter";

- "we can guess words from the context";

- "we get a lot of texts to read during geography or biology";

- "I don't highlight as many words as I used to";

- "reading has become more friendly";

- "there are lots of nice expressions, colloquialisms and idioms which we can learn from different texts";

- "I don't have any problems with interpreting texts";

The CLIL learner who chose answer "no" did not provide any explanation.

Having analysed the data provided above, it can be seen that most of the CLIL learners were sure that they had made progress in all second language areas. When talking about the areas of L2 development most of them enumerated vocabulary which turned out to be helpful in speaking, writing, reading comprehension and listening comprehension. All the positive answers provided turned out to be very enthusiastic – the CLIL learners often used exclamation marks or "smiling faces" in order to underline that in this particular area they had made a significant progress. The data provided above also shows the CLIL learners attitude towards learning English as a second language.
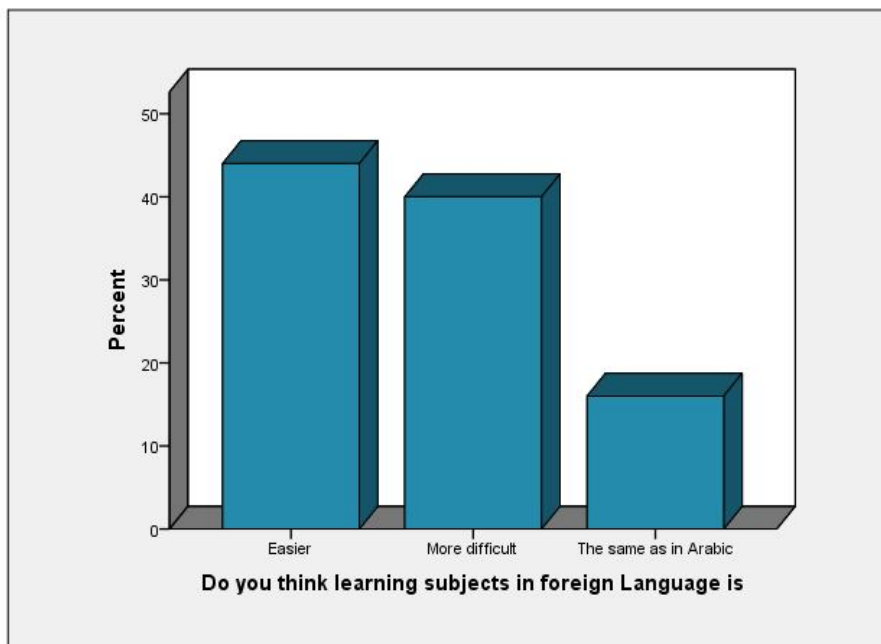

Figure 4.16: Do you think learning subjects in foreign Language is

In the second part of the questionnaire there were two questions asked concerning the bilingual subjects. They were asked whether learning subjects in a foreign language is easier, more difficult or the same as in Arabic and which subjects they considered particular difficult to learn in a foreign language. In both cases they were asked to justify their answers.

44% of CLIL learners chose the first answer "more easier" and **40% of** CLIL learners chose the second answer "more difficult ". **16% of** CLIL learners answer "the same in Arabic"

In the case of the CLIL learners who chose the second answer "more difficult" the additional answers were the following:

- "sometimes I don't understand what the teacher is talking about, especially in case of biology";

- "apart from the content we also have to learn a lot of vocabulary";

- "we have to spend a lot of time on checking the meaning of vocabulary";

- "we have to think in English which is more difficult";

- "we need to learn both in English and in Arabic";

- "we need to spend a lot of time translating from Arabic into English";

- "the course books are in Arabic and therefore it is more difficult";

- "we need describe the things more often especially when we don't know vocabulary";

- "I have to learn a lot of things by heart";

- "learning in English is time-consuming";

 - "it requires more concentration";

In the case of the CLIL learners who chose the third answer "the same as in Arabic" the additional answers were the following:

- "I can think in Arabic and in English, I can't see any difference";

- "we just get used to using English – it's natural";

- "there are a lot of thematic words in English which are similar to the ones in Arabic";

- "there is no language barrier anymore, so learning in English has become a pleasure";

- "our level of English is very high";

- "when we learn in Arabic we also get to know new concepts so there is no difference whether you do it in Arabic or in English";

As it can be seen from the data provided above, the CLIL learners who chose the second answer usually considered learning subjects in a foreign language more difficult due to the amount of new vocabulary. However, there were also a lot of them who did not consider learning subjects in a foreign language more difficult due to the fact that they felt very confident in using English.
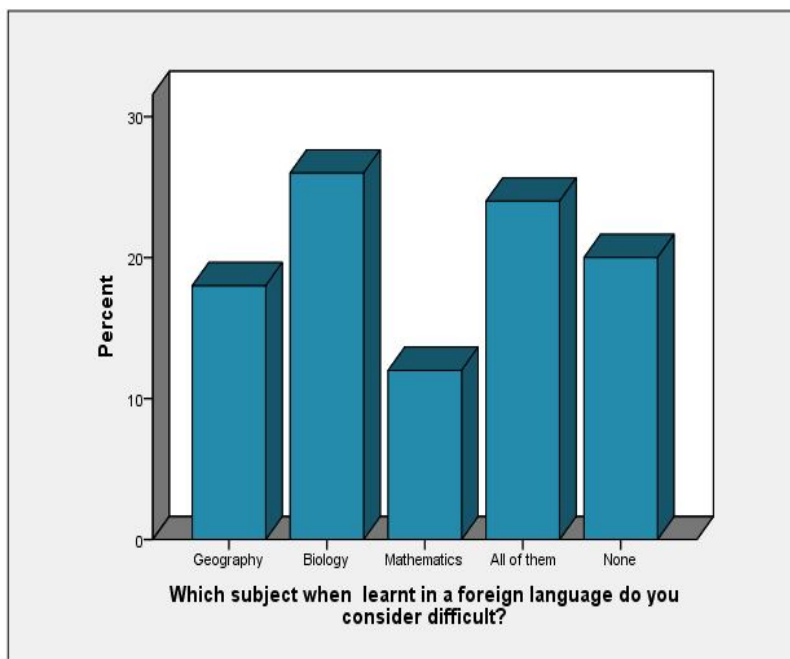

Figure 4.17: Which subject when learnt in a foreign language do you consider difficult

In the case of the question concerning difficulty of particular subjects, **18% of** CLIL learners chose, "geography**" ,26% of** CLIL learners chose "biology", **12% of** CLIL learners chose "mathematics" and only **24%** CLIL learners chose "all of them", and **10% of** CLIL stated that none of the subjects was difficult to learn in a foreign language.

The additional information concerning difficulty of particular subjects provided by the CLIL learners were the following:

Geography:

- "a very difficult vocabulary";

- "a course book in Arabic";

- "difficult additional materials, e.g. articles from *National Geographic"*

Biology:

-"a lot of new vocabulary";

- "the teacher is too fast";

- "too many notes – just writing during the lessons";

- "double learning – English and Arabic vocabulary";

Mathematics:

-"I cannot understand the teacher";

- "the teacher's pronunciation is very bad";

- "Mathematics is difficult itself – I just can't understand it in any language";

None of the subjects:

- "the difficulties are not connected with the subject";

- "I got used to learning subjects in English, the language is not important here";

- "my level of English is high enough to understand the above mentioned subjects";

- "most of us have learnt English since we were kids, it's like our mother tongue";

Surprisingly, most of the CLIL learners did not consider any subject difficult in a foreign language. Only few of them chose geography or biology which they considered difficult due to the amount of new vocabulary.

4.5.1 Part four: Attitude towards subject taught in English
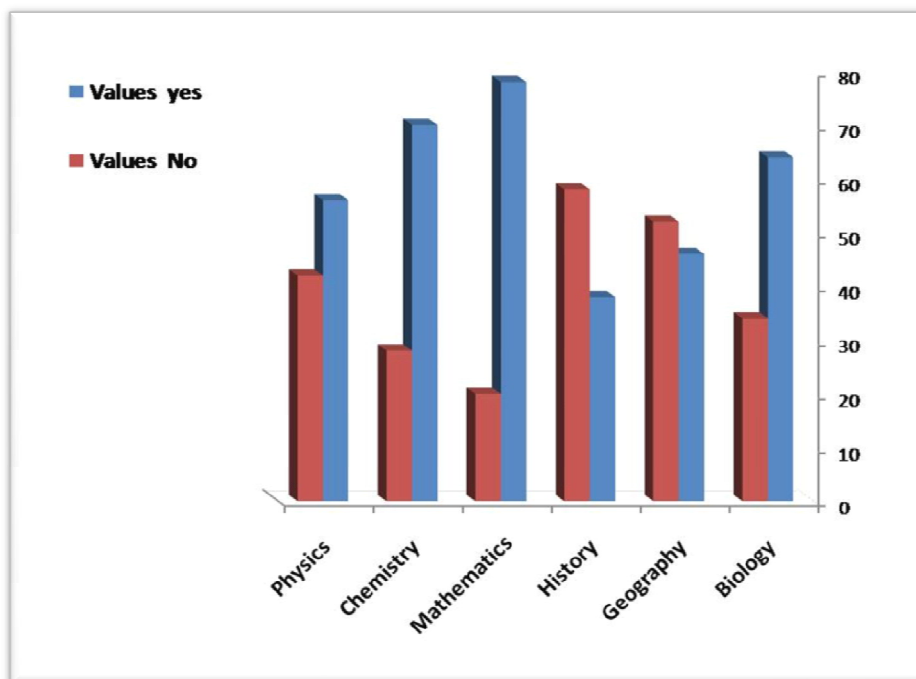
Figure 4.18: I like Learning

The subjects are easy to learn even in English, they are down to earth. I can't imagine learning sciences in English

Summing up, the CLIL learners have a very positive attitude to the subjects which are of a global dimension such as geography or history. The same can be said in regard to the learners who have also a very positive attitude to scientific subjects . The CLIL learners made their choices according to their interests in certain study area. The overall result concerning sciences being learnt in a foreign language

revealed that learners have a positive attitudes to learn a subject through English in general . The frequencies for the alternatives "yes" and "no" showed the estimated preference in the case of science studies and slight drop towards humanities.
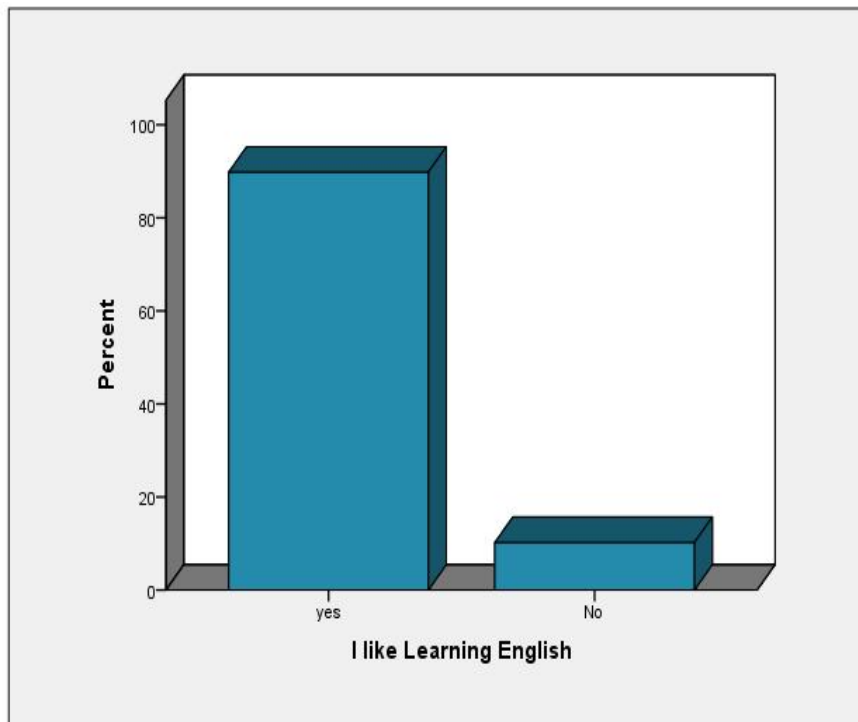
Figure 4.19: I like Learning English

The graph shows that CLIL learners have a positive attitudes towards learning English. The choices they made reveals that 88% of the respondent like English thus, on one hand will help them to acquire both language and content and enhance issues related classroom on the other. Consequently, learning process can run smoothly. CLIL teachers will find a room to distinguish reflective methodological approach and issues that support classroom interaction. The respondent who chose no were only 8% compared with the above mentioned group, they form a limited

minority of the total number. In my view this number is either influenced by their parent desire towards CLIL programme or they started learning English at late stage of their academic study.
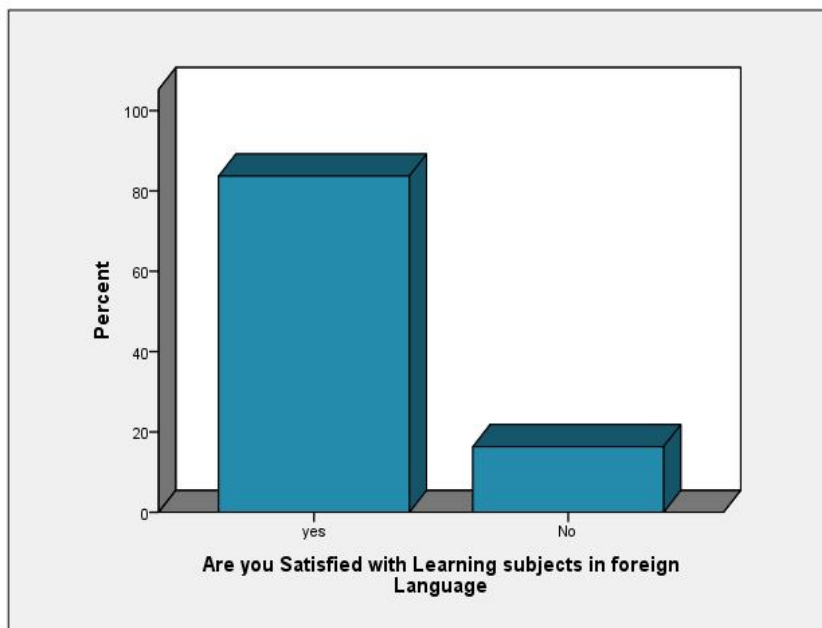
Figure 4.20: Are you Satisfied with Learning subjects in foreign Language

A question number 3 was the following: *Are you satisfied with learning subjects in English? Justify your answer.* **88%** the respondents answered *yes* and **10%** and didn't give any reasons to explain their answers while the reasons for the first group will be presented in the graph bellow.
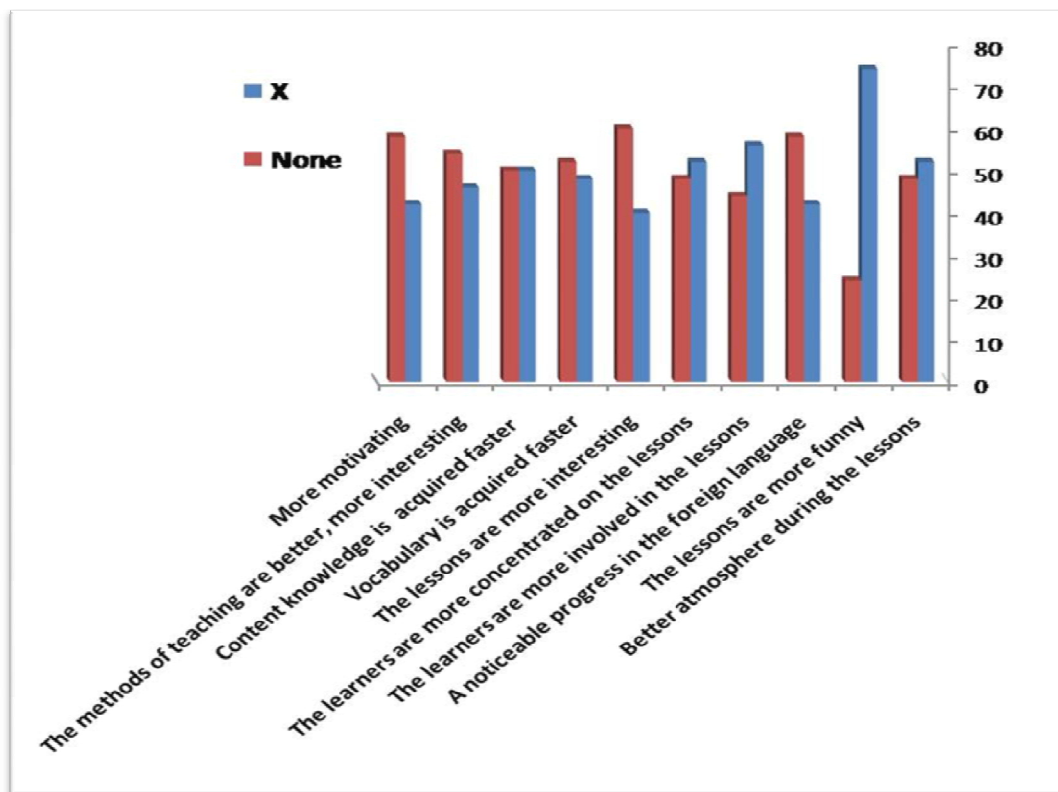
Figure 4.21: Are you satisfied with learning English through Other subject

A question number three was the following: *Are you satisfied with learning subjects in English? Justify your answer.* All the respondents answered *yes* and the reasons did not differ much. The following were the most often mentioned, e.g.

- "learning subjects in English is interesting

I can read various books";

- "my English is much better";

- "I have learnt a lot of different words";

- "there are just advantages";

- "I can improve my speaking skills";

- "I will have more chances abroad";

In the second part of the question the respondent e were asked to tick reasons for their satisfaction from a list given, the list included: **52%** chose " better atmosphere " **74%**" The lessons are more funny" **42%"**A noticeable progress in the foreign language" **56%** "The learners are more involved in the lessons" **52%**"The learners are more concentrated on the lessons" **40%"**The lessons are more interesting " **48%**"Vocabulary is acquired faster" 50%"Content knowledge is acquired faster" **46% "**The methods of teaching are better, more interesting**" 42%"** More motivating"

From the above data it can be seen that learner's satisfaction in CLIL lessons stems out from number of factors such learning environment, durability of the syllabus which addresses every day situation, different methodologies of CLIL which help to acquire both language and content and motivating factors which help learners to be much aware with educational settings that shape learner's advancement in the overall language competence.

4.6.1 Teacher's Questionnaire

Statistical techniques were used to analyze the data obtained from the field. Some of the computer software applications used for the survey were Statistical Package for the Social scientists (SPSS). The results were presented in both quantitative and qualitative terms. They were in the forms of frequency tables, histograms, bar graphs, pie charts, and time series graph. Inferences and to this end, questionnaires were administered to 50 teacher and 50 learners in the schools .

Table (4.3): ReliabilityStatistics:

Reliability   Statistics   (teacher questionnaire)

Cronbach's Alpha	N of Items
.62	18

In order to validate the data collection tool (teacher questionnaire), SPSS reliability analysis was used to examine the questionnaire reliability. The questionnaire utilized scored 62% on Cronbach's Alpha scale that is a Score deemed high than 0.50 is acceptable. (See table 4.1).

Apart from the questionnaire distributed among the CLIL learners there was also a questionnaire concerning attitude towards teaching subjects in a bilingual classroom distributed among the CLIL teachers (Appendix: 2). The CLIL teachers were asked the same question, namely: *What do you think about learning subjects in a foreign language? Please, express your opinion in three to five sentences*

paying attention to the advantages and disadvantages of learning subjects in a foreign language. 50 CLIL teachers filled in the questionnaire which was distributed by the researcher and collected within few days. While answering the question concerning their attitude towards CLIL the teachers tried to be very objective and as a result both advantages and disadvantages of CLIL were provided.

ADVANTAGES:

-"a lot of educational materials available in English";

- "the teacher is obliged to express his/her thoughts very clearly";

- "bilingual education 'opens the door' to Europe";

- "the possibility to study abroad";

- "the teacher acquires vocabulary in a foreign language";

- "the learner develops all language skills i.e. speaking, writing, listening and reading";

- "bilingual education prepares the learners for their future career";

DISADVANTAGES:

- "it's time-consuming";

- "learners who are considered to be weaker may have some problems in acquiring subjects in a foreign language";

- "available materials may not be adaptable to certain levels";- "language teaching is neglected – the most important is the subject";

- "the lessons seem to be slower – the teacher has to repeat certain information many times";

- "most of the information has to be put on the blackboard which is time-consuming";

- "in many cases the learners pay attention to the English vocabulary and tend to forget the Arabic equivalents";

Due to the number of CLIL teachers questioned, there were fewer opinions provided than in case of CLIL learners. Having analysed the data provided by the CLIL teachers it can be said that their attitude towards CLIL was more negative than the CLIL learners' attitude which was due to their rich experience in teaching.
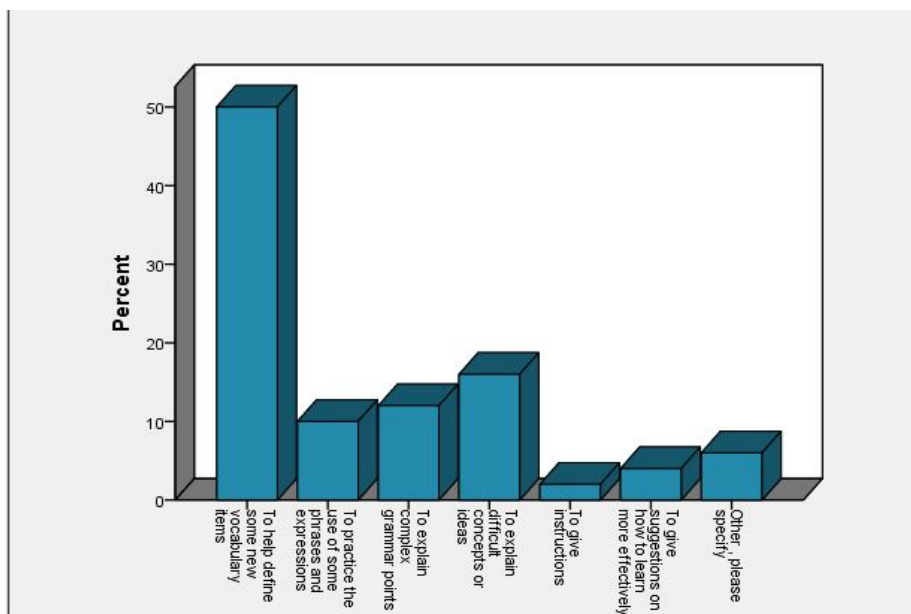
Figure 4.22: when do you think it necessary to use Arabic in the class where Subjects are taught in English

In the case of the question concerning the use of L1 during the class where subjects are taught in English which was conducted among the CLIL teachers, all **t**CLIL agreed that Arabic should be used in the class where subjects are taught in English due to the fact that some concepts are very difficult to explain in English. They also agreed that the use of Arabic helps to define some new vocabulary items (e.g. some abstract words) and to explain difficult concepts and ideas. All the CLIL teachers were fully aware of the purpose of using Arabic in a CLIL classroom.

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They also added that the use of Arabic in the class where subjects are taught in English facilitates comprehension and is less time-consuming.

Having analysed the answers given by the CLIL learners, it is important to mention that all the CLIL teachers had the same opinion concerning the necessity of the use of Arabic in a CLIL classroom, which indicates homogeneous way of thinking.
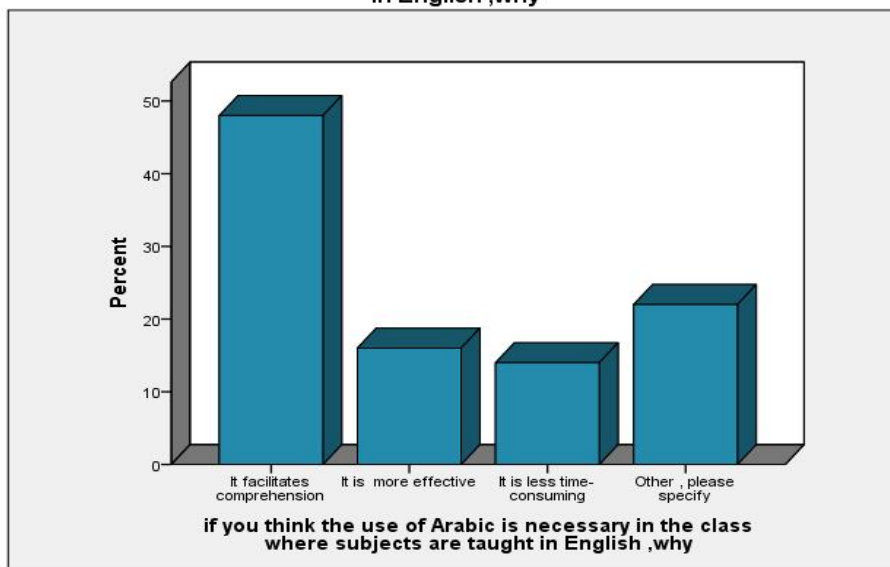

Figure 4.23: if you think the use of Arabic is necessary in the class where subjects are taught in English ,why?

48% of the respondent chose to facilitate comprehension , 16% answered its more effective, 14% chose it is less time consuming and 22% chose other. The answers confirmed that the use of L1 in CLIL classes helps in enhancing learning process in a way or another.

Motivation

The teachers were only asked two open-ended questions: *What are the motivating factors as far as teaching in a bilingual classroom is concerned* and *what are the de-motivating factors as far as teaching in a bilingual classroom is concerned?*

The teachers enumerated the following motivating factors:

- "learners' achievements – they are able to speak, e.g. about bones in English or they take part in language competitions which they win";

- "learners future achievements at foreign Universities";

- "the possibility to improve my own knowledge in a foreign language";

- "a lot of possibilities, e.g. trips abroad, meeting foreigners, exchanges etc";

The teachers enumerated the following de-motivating factors:

- "lack of materials";

- "lack of financial support";

- "lack of teacher training concerning CLIL methodology and some established criteria for the creation of teaching materials";

- "lack of agendas for schools";

- "lack of teacher cooperation as far as sharing materials is concerned";

- "teaching materials created for native speakers which are often too difficult to use in the early years of a CLIL course";

As it can be seen from the data provided above, the teachers enumerated more de-motivating factors than the motivating ones. These factors are mostly connected with extrinsic motivation. Hopefully, these factors will not take over the motivating factors which are mainly intrinsic ones.
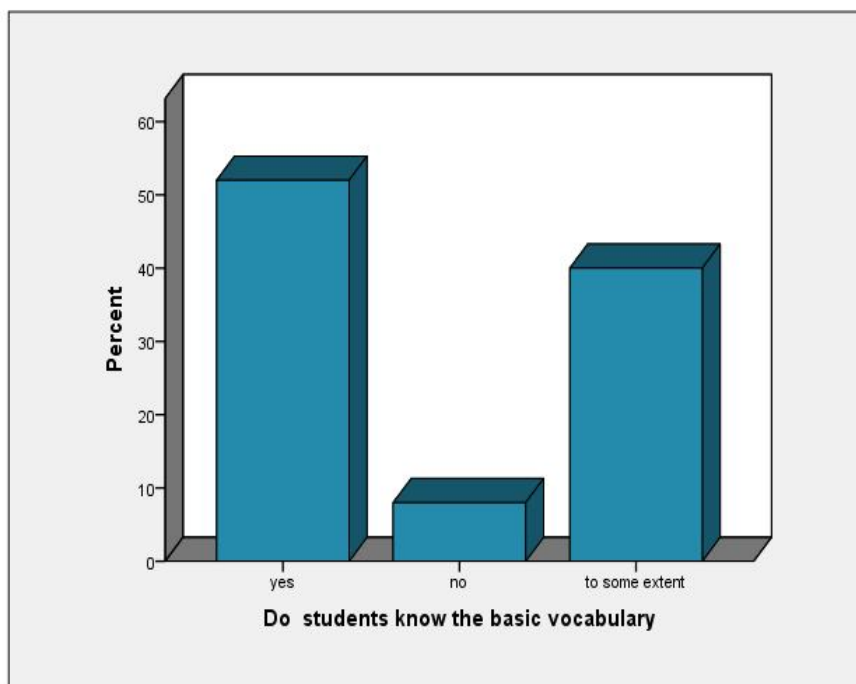
Figure 4.24: Do students know the basic vocabulary

As it can be seen from table (1) most of the respondents agreed that their students know the basic vocabulary of content (subject), 8.0% of them made the variable no as their choice while the rest of the respondents form 40.0% percent of the total number.

With regard to the basic vocabulary, the majority of respondents known the basic vocabulary for learning new content. Thus, is an indicator that CLIL students develop linguistic competence because of the diversity of academic vocabulary they deal with across school curricular.
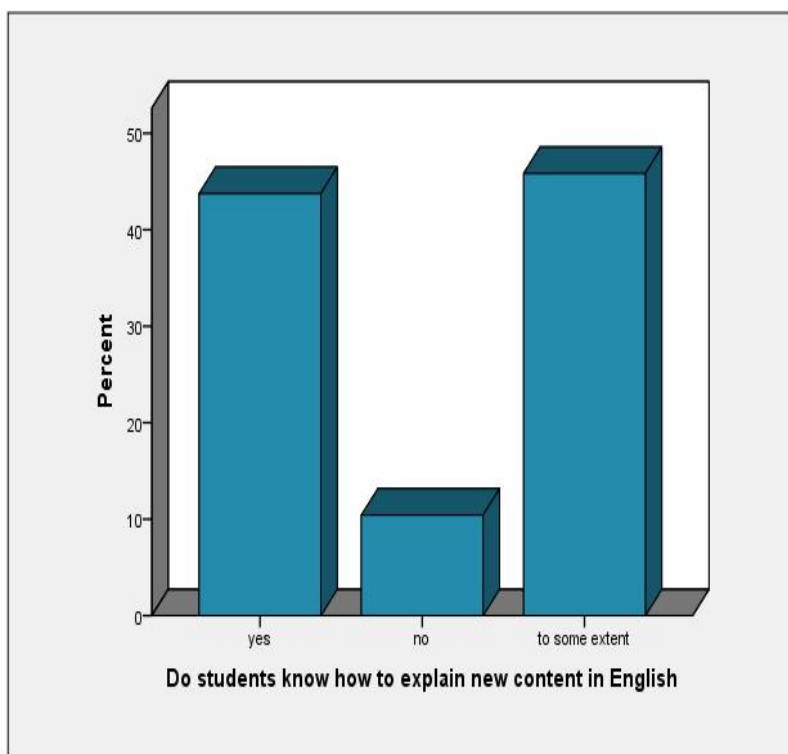
Figure 4.25: Do students know how to explain new content in English

It should be noted that this assumption explains that CLILin classroom broadly consists of introducing aspects related to communicative competence and curricular materials offer the students a natural situation for language development. As a result when they produce output they do it simultaneously on the base of a solid learning ground driven from both language and content.

At upper secondary level too, the overall aim, expressed in the syllabus, isto enhance students' communicative skills, although there is a graduallyincreasing focus on academic language, as students should develop proficiencyin using language related to the profile of their educational programme, suchas the Natural or the Social Sciences (Swedish National Agency for Education,2011b). Further, students' ability to communicate in formal contexts as well,using complex language structures, including contextually appropriate phrasesand vocabulary,

should be developed at upper secondary level. Studentsshould, for instance, learn how to report, reason, summarise and argue inEnglish.In content and language integrated learning (CLIL), thebasic assumption is that foreign or second language learning is enhanced whenthe target language is used to teach non-language subjects (Coyle, Hood &Marsh, 2010).
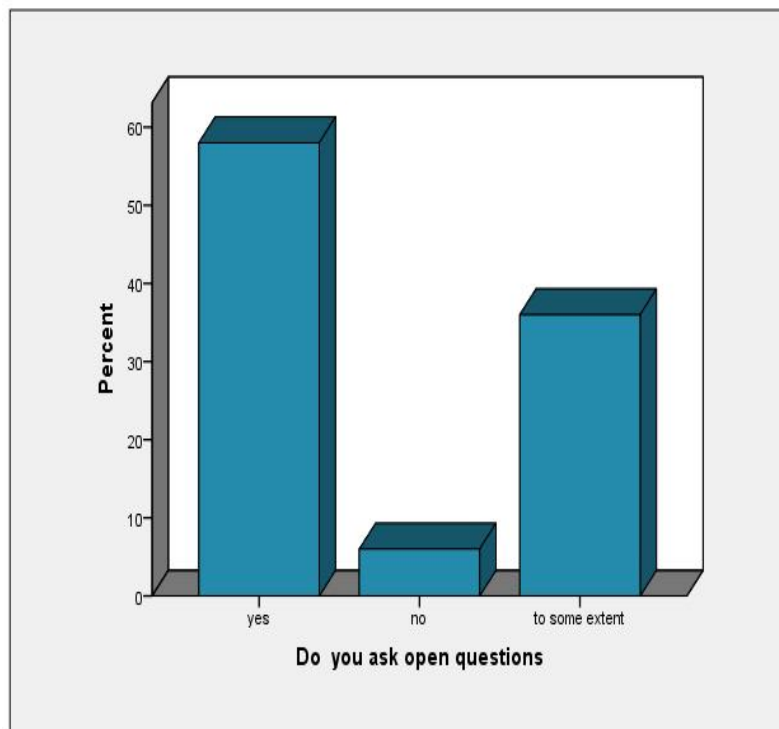
Figure 4.26: Do you ask open questions

The influence of the teacher's use of questions is vital in creating what interactive learning environment where students can get involved in discussion and knowledge sharing. Thus, not only focus on the traditional distinction between open and closed question but on the contrary, it what makes a question open or closed is the teacher's feedback or response to the students' answers to that question. The kinds of teachers' feedback moves that successfully create an interactive learning environment. For instance, when the teacher distances her/his

feedback from being an evaluation of the student's answer as wrong or right, more communication takes place.
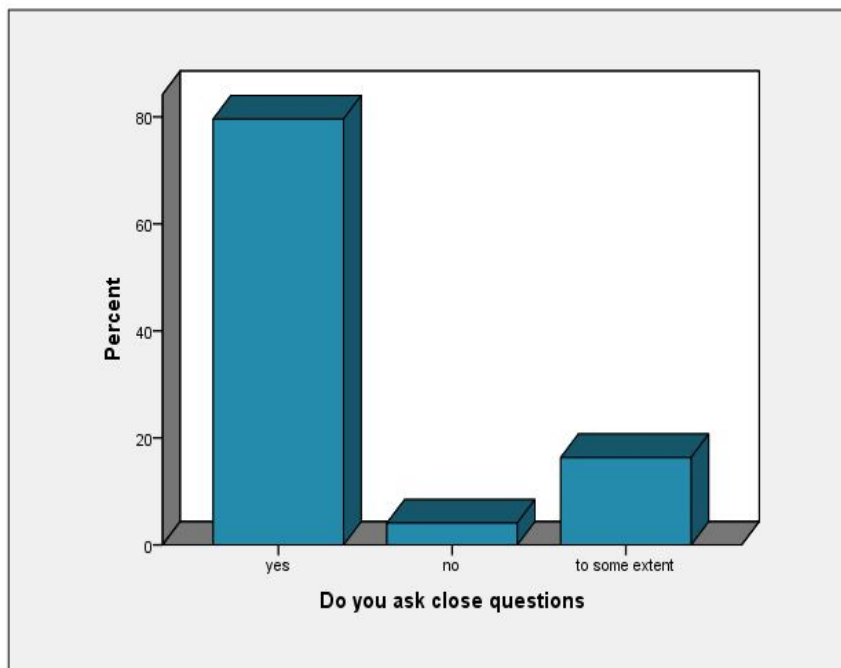
Figure 4.27: Do you ask close questions

Speech in CLIL classrooms, in particular student output, is examined by looking at questions as a vital element of classroom talk and many researchers agree that teacher questions are the key to the amount as well as quality of students" language production. "Especially in whole-class interaction the type of question asked by the teacher will have a direct impact on quality and quantity of language output produced by the students" (Nikula, Dalton-Puffer &Llinares 2013: 77). Working with question-type taxonomies, such as open or closed questions, suggest that certain question types lead to longer as well as more complex student answers. Closed questions, also called yes/no questions, are easy to understand and quick to answer whereas open questions, that are wh-questions, are more demanding and allow more space for the response but they also put higher demands on the questioner because the answer is less predictable. Thus, many open questions are

not as open as they seem to be because they often allow a quick one-word answer and so the conversation control stays with the teacher. As a consequence, student responses are usually quite short and only randomly consist of more than one word, mostly the answer is yes/no, a noun, or sometimes a verb. "It must be the context of didactic discourse which determines that numerous questions which are formally „open-ended" are treated as closed by the participants" (Dalton-Puffer 2006: 198). In that the students" preference for single noun answers does not depend on the type of question asked, Dalton-Puffer (2006: 193; 198) suggests that the type of information sought by the questioner is responsible for the amount of student output.

Evidently, student responses differ in quantity and quality according to what kind of information they are supposed to provide. Questions for facts almost universally result in minimal responses, no matter whether they are [open or closed]. If, in contrast, teachers aim at students" beliefs and opinions or require them to explain, define or give reasons, they are quite likely to get extended student responses. (Dalton-Puffer 2006: 205)

Hence, if teachers want to improve the speaking skills of their students, they need to allocate more discourse space to them and this can be done via asking non-facts questions (Dalton-Puffer 2006: 192-193; 197-198; 205).

According to a Finnish study by Nikula (2010: 119-120) CLIL lessons do offer more room for active participation in classroom discourse than content lessons in the students" L1 because students and teachers are on a more equal footing regarding the right to engage in classroom discourse. "[T]he greater sense of social symmetry between the teacher and the students in CLIL lessons may be due to the teacher lacking some of the language resources with which to contribute to subtle creation and re-creation of classroom power differentials in English" (Nikula 2010: 119). Another dimension of the concept of discourse space is the so called mask

effect, which has been observed by Gassner and Maillat (2006: 18-20) in Swiss CLIL lessons. Students produce richer output in role plays conducted in the CLIL target language than in their L1 and this pragmatic mask effect is triggered by the use of a L2 in CLIL. The mask effect is "a pragmatically induced discursive pattern characterised by referential and modal blocking, whereby the linguistic activity becomes a purely language-internal phenomenon which ceases to refer and to imply epistemic grounding" (Gassner&Maillat 2006: 19). Such a mask effect is not available in traditional language lessons because here the foreign language represents the focal point of learning. Thus, the pragmatic differences between CLIL and EFL classrooms, for example the mask effect or reduced error correction, are responsible for the lower foreign-language-speaking anxiety of CLIL students (Dalton-Puffer 2011: 190 and Gassner&Maillat 2006: 18-20).
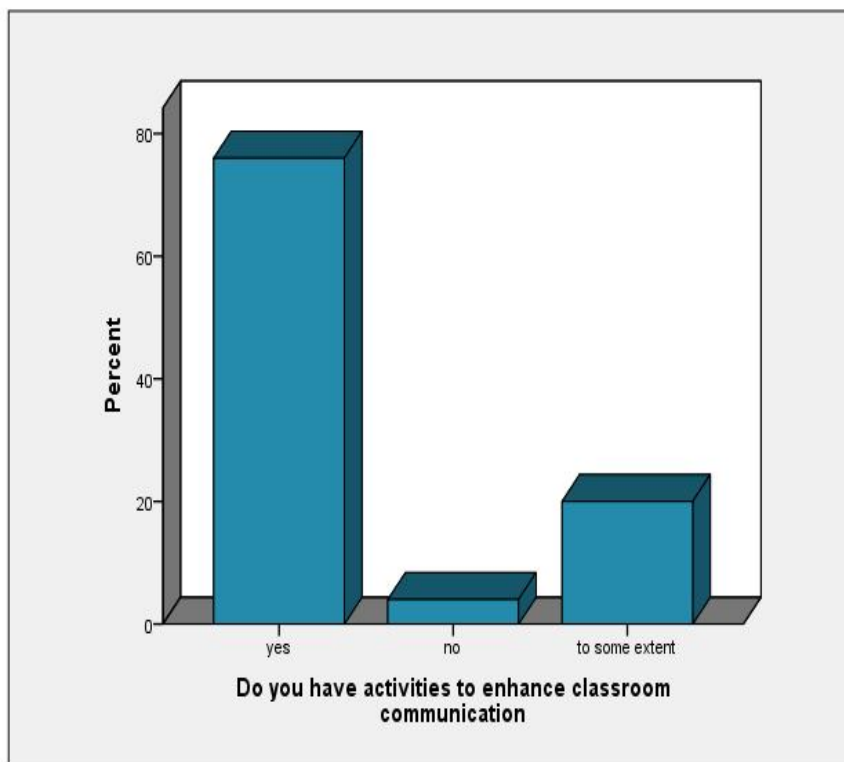
Figure 4.28: Do you have activities to enhance classroom communication

When students are engaged in a learning activity they are actively working, and both the content and the new language they are studying are in their short-term memory. This is similar to a phrase on a blackboard: if it is not permanently placed in their long-term memory, it can easily be erased or forgotten. Consequently, different types of classroom interaction is due certain classroom pedagogical features that CLIL learners and teachers practice to check understanding content matters.
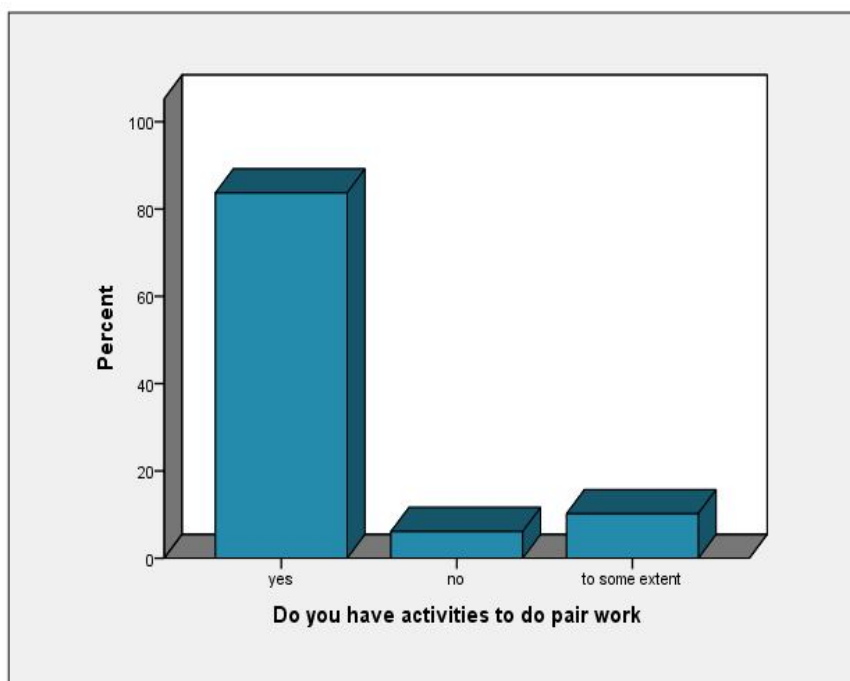
Figure 4.29: Do you have activities to do pair work

The data in   showed that engaging in communicative language tasks through pair work helps a leaner develop in an L2 in several ways. Tasks provide an opportunity not only to produce the target language, but also, through conversational adjustments, to manipulate and modify it Checking and clarifying problem utterances ('negotiating for meaning') ensures that task participants receive comprehensible input and generate comprehensible output, both of which

have been claimed as crucial to second language acquisition (SLA) so task type is considered significant, with those tasks requiring an exchange of information most likely to prompt negotiations for meaning.
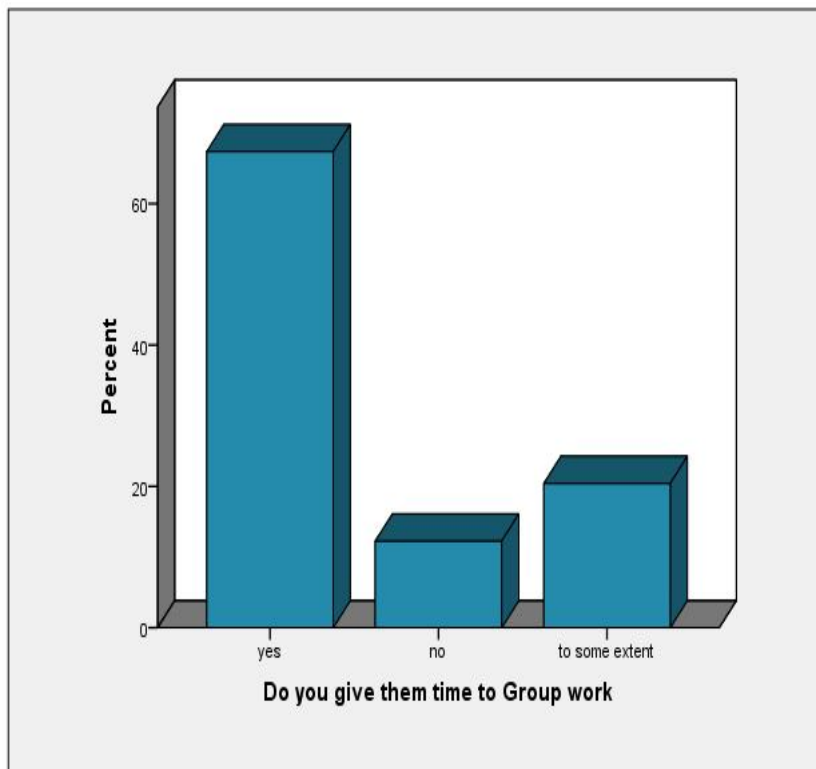
Figure 4.30:Do you give them time to Group work

Moreover, the importance of negotiation of meaning in languageacquisition is underlined by Long (1996). In interaction, the participants mayuse different strategies to clarify meaning when communication breaks down;they may request clarification or confirm the message, e.g. by repeating orparaphrasing a message. In educational contexts, teachers could provide taskswhere such negotiation is triggered, e.g. in tasks where exchange ofinformation is needed.Further, Swain (1995, 2001) argues that students should also be givenopportunities to modify their own production – output – for optimal learning,since output pushes learners to

process language more deeply than when theyprocess input. She argues that, in their efforts to communicate, students try toconvey the intended meaning, and in doing so, they may become aware of notice what they are able to express and where they lack the competenceneeded to express the intended meaning. Consequently, the learner may seekinformation from peers, teachers or books, and so, generate new knowledge.
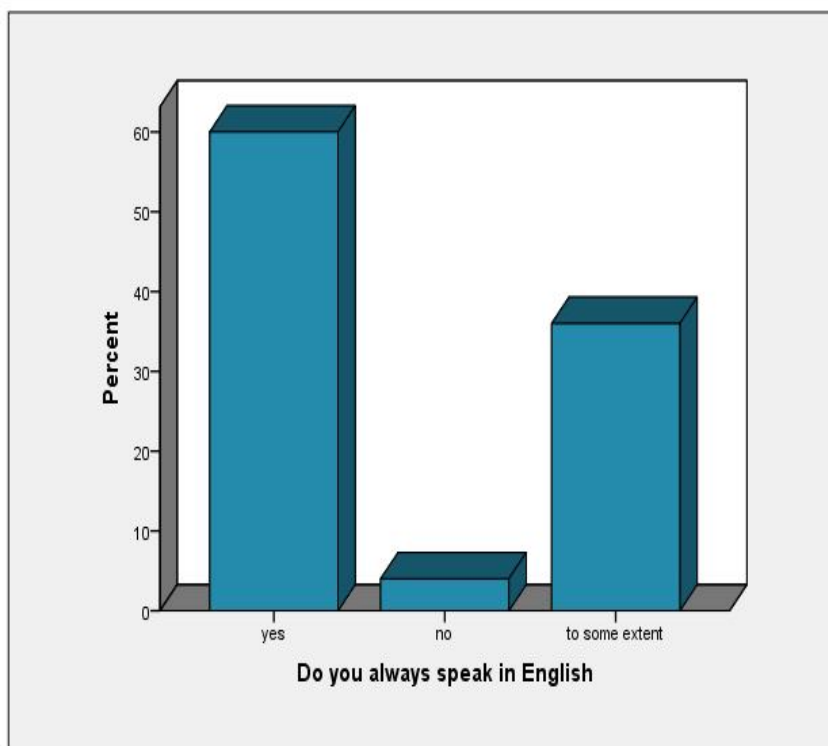
Figure 4.31: Do you always speak in English

It is clear that teachers' most important classroom work happens, "where they provide a social interaction within the community of learners such that the learners may move from what they know to what they don't yet know, from their own experiences to a new understanding of the disciplines represented by the content

they are studying. CLIL teachers must be aware about delivering language through teaching content.
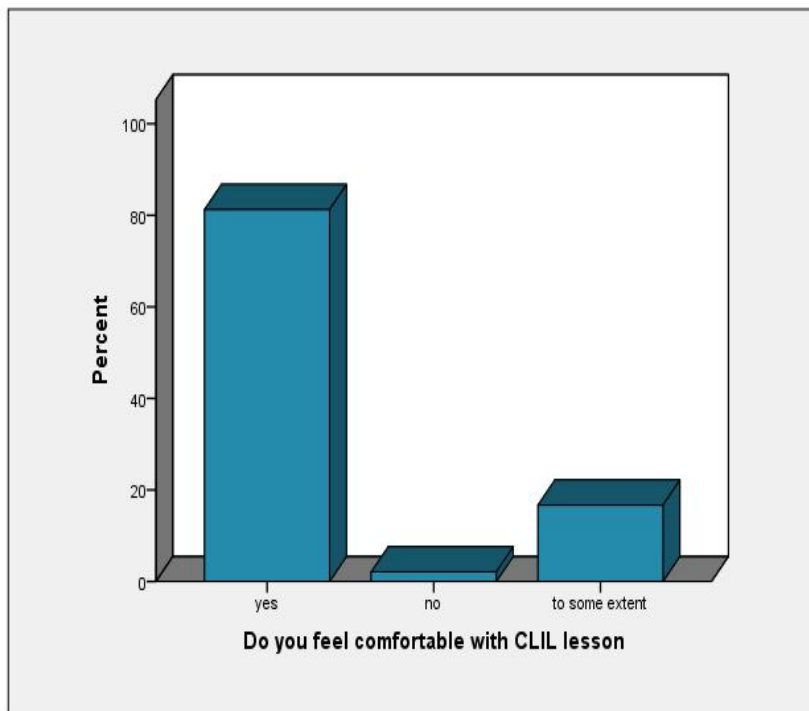
Figure 4.32: Do you feel comfortable with CLIL lesson

The data shows that teacher's exists when the teacher asks the class for agreement or disagreement, she/he invites more peer response to the student's answer. This encourages more involvement and participation. When the teacher gives up control over the lesson content and follows the students' ideas as a main drive for furthering the discussion, she/he could create a more interactive learning environment and consequently teachers develop a good perception about CLIL learning.

In contrast to the outcome studies (examples cited above), which construct language learning in terms of a product, studies on CLIL classroom discourse take

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a process-oriented view of language learning, a process that is prototypically enshrined in the lesson as *the* core event in institutional learning. In other words, language learning is thought to take place via learners" participation in the sequentially structured discourse activities which are determined by local pedagogical designs and afford specific interaction opportunities among the participants. (Nikula, Dalton-Puffer &Llinares 2013: 75, original emphasis)

Badertscher and Bieri"s (2009) study on the negotiation of meaning compared CLIL and mainstream teaching in Switzerland. They found that CLIL lessons have twice as many negotiation sequences than mainstream lessons in that negotiation of meaning

makes up 17.3% of total lesson time compared with 9.8% in the L1. However, a negotiation of meaning sequence in CLIL is not necessarily longer than in mainstream content lessons but quantitative differences can be observed. Negotiation of meanings in CLIL "consist of more clearly discernible phases and are carried out more consistently by teachers once they have realized a problem has occurred" (Nikula, Dalton-Puffer &Llinares 2013: 76). Moreover, CLIL teachers are willing to use greater methodological diversity for dealing with language difficulties (Badertscher&Bieri 2009: 147; 155; 191). Closely related to this negotiation of meaning study is the topic of language errors and corrective feedback. According to a study of CLIL classrooms by Dalton-Puffer (2007), the most frequent type of

repairable is vocabulary or lexical errors followed by pronunciation errors. On the other hand, grammatical errors are often ignored, especially by non-language teachers, because they are regarded as less important. Repair in CLIL classrooms is mostly initiated by teachers and repairs are quite direct, especially among peers, but the repair realizations between teachers and students get more indirect the older the students are. "It thus seems to be the case that in the higher grades the students

slowly begin to approximate the status of equal and socially-distant adults where face-saving issues are of increasing importance" (Dalton-Puffer 2007: 255). Furthermore, CLIL repair is still classroom repair regardless of CLIL"s intention to be a naturalistic environment for language acquisition and thus its repair is not typical for casual conversations (Dalton-Puffer 2007: 230-231; 254-255).
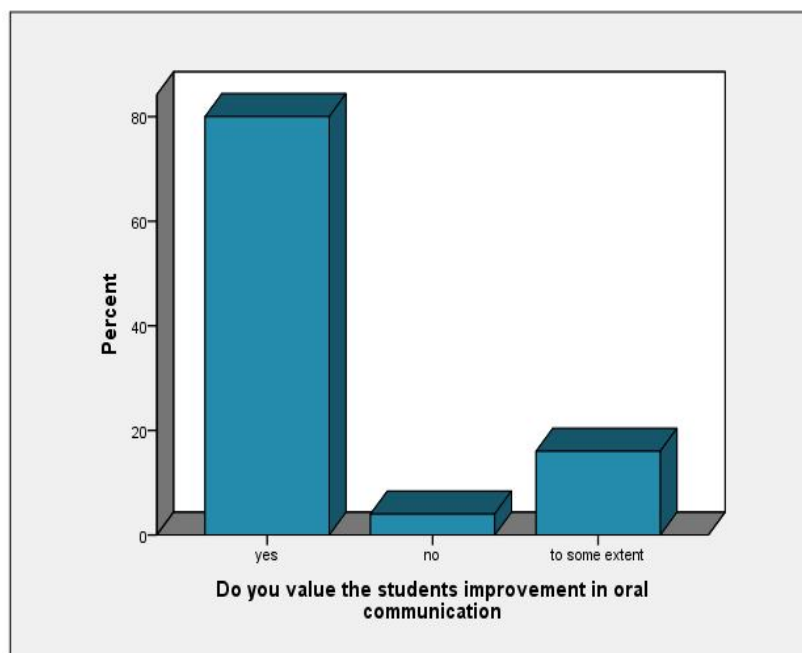
Figure 4.33: Do you value the students improvement in oral communication

Classroom communication is at the core of learning in CLIL lessons. CLIL students are supposed to be active participants because meaningful interaction is crucial for acquiring knowledge. This „dialogic form of pedagogy" is an essential part in CLIL classrooms (Coyle, Hood & Marsh 2010: 35). "In the 4Cs Framework, the terms „language" and „communication" are used interchangeably. This is not only a syntactical device for promoting the CLIL concepts, but also a strategy for promoting genuine communication in the vehicular language" (Coyle, Hood & Marsh 2010: 42). CLIL students are not only supposed to learn an

additional language but rather to develop communication skills and this is best done via actively communicating in the target language.

In a CLIL context the role of language needs to be reconceptualised from language learning „per se" towards a combination of "learning to use language and using language to learn" (Coyle 2007: 552). The Language Triptych (Figure 2), a conceptual representation, connects content and language objectives because it combines the language as a subject with the language as vehicular for content learning (Coyle 2007: 552 and Coyle, Hood & Marsh 2010: 36). "It supports learners in language using through the analysis of the CLIL vehicular language from three interrelated perspectives: language *of* learning, language *for* learning and language *through* learning" (Coyle, Hood & Marsh 2010: 36, original emphasis).
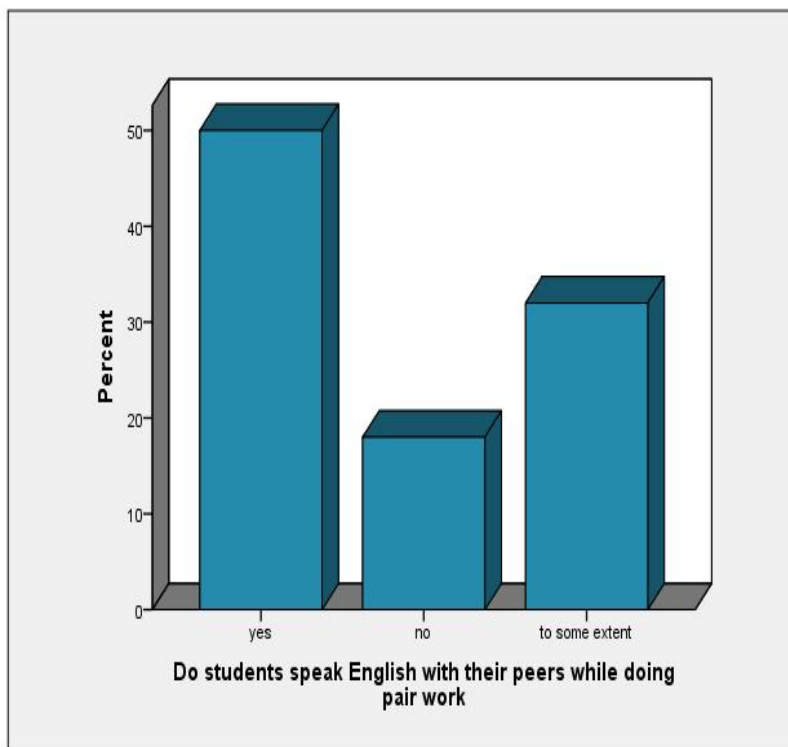
Figure 4.34: Do students speak English with their peers while doing pair work

The respondents explained a dilemma of the fact that they attempting to create a situation where students can solve problems through the use of appropriate academic L2, according to the goals of a CLIL classroom, and this particular practice does not necessarily provide that opportunity for the students when they work independently. Therefore, students should do pair work in situation which help them to rise negotiation during doing the task.

Language *of* learning is needed by CLIL students "to access basic concepts and skills related to the subject theme or topic analysis of the language needed to scaffold content learning will lead to a complementary approach to learning progression" (Coyle 2007: 553). This means that grammatical elements, for instance the use of tenses, are not taught according to their difficulty but according to their functional need required by the content. Learners get the opportunity to acquire language in an authentic context and to use language in meaningful interaction (Coyle, Hood & Marsh 2010: 37).

Language *for* learning "focuses on the kind of language which all learners need in order to operate in a foreign language using environment. It foregrounds metacognition and learning how to learn" (Coyle 2007: 553). In CLIL classes students ought to acquire skills which are needed for pair or group work, like debating, asking, or memorizing, for example. Furthermore, they need a repertoire of speech acts which help them to describe or evaluate because these are vital for carrying out tasks appropriately. Quality learning can only take place when the participants know the language for supporting each other or for being supported (Coyle, Hood & Marsh 2010: 37).
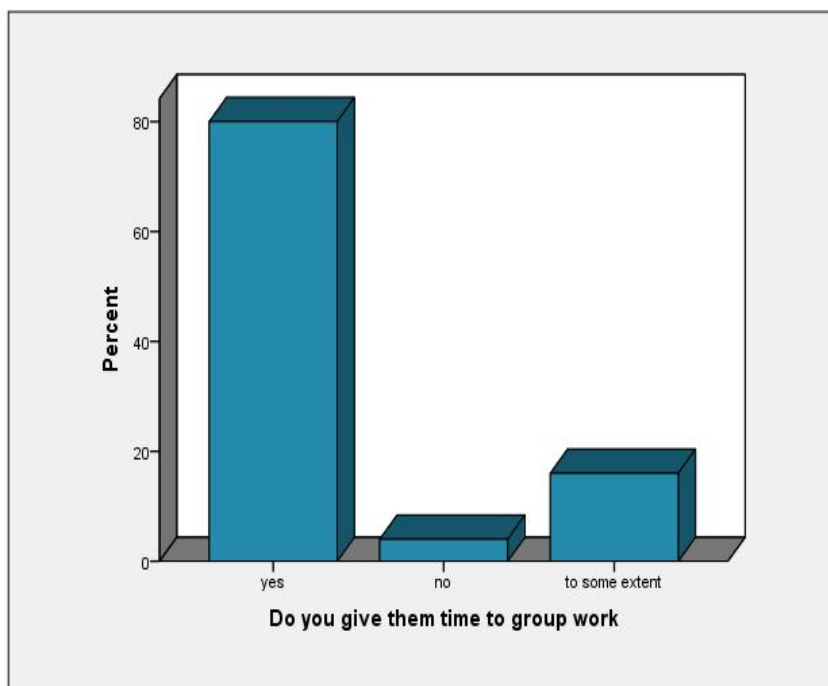
Figure 4.34: Do you give them time to group work

The data in the graph showed that engaging in communicative language tasks through pair work helps a leaner develop in an L2 in several ways. Tasks provide an opportunity not only to produce the target language, but also, through conversational adjustments, to manipulate and modify it Checking and clarifying problem utterances ('negotiating for meaning') ensures that task participants receive comprehensible input and generate comprehensible output, both of which have been claimed as crucial to second language acquisition (SLA) so task type is considered significant, with those tasks requiring an exchange of information most likely to prompt negotiations for meaning

Language *through* learning "is based on the principle that effective learning cannot take place without active involvement of language and thinking. When learners are encouraged to articulate their understanding, then a deeper level of learning takes place" (Coyle, Hood & Marsh 2010: 37). CLIL students need

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language to improve their thinking skills and they need to acquire new knowledge as well as advance their thinking process for supporting their language learning. Language learning is "based on an upward spiral for progression rather than step-by-step grammatical chronology" because the progression is achieved through comprehending emerging language as needed by the students (Coyle, Hood & Marsh 2010: 38).
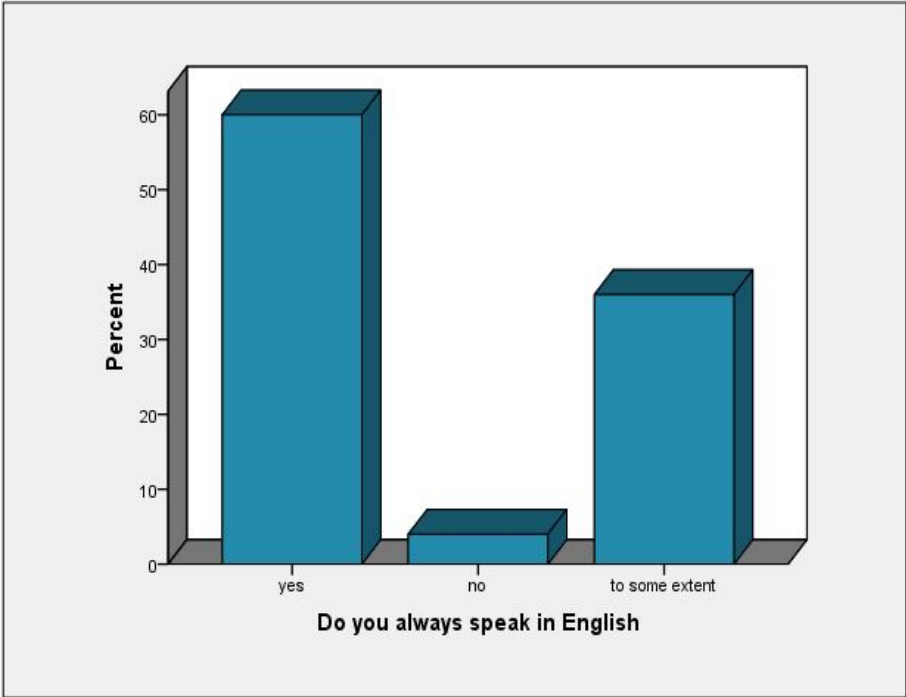
Figure 4.35 : Do you always speak in English

The frequencies shows that making English as a medium of instructions in CLIL classrooms requires a teacher a teacher who can demonstrate content knowledge , feel confident about his English skills, to be able to talk about all of these things, because new content is in many ways a new vocabulary, right? The vocabulary to a large extent carries the content and make interaction between the teacher and the learners.

CLIL learners need to discuss debate, justify and explain using more complex language and different sorts of language than would be practiced in the regular foreign language lessons. In turn, the language needed is linked closely with literacy issues in the mother tongue – scaffolding language in a different way than in foreign language lessons is required (Coyle 2006, p.10).

Darn (2006), on the other hand, looks at the use of mother tongue (hereafter L1) in CLIL. He distinguishes CLIL from other education programs adding that there is no evidence to show that comprehension is not hampered by the lack of target language competence in other education programs such as the bilingual education. CLIL though, he argues, has the advantage of accepting translation especially during what is identified 12

as a 'transition' stage "at which the learners become fully functional in both languages" (p.3). The same can be said about CLIL when compared to EFL where teachers intentionally avoid the use of the mother tongue.

The study concludes that despite the difference among judges with regard to the degree of foreign accent as well as degree of irritation, the general results indicates that the students who had more exposure to the target language via L2 content-based instructions have more intelligible foreign accent than their counterpart who had only traditional EF classes.

Based on the previous discussion, we can conclude that though CLIL is considered as a more natural and economic environment for language learning than the traditional EFL classroom, it still has its own requirements that are not necessarily required in the EFL classroom. Those requirements include a specific level of the target language upon which teachers can build. It also requires some

learning skills such as the ability to justify and explain in the target language. It might be argued, though, that such skills are usually acquired at earlier stages by the virtue of learning the same content subjects in L1 at earlier stages but this is not always the case especially when CLIL is introduced at primary and intermediate stages.
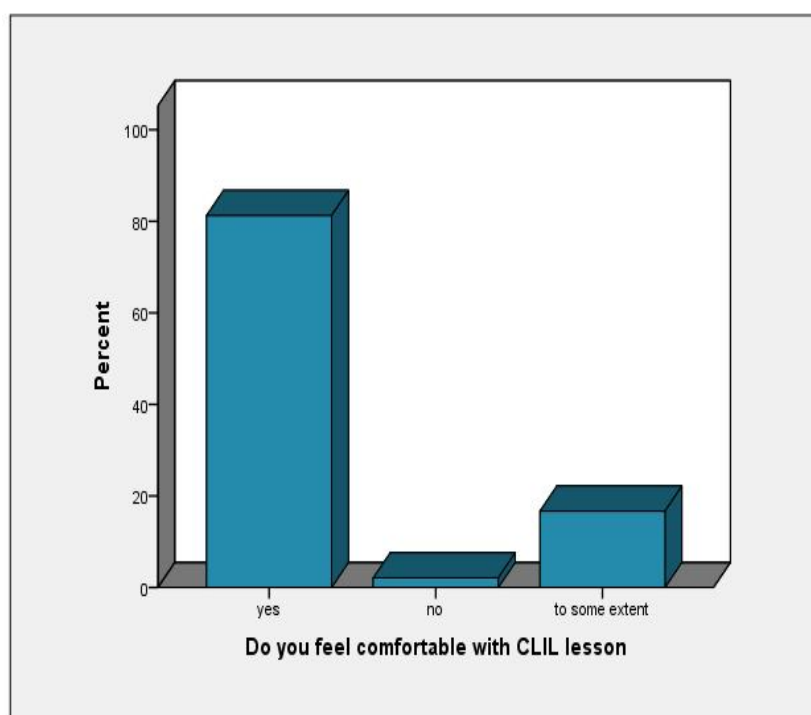
Figure 4.36: Do you feel comfortable with CLIL Lesson

By using authentic teaching material available around and the material that is connected to the experiential and background knowledge of the students, an English class room can be made interactive, interesting, enthusiastic and learner friendly, this emphasizes that in the discourse of a classroom, most of the learning takes place and most of the instruction gets accomplished. Schwandt (1994:118) notes that through watching, listening, asking, recording, and examining, learners fashion "meaning out of events and phenomena through prolonged, complex processes of social interaction.

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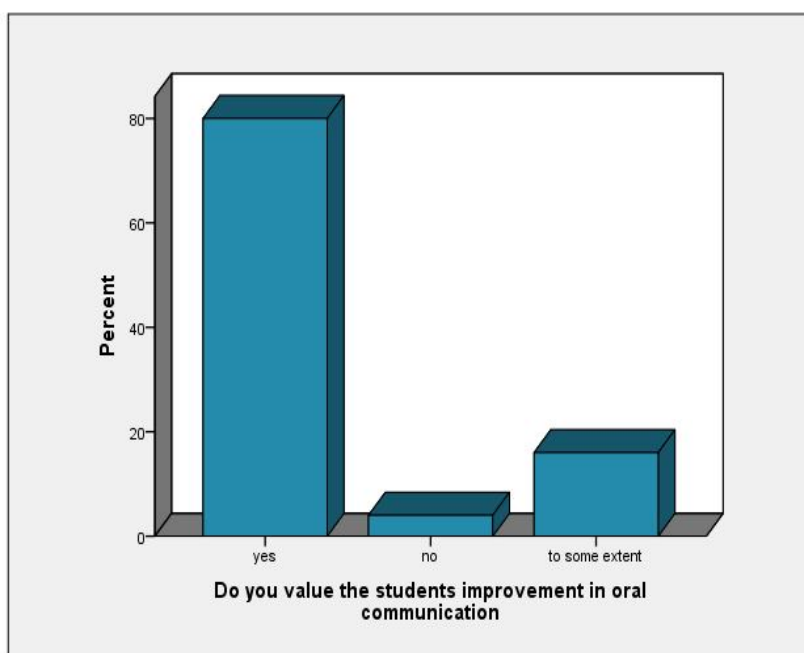
Figure 4.37: Do You Value The Students improvement in oral Communication

The graph reveals that: 80% of the respoundents replied that they value the students improvement in oral communication while 2.0% said no and 12.0% made to some extent as a choice when learning process take place in CLIL classes.

When students are engaged in a learning activity they are actively working, and both the content and the new language they are studying are in their short-term memory. This is similar to a phrase on a blackboard: if it is not permanently placed in their long-term memory, it can easily be erased or forgotten. Consequently, different types of classroom interaction is due certain classroom pedagogical features that CLIL learners and teachers practice to check understanding content matters.

By using authentic teaching material available around and the material that is connected to the experiential and background knowledge of the students, an

English class room can be made interactive, interesting, enthusiastic and learner friendly, this emphasizes that in the discourse of a classroom, most of the learning takes place and most of the instruction gets accomplished. Schwandt (1994:118) notes that through watching, listening, asking, recording, and examining, learners fashion "meaning out of events and phenomena through prolonged, complex processes of social interaction.
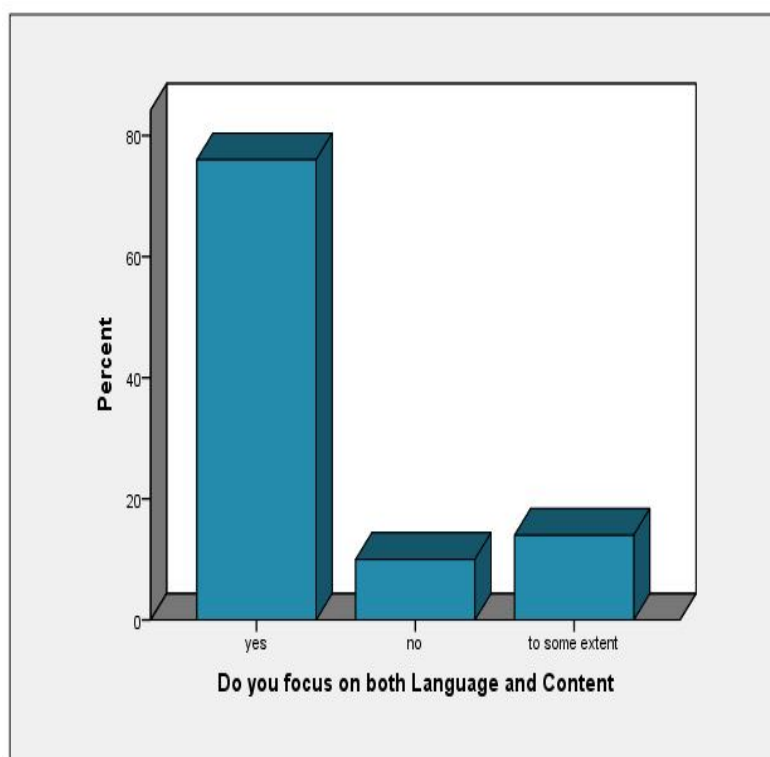
Figure 4.38: Do you focus on both Language and Content

It is clear that teachers' most important classroom work happens, "where they provide a social interaction within the community of learners such that the learners may move from what they know to what they don't yet know, from their own experiences to a new understanding of the disciplines represented by the content they are studying. CLIL teachers must be aware about delivering language through teaching content.

The framework goes beyond considering subject matter and language as two separate elements but rather positions content in the „knowledge of learning" domain (integrating content and cognition) and language, a culture bound phenomenon, as a medium for learning (integrating communication and intercultural understanding). It takes account of „integration" on different levels: learning (content and cognition), language learning (communication and cultures) and intercultural experiences. (Coyle 2007: 549-550)

The choice of content is influenced by contextual variables like the age or language level of the learners, teacher availability, and language support.

Content can range from the delivery of elements taken directly from a statutory national curriculum to a project based on topical issues drawing together different aspects of the curriculum [...]. Content in a CLIL setting could also be thematic, cross-curricular, interdisciplinary or have a focus on citizenship, for example. (Coyle, Hood & Marsh 2010: 28)

The content of CLIL can be located within or beyond the school curriculum and how exactly the content will look like depends on whether the CLIL context demands for a more language-led, content-led or balanced approach. Nevertheless, CLIL content should offer opportunities "to initiate and enrich learning, skill acquisition and development" (Coyle, Hood & Marsh 2010: 28).

4.7.1 Classroom Observation in Comboni School

Sample lessons:

The following lessons were chosen to be presented and analysed:

Subject: geography

Date: 18.12.2018

Topic of the lesson: "Indirect sources of geographical information"

Number of learners: 50

_____

Subject: biology

Date: 21.12.2018

Topic: "The chemistry of living things"

Number of learners: 44

_____

The number of learners is smaller in compared with classroom in other schools

4.8.1 Language aspects

During the classes I attended it could be easily noticed that the CLIL teachers were very careful as far as integrating content and language was concerned. They were aware of the fact that for some learners it was shocking to learn a subject through a foreign language so they often switched into Arabic. The foreign language skills were not paid attention .

4,8,2 Second language development

Generally, most of the skills were paid attention to during the lessons mentioned above. During the geography lesson the CLIL learners had a possibility to develop their listening skills as well as speaking skills. The same can be said about biology. Apart from that, the CLIL learners had the possibility to get acquainted with new

vocabulary which was underlined by all the CLIL teachers. The situation was different in the case of grammar and pronunciation – no error correction was used and hardly ever any attention was paid to the development of grammar or pronunciation. A detailed analysis is presented below.

In the case of **speaking abilities** sustained monologue concerning the ability to describe one's experience was noticed only during the geography lesson when a few CLIL learners fluently sustained a straightforward description of the sources of geographical information that they were acquainted with, e.g. "When I want to get some information I use the Internet which I think is the most common source of information, well not only the geographical one", "I think that we can simply use maps. Our teacher from the primary school kept repeating that we can read everything from the map". In the case of biology, the CLIL learners did not use any monologues. When being asked a question, they gave a very short answer, e.g.

(biology)

T: "How are we built?"

L: "Out of water"

T: "Anything else?"

L: "Carbohydrates?"

T: "Right, and?"

etc…

The CLIL learners did not have any possibility to take part in a discussion or to address the class directly because there were no tasks used which required those kinds of abilities. Moreover, the researcher's opinion is that the CLIL learners would not be willing to take part in a discussion or to address the class directly – most of them seemed to be scared of speaking which could be due to the situation in which they found themselves: new school, new teachers, new class and what is

more, subjects to be learned in a foreign language. However, it should be mentioned that those CLIL learners who had enough courage to speak in a foreign language had a very good command of English producing clear and smoothly flowing well-structured speech.

During the above mentioned CLIL lessons observed in December, the CLIL learners were not given any **written assignments** so the researcher is not in a position to evaluate the writing abilities of the CLIL learners observed. However, most of the CLIL learners were making some notes during all the lessons i.e. geography and biology. As far as **listening skills** are concerned, the CLIL learners were exposed to the teacher talking during all lessons. The only lesson where the CLIL learners were exposed to audio media was the geography lesson. The CLIL learners were watching a documentary on weather forecasting and additionally they were asked to do some tasks which were connected with understanding. The geography CLIL teacher provided the CLIL learners with some comprehension questions which they were supposed to answer on the basis of the video presentation, e.g. "How do we collect weather information?", "What do we use a cartogram for?", "What kind of thematic maps do we have?" etc. it can be said that on the basis of the CLIL learners language output, they could understand the main ideas which were delivered in a standard dialect (e.g. British English) including the geographical field. However, most of the CLIL learners asked the CLIL teacher to play the video once again in order to be able to find answers to the questions. 5 out of 7 CLIL learners asked had problems with answering the more detailed questions. In the case of all subjects, the CLIL learners were asked to listen to instructions which were given by the CLIL teachers, e.g. "Watch the video and answer the first two questions, please" (geography), "Look at the board and try to analyse the drawing of molecules. What is the main difference between them?" (biology), "Open your books on page 7 and do exercise 3". Most of the CLIL

learners could understand the instructions but they often asked for repetition, e.g. 11 instructions given – the CLIL teacher was asked 8 times for repetition (geography), 15 instructions given – the CLIL teacher was asked 7 times for repetition (biology), 18 instructions given. Based on the data provided above, it can be said that the CLIL learners had some problems with understanding instructions and could only catch the main point which could be due to the fact that they were not used to being given instructions in a foreign language. All the CLIL learners were listening as a member of a live audience and they could follow the teachers' talk even though the subject matter was not familiar. At that stage of the study, it can be said that the listening skills of the CLIL learners were rather good.

During all the lessons observed i.e. geography and biology, the CLIL learners were asked to read some texts. All the learners were asked to **read** shorter texts during the lessons rather than the longer ones. They were also asked to read instructions. In general, the learners could read with a larger degree of independence, adapting style and speed of reading. From time to time they had some problems with vocabulary so they asked the teacher for explanations. In the case of geography and biology, the learners did not have significant problems.

As far as **grammar** is concerned, the only teacher who paid attention to grammar during the lesson analysed was the geography teacher. The most visible grammatical problem that the learners seemed to have was connected with countable and uncountable nouns. Some of the learners made basic mistakes such as: "*I have many advices* instead of "I have some advice…", *"Alps are…"* instead of "The Alps are…", "The geography teacher started correcting the learners by giving them the proper form but afterwards he decided to spend a few minutes (7 minutes) on explaining the basic rules using the examples from geography, e.g. "The Canary Islands are…" , "Knowledge about the Canary Islands is…", "The Pacific Ocean is…", "The Tatra mountains are…" etc. On the basis of the

observations, the researcher noticed that the learners had some problems with the following grammatical concepts: the proper use of the Perfect Tenses, e.g. "*What happened with the heat energy?*"* instead of "What has happened with the heat energy?" – observation based on some experiment (biology),; the proper use of articles, e.g. "*Alps** are the biggest chain of mountains in Europe*"*, it should be "The Alps are the biggest chain of mountains in Europe" (geography), "*The*carbohydrates consist of...*",* it should be "Carbohydrates consist of…" (biology) etc.; problems with relative clauses – the learners tended to use "which" instead of "who" or "where" like in the following examples: "My uncle *which** climbs the mountains says that the weather is really changeable in the Alps", "The Bermuda Triangle is an area *which** many ships disappeared due to some weather changes (geography) etc. In most cases it was an intralingual transfer which was responsible for those sorts of errors. Summing up, at this stage of observation the learners showed a relatively high degree of grammatical control. Their mistakes did not lead to misunderstanding.

As far as the use of **vocabulary** is concerned, it can be said that at that stage of the study the learners had a good range of basic vocabulary but had a lot of problems with the content related vocabulary. In order to answer the teachers' questions and to do the tasks they kept asking the teachers for content vocabulary. The researcher noticed that at that stage the learners while having problems with some words, did not try to explain the word but just asked for its equivalent in English. Another thing worth mentioning is that the geography teacher noticed that the learners had some problems with "make" and "take" and she provided them with some expressions putting them on the board, e.g. "to take an exam", "to make a decision", "to take a shower" etc. The expressions were basic and they were not content related. Additionally, the learners tended to make mistakes related to the use of pronouns, e.g. instead of "it" they often used "she" or "he" as in the

following examples: "The cover is quite thick and *she** cannot be melted" (geography), "The starch is very important for our bones. *She** is also important for our brain" (biology) etc. Most of the mistakes are also of an interlingual nature because they come from the native language. All in all, lexical accuracy was rather high, though some confusion and incorrect word choice occurred without hindering communication.

While observing the learners during all the subjects mentioned, the researcher did not notice any problems as far as **pronunciation** is concerned. The learners' pronunciation was clearly intelligible even though a foreign accent was sometimes evident and occasional mispronunciations occurred. Most of the learners had some problems with word stress, e.g. the word *cover* (geography) – most of the observed learners stressed the second syllable instead of the first; the word *economical* (geography) – the learners stressed the second syllable instead of the first; the word *molecule* (biology) – the stress was put on the first syllable instead of the third;. Additionally, the learners had some problems with the long vowels which they shortened, e.g. *forecast* (there should be long "o"- o: and the learners often used short "o") (geography); *starch* (there should be long "a" – a: and the learners often used short "a" instead) (biology), *mutually* (there should be long "u" – u: and the learners tended to use short "u" instead) etc.

During the lessons observed the teachers did not pay attention to the pronunciation errors.

As can be noticed from the data provided above, the learners tended to be quite uncertain as far as integrating content and language is concerned. They had some problems with speaking, listening comprehension as well as grammar, vocabulary and pronunciation. At this stage of the study it should be born in mind that most of the learners observed experienced integration of content and language for the first time in their lives and thus they may feel uncertain. On the other hand, it should be

noticed that the learners did their best and they are likely to succeed in developing their language skills and sub-skills. The next data analysis concerns the use of L1 during the classes observed.

4,8.3. The use of L1 (code-switching)

On the basis of the observations, it can be said that various instances of code-switching were present during the lessons. In the case of the geography lesson in Comboni school , about 5% was in Arabic. In the case of biology, it was about 10% of the lesson .The percentage varies due to the difficulty of the subject taught and the topic of the lesson. The following examples illustrate various instances of code-switching.

 Both learners and teacher resport to L1 to make linguistic switch and socializing switch.

4.8.4 Content aspects

At that stage of the study, it is very difficult to present the data concerning the content aspects. Throughout the whole month the learners were under the "safety umbrella" which meant that they were not given any bad marks. From time to time some CLIL learners who were exceptionally active during the lesson were given a positive mark. On the basis of the observations, it can be said that the CLIL learners had some problems with understanding content in a foreign language. The CLIL learners tended to ask a lot of questions and also switch into their mother tongue.

As already mentioned the only way to evaluate the content aspects at this stage of the study was to present the marks of the CLIL learners which were taken from their written tests mentioned above As previously, the marks may be subjective to a certain extent because they were given by only one subject teacher. The researcher was not in the position to evaluate the content.

Geography:

Table (4.4) Marks received in Geography at the end of the second semester in Comboni School:

Grade	Number of Learners
Excellent	6 Learners
Very good	10 Learners
Good	15 Learners
Passed	14 Learners
Failed	5 Learners

Looking at the marks received by the learners in geography throughout the final school exams, it should be taken into consideration that all the marks were given according to criteria adopted by the geography teacher so they may be subjective. However, the researcher did not have any possibility to test learners knowledge and this is why the researcher had to analyse the marks given by the geography teacher. Six learners received an excellent mark which was due to the fact that this mark is only given to learners who have written something outstanding. There were also ten learners who obtained very good and good marks which does not have to be linked to the learners knowledge but to other factors such as the difficulty of the test or the topic itself.

 The pass mark and failure marks are considered to be a very positive mark due to the number of learners who obtained them.

All in all, having analysed the marks received throughout the final exam in geography, it can be the learners definitely had more knowledge but the level varied from very good to just passed which was due to different factors of individual differences.

Table (4.5)Marks received in Biology at the end of the second semester in Comboni School:

Grade	Number of Learners
Excellent	4 Learners
Very good	2 Learners
Good	14 Learners
Passed	25 Learners
Failed	5 Learners

Looking at the marks received by the learners in biology throughout the whole school year, it should be taken into consideration that all the marks were also given according to criteria adopted by the biology teacher so they may be subjective. However, the researcher did not have any possibility to test learners knowledge and this is why the researcher had to analyse the marks given by the biology teacher.

As can be noticed, the situation in biology is different from that of geography. The aspects concerning content aspects are visible from the marks. Gradually, the learners were receiving better marks. Four learners received an excellent mark which was due to the fact that this mark is only given in case of outstanding oral or written performance. Only four learners received very good marks. In the case of good mark, the situation was very positive. According to content knowledge it can be said that the learners knowledge was better due to the quality of the marks received. Additionally, it should be also noticed that the rate of pass and fail marks also occurred but was very limited.

The above presented results suggest significant improvement as far as acquiring knowledge is concerned.

To sum up, having analysed all the marks received in biology throughout the whole school year, it can be noticed that positive result obtained revealed that the situation of implementing CLIL in EFL classroom has a solid ground as far as content aspects are concerned.

4.8.5 Learning environment aspects

Taking into consideration the learning environment, the researcher concentrated on the interaction between the teachers and the learners as well as between the learners themselves. Additionally, the teachers' methodological approach was observed together with the ways of evaluating the learners. Apart from that, the researcher paid attention to the materials used during the lessons as well as to the classroom setting.

All the details concerning the above mentioned sub-categories are to be presented in relation to the three lessons mentioned above.

4.8.6 Classroom interaction

Adopting van Lier's (1988: 94-120) framework the following types of interaction as well as types of function were noticed during the lessons mentioned above:

Type 1:

Biology:

L: "Would you like to go to the concert with us"?;

T: "Yes, I can go with you, no problem. What film do you want to see?"];

L: "We don't know, yet"]; (**interpersonal function**);….

L: "I've heard we should drink a lot of water"

T: "Yes, you are right"

L: "And we should eat something sweet every day"

L: "Well, I suppose cakes are not very healthy, by the way what cakes do like most?" (**ideational function**);As can be seen from the examples, the biology CLIL

teacher lost control over the activity going on in the classroom as well as over the topic.

Type 2:

Biology:

"Could you please write down the topic of our new lesson: *The chemistry of living things*" (**textual function**);

Geography:

"Please, watch the video and make some notes according to the questions that I gave you" (**textual function**);

In this type of interaction, the teacher controlled the topic but did not control the activity.

Type 3:

geography

"OK, to summarise, could you remind me what kind of sources of geographical information you know?" (**textual function**);

""Come to the blackboard and give me an example"] (**textual function**);

Geography:

"How can we gather or collect weather information?" (**textual function**);

In the examples above the teachers controlled the activities as well as the topic.

Type 4:

Biology:

T: "Now, get into three groups and make a list of the different functions of water"

L: "Do we have to write it in points?"

T: "Well, yes, you should"

L: "OK, we will definitely make something up when asked. What are you taking for the trip?"]

L: "Do you mean clothes or what?" (**textual and interpersonal function**);

T: "Get into pairs and try to answer the following question: *what happens with the heat energy?*"

L1: ""I don't feel like staying at school today. I think that I will not go to physical education"

L2: ""Come on, don't go, we won't exercise a lot because the teacher is ill"] (**textual and interpersonal function**);

As can be seen from the example above, the teacher controlled the activity to a certain extent but not the topic. The learners had a personal conversation while doing the task given by the teacher.

To summarise, there was quite a lot of interaction between the teacher and the CLIL learners as well as between the learners themselves. The type of interaction was mainly of a textual or interpersonal nature. As it can be noticed the learners tended to lose their concentration on the topic of the lesson which could be due to the fact that they had some problems with understanding.

4.8.7 The teacher's methodological approach

Geography

The geography teacher used a communicative approach and a learner centred one. She started the lesson with a revision of the previous one. While revising the previous lesson the CLIL teacher prompted some questions, e.g. "What is a *thematic map?*", "What is the difference between *a cartogram* and *a diagrammatic map?*" etc. The CLIL teacher provided the CLIL learners with an opportunity to speak in a foreign language about the topic which they should already know. After the short revision, the CLIL teacher introduced the topic of the video and provided the CLIL learners with some questions which they were supposed to answer while watching the video presentation. All the questions were open-ended so the CLIL learners had a chance to build longer sentences in English. The CLIL teacher paused the video from time to time in order to ask some questions concerning the

presentation. The CLIL teacher also used a technique which is called *freeze frame* (the teacher tried to create some expectations by freezing the frame on the screen). It could be noticed that the CLIL learners were all the time concentrated on the film and interested in it.

By introducing the video presentation in English which was related to the topic of the lesson, the CLIL teacher perfectly integrated content and language and what is more involved the CLIL learners into the lesson.

Biology

The lesson observed was rather teacher-centred as it was mainly the teacher who spoke during the lesson. The biology CLIL teacher introduced the topic of the lesson by asking one question: "How are we built?". Most of the CLIL learners started answering the question using just single words such as *water, minerals, oxygen* etc. The biology CLIL teacher put everything on the board. After a short brainstorming, the biology CLIL teacher gave a lecture on "the chemistry of living things" which lasted about 20 min. The CLIL learners were exposed to English with some switches into Arabic from time to time but in the meantime they were also asked to make some notes. The topic of the lesson was very interesting but the CLIL learners were not stimulated enough so some of them seemed to be bored. The only two communicative activities which the CLIL learners were asked to do were to work in pairs and in groups in order to answer some questions. Unfortunately, the activities went out of the CLIL teacher's control because the CLIL learners started having personal conversations.

Generally speaking, the biology CLIL teacher combined content and language but the CLIL learners did not have enough opportunities to communicate and take an active part in the lesson.

All in all, the only lesson where content and language was integrated and the learner-centred approach was used was the geography lesson. In case of the

biology lesson some attempt to integrate content and language was made on the part of the CLIL biology teacher.

4.8.8. Learner's evaluation

September was the month which was considered to be a "safety month" for the learners from the 1st grade which meant that they were not allowed to be given any bad mark. Both the CLIL geography teacher as well as the CLIL biology teacher were giving positive marks (5 or 4) only for the CLIL learners' participation in the lessons.

4.8.9. Teaching materials

Geography:

During the geography lesson described above, the CLIL geography

teacher used multimedia, namely a TV set and a video cassette. The CLIL learners watched a documentary on *Indirect sources of geographical information.* Additionally, the CLIL learners were provided with handouts where useful vocabulary was written just in English . From time to time, the CLIL geography teacher used a blackboard in order to write some unknown words which occurred in the documentary.

Biology

The CLIL biology teacher, while explaining all the terms, used OHP where all the information was written down so the CLIL learners had no problems with making some notes. Additionally, the CLIL biology teacher was using a blackboard all the time writing down more information on it. No books were used.

Summarising, both the biology and mathematical CLIL teachers used rather conventional materials (handouts and books in English) which were most often used during all the lessons observed in September. It should also be mentioned that all the handouts were prepared by the CLIL teachers themselves and some attempt to integrate content and language was made on the part of the teachers. The only

CLIL teacher who used additional materials also especially prepared for the lesson was the geography CLIL teacher. The geography CLIL teacher prepared a documentary and some tasks based on it where both content and language were taken into consideration.

4.8.10 Classroom setting

Geography

The geography classroom was not very big. The desks were arranged in rows and there were only 33 chairs available. The CLIL teacher was seated facing the CLIL learners. The blackboard was situated behind the CLIL teacher's desk so that everybody could see it. Additionally, there were a TV set, a video and a DVD next to the CLIL teacher's desk. On the walls there were two maps: a map of Europe and a map of the world. As the geography classroom was also used as the English classroom, there were some photos of Great Britain and the USA on the walls. The classroom was bright and quiet and there was no noise coming from outside the classroom.

4.9.1 Data presentation in Kibeida International School – January 2018 (2nd semester)

Sample lessons:

The following lessons were chosen to be presented and analysed:

Subject: geography

Date: 10.01.2018

Topic of the lesson: "The Earth"

Number of learners: 33

_____

Subject: biology

Date: 22.1.2018

Topic: "The Cellular transport and introduction to mitosis"

Number of learners: 33

_____

4.9.2. Language aspects

As far as the development of language skills and sub-skills is concerned the CLIL learners seemed to have made more progress in comprehension (they tended to ask fewer questions than in September). Additionally, they also acquired more subject-related vocabulary and made fewer grammatical mistakes. Taking into consideration the use of L1 during the lessons, the researcher noticed that both the CLIL teachers and the CLIL learners did not switch into Arabic as often as they had in the previous months. The percentage of Arabic usage decreased.

4.9.3. Second language development

Having observed and analysed the lessons mentioned above, it can be said that most of the CLIL learners felt confident while speaking in English. Their comprehension skills seemed to have improved as well.

. As far as writing is concerned there were still quite a lot of spelling mistakes noticed by the researcher while analysing the tests. There was a slight progress noticed in grammar but no progress in pronunciation – the CLIL learners tended to make the same mistakes. During the CLIL geography lesson the CLIL learners had an opportunity to practice their **speaking skills**. On the basis of the film which they watched in English they were asked to answer the questions given by the CLIL geography teacher and provide the answers orally. The CLIL learners were willing to speak English and they could produce stretches of language with a fairly even tempo. From time to time they were hesitant when they had to use a new word or expression but it did not have any influence on the flow of speech. They were also willing to take part in discussions and express their opinions concerning the existence of dinosaurs. The following conversation illustrates their willingness to discuss difficult matters:

L1: "Do you think that a meteor shower could have influence on the existence of dinosaurs?"

L2: "In my opinion, there must have been something bigger which destroyed them"

T: "Well, if I can take part in the discussion, there is a theory which says that it was a meteor shower or even more meteor showers"

L3: "Can we predict a meteor shower?"

T: "Nowadays, of course we can but in the Past people did not know what it was"

etc…

During the CLIL biology lesson three CLIL learners were taken to the board and were asked some questions concerning the previous lessons. One CLIL learner had no problems with answering the questions fluently but the other two had a lot of problems with vocabulary so their speech was not very fluent. They could only provide the teacher with a simple description of some cellular processes, e.g.

L1: "Pairs of the chromosomes fail….uh… I don't remember the word, can I say it in Arabic?"

L2: "Can I write down the words I don't know the right pronunciation"

In the next stage of the lesson where the CLIL learners were given some tasks which required speaking, only five CLIL learners were very active answering the CLIL biology teacher's questions giving clear and detailed descriptions. The other CLIL learners were silent. The topic seemed to be difficult for them and they hardly ever spoke during the lesson.

All in all, there was noticeable advancement and changes concerning the speaking skills as far as geography and biology were concerned. The CLIL learners were still willing to take part in discussions and express their opinions.

In this class the CLIL learners were given tests in geography and biology .

The first test to be discussed was taken in geography and covered astronomy with some parts of geology. There were three questions in English out of six. Firstly, the CLIL learners were asked to name inner or outer planets then they were asked to write the definitions of some terms and in the third question they were asked to divide Mesozoic and Cenozoic into periods or divide Paleozoic into periods depending on the group the CLIL learners were in. The tests of 32 CLIL learners were analysed. The aim of the questions was to check the learners' vocabulary. The CLIL learners did not have any problems with the first and the second question but many of them had a lot of problems with the third questions where they were supposed to divide the eras into periods. They either confused the periods or made spelling mistakes, e.g. *"Cretacos** instead of *Cretaceous"*, *"Triasic** instead of *Triassic"*, *"Sylurian** instead of *Permian"*, *"Karbonius** instead of *Carbonius"* etc.

The biology test consisted of 32 questions which were all given in English. In the first question, the CLIL learners were provided with the picture of a cell and they were asked to name different parts of the cell. In question number 2, they were ask to list the differences between the animal and the plant cell. In question number 3, they were asked to draw a nucleus, identify the parts and describe the functions. Questions 4-15 were multiple choice questions, 16-25 were *true/false* questions and questions 26-32 were statements which were to be completed by the correct term or phrase. The test covered the material concerning the structure of different kinds of cells. 34 tests were analysed. One more learner joined the CLIL class in December and that is why the number of the tests is different. The most problematic were the first three questions and the statements where the CLIL learners were asked to provide some words or expressions. While analysing the tests written in January, the CLIL learners seemed to have fewer spelling problems than they had in November which may be due to the fact that they "crossed the

language barrier" and got used to writing in English. The most common mistakes which appeared in the test were the following, e.g. "*membrance** instead of *membrane*", "*nucleus** instead of *nucleolus*", "*plastics** instead of *plastids*", "*rybosomes** instead of *ribosomes*", "*vacule** instead of *vacuole*", "*organeles** instead of *organelles*" etc.

CLIL learners were able to develop their **listening skills.**, the CLIL learners were engaged in the process of comprehension accompanied by a wide variety of contexts. During the CLIL geography lesson, they were exposed to the teacher's talk as well as to the other learners' talk while working in pairs and groups. A similar situation took place during the CLIL biology lessons when they were exposed both to the teacher's talk and the learners' talk.Taking into consideration the **reading skills** of the CLIL learners at that stage of the study it can be said that the CLIL learners could read with a large degree of independence, adapting various styles and speed of reading to different texts and purposes (Council of Europe, 2001: 69). However, during all the lessons mentioned above, the CLIL learners were only asked to read some instructions so it is very difficult to say whether their reading skills developed or not. They were also asked to read the information from the blackboard and copy everything into their notebooks. On the basis of the observations, the CLIL learners did not have many problems with understanding the instructions they had been asked to read apart from geography.

All in all, not many changes concerning the development of reading skills of the CLIL learners observed were noticed.

The CLIL biology teacher did not spend any time on correcting the **grammatical** errors made by the CLIL learners. The lessons were very intensive and there was no time to do it. The only person who spent some time on correcting the CLIL learners grammatical errors was the CLIL geography teacher. The error correction was rather quick and made after the CLIL learner had made an error. The CLIL

geography teacher did not go into any details as far as grammar explanation was concerned. There was also no need to do it as the errors that the CLIL learners made were mainly related to the use of pronouns, e.g. "*she** instead of *he* or *it"* etc., the use of prepositions, e.g. "*for** instead of *on*" and the "s" ending in the third person singular.

To summarise, the researcher noticed a slight progress as far as grammar was concerned – the CLIL learners still made errors in the use of pronouns or prepositions but they did not make many errors concerning the structures or the use of Tenses, which was quite visible in the previous months. They showed a high degree of grammatical control and their mistakes did not lead to misunderstanding.

In comparison to the previous months, the range of **vocabulary** that the CLIL learners possessed definitely increased. Having observed the CLIL learners it can be said that most of them used a lot of specialized vocabulary from the field of geography and biology. From time to time they had some problems with remembering a word but in such a situation they either tried to explain the word or just used a Arabic word instead. They had problems with using them and also with remembering them.

Having analysed the data gathered during the lessons mentioned above, the **pronunciation** of the CLIL learners did not change a lot in comparison to the lessons observed in the previous months. Most of the CLIL learners tended to have some problems with word stress, e.g. the word *sedimentary rocks* (geography) – most of the observed CLIL learners stressed the first syllable instead of the third one; the word *chromosomes* (biology) – most of the observed CLIL learners stressed the second syllable instead of the first one;. Additionally, the CLIL learners still tended to have some problems with the long and short vowels, e.g. *kangaroo* (there should be long "u" – u: and the CLIL learners often used the short "u") (geography), *diffusion* (there should be long "u" – u: and the CLIL learners

tended to use short "u") (biology); Some of the CLIL learners seemed to have some problems with the use of proper vowels. Some of them used "e" instead of "a". However, it was very difficult for the researcher to go into detailed analysis as far as pronunciation was concerned due to the fact that the researcher did not feel competent enough. As a result, the researcher concentrated only on the most visible pronunciation errors. Concluding, as far as pronunciation is concerned, the CLIL learners did not make visible progress in comparison to their pronunciation analysed in the previous months. As it can be noticed from the data provided above, the. Some of the CLIL learners were willing to integrate content and language by talking or writing about mathematical formulas in English.

4.9.4. The use of L1 (code-switching)

Comparing the lessons observed in September and November to the lessons observed in January there were some changes noticed as far as code-switching was concerned. The percentage of the use of Arabic decreased. In the case of the above mentioned geography lesson, about 20% of the lesson was in Arabic. In the case of biology, it was about 3% of the lesson As can be seen, the percentage of the use of Arabic during the lessons observed decreased by about 2%. Nearly all types of code-switching were noticed during the lessons observed apart from the affective switch: the types of code switching noticed in the classroom we of linguistic switch, topic switch and socializing nature.

4.9.5. Classroom interaction

Adopting van Lier's (1988: 94-120) framework the following types of interaction as well as types of function were noticed during the lessons mentioned above:

Type 1:

Geography:

L1: ""Can we predict the phenomena concerning meteors?"];

T: "We are talking about the Earth plates now, not meteors"

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L1: "Please, can you tell us, it's much more interesting"

L2: "Tell us Sir, please"] (**ideational function**);

Biology

L1: "You know what, I'm curious about the genes"];

L2: "One is from a father and the other from a mother"];

L1: "Well, it's probably obvious"; "Do you look like your father or your mother?

L2: "I look like my mother but I have my father's character] etc… (**interpersonal function**);

As it can be seen from the first example, the CLIL geography teacher was involved in the activity but lost control over it. In case of the second example, the teacher was not involved in the conversation at all. The interaction took place between two CLIL learners.

Type 2:

Biology

T: "The task is evaluate and also include some commentary in your note"

: "Write down the following numbers…] (**textual function**);

Geography

T: "Mark on the map the points where the coal occurs in Poland"] (**textual function**);

Biology

T: "You have been given a picture of two cells, please, list the differences between the cells" (**textual function**);

In the above mentioned type of interaction, the CLIL teachers controlled the topic but not the activity. The CLIL learners were given some "orders" and it was up to them whether they fulfilled them or not.

It is also worth mentioning that all the CLIL teachers spent some time on giving short lectures (max.10 min) during which they had control over the topic but not over the activities going on in the classroom.

Type 3:

All CLIL teachers spent about 10 minutes of their lesson asking CLIL learners questions concerning the previous lessons. The CLIL learners were asked to come to the blackboard or sit near the CLIL teacher's desk. While eliciting answers from the CLIL learners the CLIL teacher controlled both the topic and the activity, e.g.

biology:

"can you explain the Cellular transport ? Could you explain it to me in your own words?" (**textual function**);

"Could you solve this task and give us two solutions? How can the numbers be factorized?" (**textual function**);

Biology:

"OK, so lets' revise the structure of the cell. Could you tell me what the animal cell looks like?" (**textual function**);

"Why is there unequal division of cytoplast. You can use the picture if you want to" (**textual function**);

Geography:

"What influences the Earth? Could you give me some examples?" (**textual function**);

Type 4:

Biology:

T: "OK, Could you open your notebooks and draw different stages of mitosis" (**textual function**);

There were a few CLIL learners who did not draw anything in their notebooks. The following conversation was heard by the researcher:

L1: ""What do we need to draw it for in our notebooks?"

L2: "You are right, there is the same drawing in our course books so it's a waste of time

L1: "Even if we didn't have it in our books we could get it from the Internet"

function);

As can be seen from the above given examples, the CLIL teacher controlled the activity but not the topic. The CLIL learners had a personal conversation while doing the tasks given by the CLIL teacher.

Comparing the interaction observed during the lessons in January to the interaction observed during the lessons in the previous months, it can be said that there was more interaction between the CLIL teachers and the CLIL learners and vice versa in November which was probably due to the fact that the CLIL teachers did not give long lectures but rather provided the CLIL learners with some interactive exercises. The type of interaction which occurred during the lessons observed was mainly of a textual or interpersonal nature.

4.9.6. The teacher's methodological approach

Geography

In comparison to the previously analysed CLIL geography lessons, the CLIL geography teacher mostly used a learner-centred approach. The CLIL geography teacher introduced the lesson by asking some questions concerning meteors. Then the CLIL geography teacher told the CLIL learners a story about a meteor which had hit the planet Earth. The story telling lasted about 5 minutes. Afterwards, the CLIL learners were given some questions in English and they were asked to watch a documentary about the planet Earth. It is worth mentioning that the documentary was in English. During the film the CLIL geography teacher pressed the "pause" ("freeze frame" method) and asked the CLIL learners to answer the questions as well as to predict what was going to happen next. After the documentary, the CLIL

learners were asked to get into five groups. The CLIL geography teacher distributed maps with different Earth periods and the CLIL learners were asked to name different events which occurred in particular periods. The group which finished first was given "pluses" (five pluses meant a very good mark). As can be seen, the CLIL geography teacher used various methods which required the CLIL learners to integrate content and language simultaneously. What is more, the activities were of a communicative nature.

Biology

The CLIL biology lesson observed in January did not differ a lot from the lesson observed in the previous months. Most of the lesson observed was teacher-centred. The CLIL biology teacher gave short lecture on mitosis (10 min). While explaining certain stages of mitosis the CLIL biology teacher used OHP where all the stages were illustrated. The key words were translated by the CLIL biology teacher and put on the board. In order to revise different stages of mitosis and meiosis the CLIL learners were put into four groups and they were given different colours of plasticine. Their task was to illustrate the stages of mitosis and meiosis using different colours. At the end of the lesson the CLIL biology teacher asked one CLIL learner from each group to describe the stages of mitosis and meiosis. Apart from integrating content and language, the CLIL biology teacher used some realia to help the CLIL learners remember very difficult information.

In conclusion, both the CLIL geography teacher and the CLIL biology teacher used various methods of teaching in order to integrate content and language still paying more attention to content. All the teachers used both teacher-centred approach and learner-centred approach. All the activities where the CLIL learner was in the centre made the CLIL learners more willing to participate in the lessons.

4.9.7. Learner's evaluation

During the CLIL lessons mentioned above all the CLIL teachers used "oral evaluation". In case of geography and biology three CLIL learners were asked to come to the blackboard or sit in front of the teacher and answer some questions concerning the previous lessons. The CLIL geography teacher asked five questions and the CLIL biology teacher asked six questions. All the questions were asked in English but the CLIL learners had a choice – they could either answer in English only. In case of answering a question in English most of the CLIL learners asked were well prepared except for one CLIL learner who was not able to answer any questions asked by the CLIL biology teacher. The criteria concerning oral evaluation used by both CLIL teachers were very similar: the most important was content knowledge.

4.9.8. Teaching materials

Geography:

During the CLIL geography lesson described above, the CLIL geography teacher used multimedia. The CLIL learners were asked to watch a documentary which had been recorded from the from a programme on TV. The documentary was about the beginning of the planet Earth. The film was in English and the tasks which were distributed on some handouts were in English. All the tasks were prepared by the CLIL geography teacher. Additionally, the CLIL geography teacher was using the blackboard where she put all the new vocabulary and also drew some rock cross sections.

As far as teaching materials are concerned the CLIL biology teacher, while explaining all the terms, used projector where all the information was written down so the CLIL learners had no problems with making some notes. Additionally, the CLIL biology teacher was using a board drawing all the processes of mitosis and meiosis. Additionally, the CLIL learners were given some course books which

were written in English and were used in the American High School. The CLIL learners were asked to work on tasks in the above mentioned book. No multimedia was used during the lesson.

To summarize, all the materials used during the lessons differ much from the materials used during discussed lessons in Comboni School. There were documentary materials in (geography) and IGCS course books (biology). It can be said that both the CLIL geography teacher as well as the CLIL biology teacher by providing the CLIL learners with different materials and theytried to integrate both content and language.

4.9.9. Classroom setting

The classroom was highly equipped , the seats were well organized and the general atmosphere was good. Additionally, a wooden shelf was made where the TV, video and DVD were put. No other changes in any of the classrooms were noticed by the researcher.

4.9.10Summary

This chapter has provided a rationale for the main decisions regarding the methodology of this study and the approach to analysis of the data gathered.

To validate methods of data collection a questionnaire, Observation sheet and test analysis were used. Firstly, the questionnaire was formed to address both learners and teachers involved in learning English through other subject and it has been evaluated by experts.

After having designed and piloted the previously described observational schedule, the next step was to collect the data from schools which employ Content and Language Integration approach. Most research carried out in a school is very time consuming because in addition to the data collection procedures, meetings with different school administrators as well as teachers are required and these arrangements can stretch over a longer period of time. Working with several

teachers can be quite taxing for observers because teachers are often stressed out and schools in general are a very busy environment. I also had to face these challenges because I often appeared at school without being informed that the teacher was ill or at a workshop and that the students were away on a class trip or had a project. These unexpected interruptions stretched the data collection process and made the observations quite exhausting.

My role as a researcher in observation was that of an „non-participant observer" which meant that I was known as a researcher to the class but I had got less extensive contact with the students and thus I was only minimally involved in the setting which was necessary for achieving distance as well as objectivity.

A couple of weeks after the last lesson in class had been observed, all lessons were reviewed to gain more insights and to fill in information according to categories and entries in the structured observational schedule . Next, the results of the observations made in class and the results of the reanalysis of the lessons were presented and discussed. This two-phase observation should ensure that the notes on the observational schedule were objective and did not contain missing parts.

With regard to the validity of the observations, researchers have to ensure that the indicators of the construct under investigation are fair and operationalized, for the mentioned example.

Finally, The findings of this analysis are presented and discussed in the next chapter.