

Exploring CLIL in English as a Second Language (ESL) Lessons at the Tertiary Level: A Pilot Study at a Public University in Sabah, Malaysia

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ABSTRACT—*This paper outlines a pilot study on exploring the possibilities of implementing the Content and Language Integrated Learning (CLIL) approach in English lessons at a local public university. The participants were fifteen undergraduates who were considered as low-intermediate English learners and they were from different faculties. They were placed as an experimental group and exposed to the CLIL approach for ten weeks. Throughout the lessons, the participants' language progress was observed through formative and summative assessments and at the end of the semester they were asked to fill in the questionnaire about their perceptions on CLIL. The tests showed a gradual improvement in terms of their language proficiency and the results from the questionnaires indicated students' positive responses. It can be concluded that CLIL is a useful approach in motivating students to learn English for authentic purposes and in a less traditional way.*

Keywords— CLIL, integrated language learning, English

1. INTRODUCTION

CLIL refers to “Content and Language Integrated Learning”, a term created by David Marsh in 1994 and as the term suggests, the learning of a subject is integrated with language learning in CLIL classes. In other words, CLIL promotes the dual-focused approach in which the language functions more than a tool to learn another subject (or contents of the subject). Its advantage is that it aims to help students to develop and increase their proficiency in another language, usually a second or foreign language. That being said, CLIL proved to be a hopeful educational approach which integrates learning content along with a foreign language (Mehisto et al, 2008; Coyle et al, 2010).

A number of research studies on CLIL in language classrooms have been carried out all around the globe. For example, Luczywek (2009) describes the historical implementation of CLIL in Poland which has undergone some education reformation and has promoted the teaching and learning across curriculum. The new policy emphasised on integrating several subjects and one of the studies by Luczywek tested the results of using English in teaching History and Literature and stated that,

the learners practised a lot of structures e.g. simple sentences: imperatives, questions, answers and requests in simple present and simple past tenses, and the expression ‘to be going to do something’ and learned a lot of vocabulary (Luczywek , 2009:49).

The researcher also claimed that the students were highly motivated in participating in other activities such as writing a storybook and performing in the classroom theatre. Another research was by Martinez (2009) who started a project work through CLIL for learners as young as 6-7 years old in Science, History and Geography. Although it was a challenge, she reported that at the end of the project, the students “...feel motivated to contribute...to the project” and eventually the students themselves “...were an active part in their learning process” (Martinez, 2009: 67). The key point was that CLIL could motivate students to learn actively and consequently perform well in their studies.

Apart from that, Loranc-Paszyk (2009) conducted a study on the effects of integrating reading and writing in a History of European Integration course. The respondents were 17 undergraduates and after two semesters of exposure to the CLIL module, they showed an increase in their reading and writing performances by 21% and 24% in comparison to the control group who only managed to increase 1% in the reading performance and a decrease of 1% in their writing. In a later study by Várkuti (2010), the objective was to investigate whether the use English (as a foreign language) to teach other subject could improve students' language learning. The findings showed that the students who were involved in CLIL had better communicative and academic linguistics competence compared to those who followed the tradition foreign language learning class. Hence the researcher concluded that,

Considering that the aim of education is to provide functional foreign language knowledge, the findings of this research suggest that in largely monolingual societies the CLIL approach is a more effective means of language learning than intensive language programmes. (Várkuti, 2010:76)

In the Malaysian context, the national and official first language is the Malay language and it has been used as the medium of instruction in all primary and secondary schools since 1970. By the 20th century, English has become more important internationally due to its major role in various fields such as economy and technology (Graddol, 1997). The Malaysian Government was aware of this trend and has taken some steps in improving the English language proficiency and in 2002, the Ministry of Education announced a change to the national curriculum; mathematics and science would be taught in English by the following year. The implementation of English for teaching and learning of these two subjects was carried out in phases, starting in 2003 with Year 1 (6-7 years old), Form 1 (12-13 years old) and Lower 6 (117-18 years old).

Sopia et al (2010) referred to this policy as the 'Malaysian CLIL'. They investigated the primary school students' cognitive engagement in the Science subject when they were taught in English; the findings were quite a disappointment. Among others, they found out that students were often engaged in the lower cognitive level and they were not encouraged to ask questions. Besides, the lessons were teacher-centred, and teachers also liked to ask low-cognitive questions and practise fact-recalling questions. They later suggested that the lessons should have been learner-centred so that the students would be able to express their opinions and collaborate with each other.

The policy of teaching Mathematics and Science in English (ETeMS) was finally replaced with teaching of Mathematics and Science in the Malay language since the implementation was less effective. For example, the students failed to perform well in these two subjects as well as reading. In the website of Organisation for Economic Co-operation and Development (OECD), they stated that

... the average performance in reading of 15-year-olds is 398 points, compared to an average of 496 points in OECD countries....On average, 15-year-olds score 421 points in mathematics, the main topic of PISA 2012, compared to an average of 494 points in OECD countries [and] in science literacy, 15-year-olds in Malaysia score 420 points compared to an average of 501 points in OECD countries.

In other words, the statistics showed deterioration in performance among Malaysian secondary school students. Faizah and Marzilah (2008:33) reported that the majority of the students in their research cited their lack of English language proficiency as the main factor and that their teachers "did not have a sufficient level of English language proficiency to make the lessons easy for them". These researchers also mentioned that a larger percentage of learners performed poorly in Mathematics and Science which indicated that the academic performance of students in these subjects actually deteriorated after the ETeMS was implemented.

1.1 Theoretical framework

The CLIL module proposed for this research is based on two learning theories namely the Bloom's (1956) taxonomy of learning domains, and Vygotsky's (1932) scaffolding theory.

According to Bloom's cognitive domain, learning is an active process in which the thinking elevates from recalling information (knowledge) to making judgment (evaluation) (Lightbown and Spada, 2013). The learning activities in the proposed module are not arranged in a linear order but a non-linear form. For example, the grammar items do not start with the introduction to determiners and articles but rather with phrases and complex sentences. The rationale is that the students have learnt English since primary and at the university level, they are supposed to have known about it even if they may have problem in producing grammatically correct sentences.

Meanwhile in Vygotsky's theory, the social interaction is the main element to better performance among the learners (Lightbown and Spada, 2013). As a group, the learners' interaction provides scaffolding or assistance to each other. This is one of the other concepts in the CLIL module that is to have a project-based activity in which the students could collaborate and help the members to learn the language in a more relaxed environment. This contradicts the traditional teacher-centred classes and perhaps could motivate the students to utilise the language more.

1.2 Statement of the Problem

With reference to the failure of ETeMS or the 'Malaysian CLIL' as termed by Sopia et al (2010), does this mean that CLIL has no place in the Malaysian education system? We hypothesised that the underlying factor was because Mathematics and Science were based on concepts which are not tangible, and abstract. The mathematical concepts and scientific technical terms are complex and difficult to grasp, particularly if the teachers and students are not that proficient in the English language. Apart from that, in ETeMS, the students' proficiency in mastering English was not the main concern as the focus was more on their mastering the contents of the mathematics and science lessons.

CLIL could provide us the opportunity to show our students that in CLIL lessons, equal attention is given to both the content and language. English is not a secluded, individual subject since it can be parts of other subjects like History, Geography, Arts, Science and Technology. To put it differently, students should not be constraint to only memorising grammar rules and doing grammar exercises in their workbook. They should be exposed to the possible integration of activities such as performing a historical play in English or completing a project-based learning in English in Arts classes.

These kinds of research are still scarce in the Malaysian context particularly at the tertiary level and this is another gap in the CLIL research in Malaysia. Students should have more flexibility in learning and thus this study attempts to create a learner-centred, project-based class that could encourage the collaboration among the students so that the learning process will be more interesting and motivating. In addition, topics in the modules are based on different subject and yet they are inter-related in order to make the students aware that it is possible to use English across the subjects. It is hoped that by integrating English and other subjects, for example, they would be able to reflect that reading strategies depend on the text-types and that writing a historic paper is different from writing a scientific paper.

This article is a segment of a research grant of the same title, and as such the following was based on the pilot study on the implementation of the CLIL modules in the ESL lessons.

2. PILOT STUDY

Prior to the actual research, a draft of the CLIL modules was implemented in a pilot study conducted among fifteen first year students who enrolled in the General English Proficiency Course at the Language Centre. The majority of them either got Band 1 or Band 2 in the Malaysian University English Test (MUET) in which the highest level is Band 6. Basically these students could be categorised as low-intermediate language learners.

The dual aims of the pilot study were to identify the strengths and weaknesses of the module for the improvement for the actual modules to find out how far have the students progressed in terms of their language proficiency. Finally we also wanted to get the students' feedback on the use of CLIL in their English lessons.

2.1 Research questions

The research questions are as follows:

- What is the effectiveness of CLIL modules in the learning of English in relation to the undergraduates' language proficiency?
- What are their perceptions of the impact of the CLIL modules in their language learning?

3. METHODOLOGY

The pilot study involved one experimental group and they were assessed continuously throughout the semester (14 weeks). The contact hour between the teacher and students were three hours per week. They were encouraged to bring laptops and tablets to help them with their learning tasks, and the internet service was provided by the teacher. The students worked individually and in small groups. Examples of their group works would be the following; reading on-line materials, extracting information from the Internet, preparing a project proposal, class discussions and debates, etc.

The students were tested on their grammar knowledge in the beginning and at the end of the pilot study, and in between, their writing and speaking performances were also assessed. After they have completed the post-test, they were also given a set of questionnaire on their perceptions on the module.

The data from the tests and questionnaires were analysed through the descriptive statistics.

3.1 The CLIL module

The pilot study was conducted over 10-week period, but the module was used in only four times as it was only a draft. The actual module will be completed based on the feedback from the students and include more topics to be used during the 13 weeks of compulsory teaching at this university. The draft consisted of four topics that covered the subjects of History, Geography, Literature and Moral Values. A topic is made up of several sub-topics that comprised Listening, Speaking, Reading, Writing and Language Focus.

For the purpose of the pilot study, some of the topics were based on the textbook that they used during the semester to make them feel at ease with CLIL. For example, in Unit 17 of the textbook which entitled “Time Capsules”, there was an extract about “Pompeii: A Window to Ancient History” used in the CLIL modules. The original purpose was for the students to underline the nouns in the extract. However, we felt that asking students to identify the nouns would be a typical grammar exercise that would not leave much impact on them. Thus we expanded the topic “Pompeii” by including more texts and video-watching to trigger students’ interest. After the completion of these activities, the follow-up activities included role-playing and finally some grammar exercises. During the discussion the students were able to relate to the process of volcano eruptions to Geography and the archaeological site of Pompeii to History. The role playing was perhaps the most stimulating activity as the students acted as residents of Pompeii who witnessed the volcano eruption. They chose the characters by themselves and talked about their roles in the society and the life in the future since they had lost everything in the disaster. The grammar exercises that were later given to the students on noun and verb agreement, and quantifiers were not intimidating since they had already understood the whole text about “Pompeii”.

3.2 Assessment

The students’ language proficiency was assessed five times using Tests 1 and 2, Writing assignment, online grammar test (MyLine), and Presentation. The items for Test 1, Test 2 and MyLine were grammar items, Writing assignment required the students to form questions from any text that they read and Presentation was the only pair work in which the students wrote a dialogue based on a given situation and conducted the conversation with each other.

4. RESULTS AND DISCUSSION FROM THE PILOT STUDY

In this section, there are two parts of the results presented; i) the students’ progress in their language learning, and ii) their perception on the use of CLIL modules in their language learning.

The table below showed the students’ progress throughout the semester. Grammar Test 1 was in Week 6, Writing assignment in Week 10, MyLine test in Week 11, Presentation assessment in Week 12, and finally Grammar Test 2 in Week 13. The passing marks for Writing Test was 10%, MyLine was 5% and Presentation was 10%.

Table 1: Students’ marks

Student	GRAMMAR TEST 1 (20%)	GRAMMAR TEST 2 (20%)	(+/-)	Writing (20%)	MyLine (10%)	Presentation (20%)
1	13.5	15.2	1.7	13	7.6	14.5
2	16.5	16.6	0.01	10	8.3	17
3	15	19.4	4.4	15	9.7	14
4	14	17.6	3.6	17	8.8	16.5
5	14	15	1	13	8	15.3
6	10.5	15.2	4.7	13	7.6	14.3
7	15	15.2	0.2	15	7.6	16.5
8	16	15.8	-0.2	11	7.9	16.1
9	16	14.4	-1.6	16	7.2	16.3
10	16.5	13.8	-2.7	15	6.9	15.5
11	13.5	15.4	1.9	19	7.7	17
12	16	15	-1	15	8	16
13	15.5	16.8	1.3	19	8.4	15
14	15	14.4	-0.6	14	7.2	15
15	13.5	15.4	1.9	14	7.7	16.5

As portrayed in Table 1, the majority of the students (ten students) showed a gradual progress in their grammar proficiency and only five students showed a decline in the grammar tests. In the other three assessment on writing, the online English grammar test and presentation skills, the majority of the managed to score at least more than the average marks. This was a good indicator of their language learning performance since they were considered as low-intermediate and only scored either Band 1 or Band 2 in their MUET.

The findings from Table 1 showed that the students' language proficiency had gradually increased as they were guided using the CLIL module. Although the data was quite limited, it was a positive one and this implied that it was possible to integrate both the language and content in a lesson and improved the learners' language proficiency. Thus the participants were aware that English can still be integrated in other content subjects like Geography or History or Humanities which are not that technical and formulaic. The finding also was consistent with both Loranc-Paszylk (2009) and Várkuti (2010) that by exposing students to the CLIL modules, they would be able to improve their language proficiency.

Next are the results of the questionnaire on students' perceptions on the language and content aspects of the CLIL module.

Table 2: Results from the questionnaire

	Items	Agree	Neutral	Disagree
Q4	The teaching and learning approach used in this course is very motivating	100% (15)		
Q1	The contents of the course are very clear	100% (15)		
Q5	The course covers the prominent skill in learning English language namely; Listening	100% (15)		
Q6	The course covers the prominent skill in learning namely; Speaking	100% (15)		
Q7	The course covers the prominent skill in learning namely; Reading	100% (15)		
Q8	The course covers the prominent skill in learning namely; Writing	100% (15)		
Q11	The activities are very interesting	100% (15)		
Q12	I am able to the language exercises given on my own without help from the teacher	33% (5)	54% (8)	13% (2)
Q19	This course does not help much in my English proficiency	7% (1)	7% (1)	86% (13)
Q22	Learning the different topics in details helps me to achieve better proficiency in English	100% (15)		
Q35	I could learn English through different topics	74% (11)	13% (2)	13% (2)
Q36	I am not able to understand the grammar lessons	13% (2)	13% (2)	11 (64%)
Q37	I have the opportunity to learn about general knowledge in this course	100% (15)		

Table 2 above shows some of the items asked in the students' questionnaire. In Qs 4 and 11, all of them found the content of this module motivating and interesting. In some of the lessons, the students had the opportunity to watch video clips related to the topics, for example, about Pompeii and constructing a house. The students were able to learn about the chronological event of the eruption of Mount Vesuvius and its impact on the people of Pompeii. It was more realistic than reading a passage about the disaster.

Next, Qs 5,6,7 and 8 were about their perceptions on the language skills, and all of them agreed that the module included all the four skills namely speaking, listening, reading and writing. For instance, in a lesson on Neighbourhood, the students were shown several pictures, downloaded from the Internet, of different types of residents from the most glamorous to the slump areas. They then discussed the socio-economic status of people that would occupy the different areas and the implications on the society. They also wrote a narrative essay following the discussion, exchanged them among themselves and read them. As such the lesson managed to incorporate all four skills equally.

Summing across the pattern of students' responses in Table 2, it clearly indicated that the majority of them were positive towards the impact of CLIL on their language learning. By capturing their interests in the contents of the lessons, students found the activities motivating and cooperated well in group work and finally showed some improvement in their language progress. This confirmed the claims by Luczywek (2009) and Martinez (2009) that students learnt actively in CLIL classes since they were highly motivated.

On the other hand, the limitation of this pilot study was the lack of test on the content or the topics in the modules. Therefore, even if the students agreed that they were able to get new knowledge and learnt different topics, there was no statistical data to support these claims. In the actual research which will be carried out in October 2014 i.e. the beginning of a new semester for the new undergraduates, the modules would have been refined and the students will be assessed in both their language proficiency and their comprehension of the contents.

5. CONCLUSION

The spread of the English language around the world was caused by its usage in the domains of communication, politics, economics, entertainment, education and information technology and it has been a concern in the Malaysian education policy to address this issue. Among the actions taken to improve the English language proficiency were introducing the English for Science and Technology subject and implementing English as medium of instruction in science and mathematics (ETEMS). Both actions were targeted to primary and secondary schools and hence this CLIL research was planned to fill in the gap of improving the English proficiency of the students at tertiary levels. The modules were designed to differ from the typical English grammar modules that focus on drilling exercises. In this research, the modules were used to provide the undergraduates a practical purpose in language learning rather than being another English lesson.

As a conclusion, it could be said that the initial findings from the pilot study was substantial in supporting our argument that CLIL is relevant in the Malaysian education system, and it is perhaps more practical to implement it at the tertiary level. The pilot study demonstrated that the students were prepared to accept changes in the way of learning English and how this approach could help to motivate and simultaneously increase their language proficiency.

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