An Experiment in the Use Of Content And Language Intergrated Learning (Clil) and Genre Process Writing

Robert John Jackson
Manipal International University, Kelana Jaya Campus, Kuala Lumpur, Malaysia
Telephone: +60192692543 Email: robertjackson838@gmail.com

Abstract
The objective of this study is to examine the effectiveness of CLIL combined with genre process writing in enhancing the writing skills of students. An experiment was conducted between two groups to determine the effect of CLIL combined with Genre Process Writing on the writing grammar results of the students. The basic concept of CLIL is to integrate the degree course subjects into the English program so that the students are writing and speaking about subjects with which they have a major interest. In this experiment, the subject was English language. Genre process writing was developed to encourage students to be more adventurous in their writing and to remove the influence of the teacher’s ‘suggestions’ of what to write in their papers.

The descriptive analysis of the results showed that the test group’s gains were greater than the gains of the control group. The inferential analysis tests showed that whilst there was no evidence of significant difference, at a 5% significance level, at the start of the semester, the results at the end indicated that there was evidence of a significant difference between the two groups at a 5% significance level.

The results also show that the reduction of the number and types of grammatical mistakes in the test group was greater than the control group.

Keywords: Content Language Integrated Learning (C.L.I.L), Genre Process Writing,

1. Introduction
A number of researchers have indicated that the writing standard of students entering universities is poor. Chan and Ain (2004) stated that “the writing process had not been entrenched in their knowledge base”. Chow (2007) observed that once students reach the tertiary level of study they are required to express themselves clearly and in their own words. Chow (2007) referring to the level of writing skill of entrants to university states that “many of the students are at a loss”. Othman (2009) makes the comment that many of the students entering universities do not know how to write simple sentences. This research has addressed the issues raised above and used the English language course to develop the English language skills necessary to competently handle the undergraduate work in their respective areas of study.

1.1 Content and Language Integrated Learning (CLIL)
C.L.I.L started to become the most widely used term for this kind of provision during the 1990s although it has been around for many years in language teaching. CLIL is the platform for an innovative methodological approach of far broader scope than language teaching. CLIL use in Europe is on the basis of the content subjects are taught and learnt in a language which is not the mother tongue of the learners. This statement does not really apply to Malaysia as English is widely used in the community.

Some of the advantages of using CLIL are:
1. Knowledge of the English language becomes the means of learning content.
2. Language is integrated into the broad curriculum.
3. Learning is improved through increased motivation and the study of natural language seen in context. When learners are interested in a topic they are motivated to acquire language to communicate.
4. CLIL is based on language acquisition rather than enforced learning.
5. Language is seen in real-life situations in which students can acquire the language. This is natural language development which builds on other forms of learning.
6. CLIL is long-term learning. Students become academically proficient in English after 5-7 years in a good bilingual programme.
7. Fluency is more important than accuracy and errors are a natural part of language learning. Learners develop
fluency in English by using English to communicate for a variety of purposes.

8. Reading is the essential skill.

CLIL helps to:

- Introduce the wider cultural context.
- Prepare for internationalisation.
- Access International Certification and enhance the school profile.
- Improve overall and specific language competence.
- Prepare for future studies and/or working life.
- Develop multilingual interests and attitudes.
- Diversify methods & forms of classroom teaching and learning.
- Increase learner motivation.

Accordingly, its advocates stress how it seeks to develop proficiency in both the non-language subject and the language in which this is taught, attaching the same importance to each. “Achieving this twofold aim calls for the development of a special approach to teaching in that the non-language subject is not taught in a foreign language but in the language of instruction of the Institution”. European Commission (2005). The use of CLIL in the English language is designed to improve both the English language skill and the subject matter skill allowing for language learning in an authentic and holistic way.

CLIL is very much a language learning methodology. The International CLIL Research Journal published 22 articles since 2008 and all related to language development concurrent with the subject matter.

1.2 Genre Process Writing

Genre process writing is used to encourage the students to be freer with their writing essays. Genre process writing was discussed and introduced to the students as most of them have not had the experience in their previous schooling. It allows the students to take risks with their writing and to experiment with different ways of saying the same thing. Traditionally, English teachers use the product method of teaching English. This method limits the students to writing about the things that the teacher has identified as important and should be included in the writing.

1.3 Literature Review

The literature review indicates that most of the CLIL studies have been in the area of bi-lingual countries (where English is a foreign language) and there is a requirement for instruction in English to learn various subjects. The purpose is for the students to learn their particular subject in English, rather than their own language.

Dirks (2004) defines teachers as two distinct groups. The first which retain the traditional role of teachers and teaching are classified as ‘guardians of tradition/culture’. The underlying concept being that these teachers do not want to move with the times and are happy in their comfort areas. This suggests that irrespective of the evidence produced by researchers, there would be no possibility of changing their teaching methods. The second utilises the CLIL approach for the transgression of borders between disciplines, which is reflected in methodological and topical diversity in the classroom including many process-oriented procedures and a highly communicative setting.

Teachers’ mind-sets containing assumptions about subject matter teaching or language teaching as well as CLIL-specific elements need to be considered in an integrated manner since these elements can and do influence and reinforce each other. For that reason, CLIL lessons can have a highly innovative potential for schools: CLIL can break the cycle of fossilised routines, behaviour and topics and lead to new perspectives and positions. However, schools and teachers need to make active use of this innovative potential as innovation does not happen automatically.

Knapper (2008) states that “there is an impressive body of evidence on how teaching methods and curriculum design affects deep, autonomous, and reflective learning”. He goes on to say that notwithstanding the evidence, educational and curriculum practices continue to be dominated by tradition rather than research evidence. He further claims that even though university faculty have received some teaching training and have excelled in their own learning processes, as soon as they commence teaching they tend to fall back onto tradition.
Rod Ellis developed the following table to differentiate between the two methods.

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Traditional Form Based Pedagogy</strong></td>
<td><strong>Task Based Pedagogy (C.L.I.L.)</strong></td>
</tr>
<tr>
<td>Teacher controls topic development</td>
<td>Students able to control topic development</td>
</tr>
<tr>
<td>Turn taking is regulated by teacher</td>
<td>Turn taking is regulated by the same rules that govern everyday discussion</td>
</tr>
<tr>
<td>Display questions (the students may already know the answer)</td>
<td>Use referential questions (questions that the students do not know the answer)</td>
</tr>
<tr>
<td>Students are placed in a responding role and perform limited range of language functions</td>
<td>Students function in both an initiating and responding role and perform a wider range of language functions (asking and giving information, agreeing and disagreeing, instructing)</td>
</tr>
<tr>
<td>Little need or opportunity to negotiate meaning</td>
<td>Opportunity to negotiate meaning when communication problems arise</td>
</tr>
<tr>
<td>Scaffolding directed primarily at enabling student to produce correct sentences</td>
<td>Scaffolding directed primarily at enabling students to say what they want to say</td>
</tr>
<tr>
<td>Form focussed feedback (the teacher responds implicitly or explicitly to the correctness of the students’ utterances)</td>
<td>Content focussed feedback (the teacher responds to the message content of the students’ utterances)</td>
</tr>
<tr>
<td>Echoing (the teacher repeats what the student has said for the benefit of the whole class)</td>
<td>Repetition (a student elects to repeat something another student or teacher has said as private speech)</td>
</tr>
</tbody>
</table>

Adapted from *The Method of Task Based Teaching* Rod Ellis

www.kansai-u.ac.jp/fl/publication/pdf_education/04/5rodellis.pdf

CLIL teaching is first and foremost concerned with good teaching: it has to face similar pedagogical challenges as those faced in mainstream programmes. Many CLIL issues are by no means CLIL-specific.

Varkuti (2010) revealed significantly great differences (24% on average) between the linguistic competences of bilingual school students, who are enrolled in the CLIL programme and those taking part in traditional intensive foreign language learning (non-CLIL) programmes. The hypotheses that CLIL students have a higher level of foreign language competence - both for social and for more cognitively demanding academic communication – were supported by the data. The study demonstrates a distinct numerical advantage for CLIL although this result was expected due to the CLIL student’s richer exposure to English. Varkuti, A (2010)

Colleges of engineering, arts and crafts in Austria have been employing CLIL in engineering subjects in order to better prepare future engineers for the international nature of their occupation in a globalized industry. The overall evaluation of CLIL by current participants is highly positive with a somewhat toned-down but still positive evaluation coming from the alumni. In self-reports on speaking, reading, listening, writing skills the CLIL alumni rated their abilities significantly higher than colleagues who had not experienced CLIL during their school days. The most important aspect, however, is the significantly lower inhibition level when actually speaking the foreign language. Moate, J (2010) states that “the genre-based approach addresses the concerns of both subject and language learning and supports both the content and language goals of CLIL offering a more balanced partnership”.

This study is different from those previously undertaken in that this study used the English language course to improve English and subject skill levels. The integration of genre writing process into the lesson helped the students understand the reasoning behind the methodology. Many of the students indicated that they had never been exposed to this type of teaching and the fact that they responded so well supports the approach. The students in other studies made the comments that they had less fear of speaking in a foreign language and have developed a higher motivation for the foreign language. There were a number of students who disagreed with the C.L.I.L. approach and believe that they did not progress in their subject. Dalton-Puffer, C, Hütten, J, Schindelegger, V, Smit, U, (2009) Integrated reading and writing activities brings benefits to the learner with respect to both content learning and language learning processes. As for language gains, processing information and
process writing is that the students are writing about events from their perspective and not what the teacher wants. The process of writing becomes evaluated is absolutely essential for content learning – text-responsible writing not only helps to revise them to write. This ‘process’ writing is described by Zamel as the need to understand how writers compose, their particular, it builds up reading and writing skills, as well as discourse skills and helps students expand their development of the writing skill will be free flowing without the interference of anyone. The studies of ESL in essence, Zamel is saying that the students should be encouraged to just write without any inhibitions so that there is a dual focus on both language and content learning, and as CLIL teachers usually have both content and language competences. Loranc-Paszylk (2009) Loranc-Paszylk (2009) undertook a study with an experimental group and a control group of students to study the effect C.L.I.L. in academic writing. The pre-test results for the experimental CLIL group was 59% and for the control group 53%. After the tests were completed the post-test result for the experimental CLIL group was 83% and for the control group 52%. The progress mean of the experimental CLIL group academic writing was 24% whereas the progress mean of the control group was -1%. Sopia Md Yassin, Ong Eng Tek, Hashimah Alimon, Sadiah Baharom and Lai Ying Ying, (2010) completed a study of CLIL in Malaysia in light of concerns of its effectiveness. Their observations included that teachers adopted a very didactic style. This meant that the teachers did most of the talking and the students only responded to the teacher’s questions. The focus of the class is centred on providing a predetermined response and involved giving the ‘correct’ answer rather than discussing a process or reasoning. Brown (2000) states that teacher talk should not occupy the major proportion of the class period.

1.4 Genre Process Writing

The work of Vivian Zamel in the 1970s and 80s is still regarded as an authority on the process approach to writing. Zamel has identified that the student’s L1 has an effect on the ability to write in L2. The main thrust of process writing is that the students are writing about events from their perspective and not what the teacher want them to write. This ‘process’ writing is described by Zamel as the need to understand how writers compose, their actions, strategies they employ and the difficulties that they face in finishing an article. Zamel believes teachers should adopt a model of instruction that acknowledges students and gives them the opportunity to write. The model should also encourage students to take risks, establish trust and view writing as a meaning making event. In essence, Zamel is saying that the students should be encouraged to just write without any inhibitions so that the development of the writing skill will be free flowing without the interference of anyone. The studies of ESL classrooms that Zamel has reviewed, demonstrate the kinds of change and growth that are possible when writing is promoted in meaningful ways. They serve to confirm the implications of composing process research as well as to provide us with positive models of teaching. Zamel, V (1976,1982,1983,1985)

1.5 Methodology

The objective of this study is to examine the effectiveness of CLIL combined with genre process writing in enhancing the writing skills of students. This objective was achieved by using a three phase approach, use of CLIL concept, use of genre process writing and the Markin software. The class was student centred which means less teacher talk. In many of the lessons, teacher talk was limited to explaining the assignment for the lesson and additional guidance where necessary.

The English course is a common subject in foundation and degree studies. This allows the teacher to teach the same method of writing in the various subjects because the only difference between the courses is the nouns. All other aspects of the English language are the same in the use of verbs, adjectives and other grammatical structures. The students were from a foundation course and were separated into two groups. The students were from the same language group. One group was the test group and the other was
the control group. The test group was subjected to the CLIL combined with Genre Processing Writing methods however the control group did not have the same methodology. The socioeconomic background and/or cognitive dispositions of the students was not considered in this study.

The study was a multi phase process. The first step was to give the students the first writing test. The results of this test was placed into the Markin software and analysed for grammar mistakes. The results of the grammar analyse was documented in excel. Sentence construction and essay layout was covered in this instruction period.

The students were given lessons in writing of various genres over the next 14 weeks of the first semester. These lessons were in addition to the other aspect of the English program.

The writing genre commenced with a personal narrative and proceeded to increase in complexity by the introduction of essays which included argumentative, contrast and compare, and cause and effect.

All of the subjects of writing assignments, except for the personal narrative, were taken from their respective degree classes by the students’ decision. The biotech students wrote about a biotech subject, the engineer students wrote about an engineering subject and the business students wrote about business subjects. This gave the students the opportunity to develop their course arguments and to present them in a cohesive manner. The initial production was simple sentences and from those sentences formed the paragraphs and finally placed the paragraphs into the essay form to then develop the conclusion. The lecturer’s role was one of facilitator and to guide the students in their choice of topic.

At the end of the first semester a writing test was given to the students. The writing was placed into the Markin software, analysed and compared against the first writing. A two tail t test was used to determine if there was any evidence of significant difference as a 5% significance level.

Grammar per se is not taught in this methodology. It is expected that the students will have sufficient knowledge in basic grammar to be able to write in an appropriate manner. However, as course writing assignments were submitted to the lecturer, they were placed into the Markin system and the students given a grammar report which indicates the weaknesses of their grammatical writing.

The test group was subjected to the above process but not the control group. The difference in end of semester writing scores were then tested for significant differences. A one tail t test was used to determine if there was any significant difference at a 5% significance level.

1.6 Results

This test group graph shows the results of the placement test and the end of semester test for the test group. The y axis displays the score in percentage points whilst the x axis show the number of students. The placement test score is depicted by the blue (series 1) line and the end of semester score by the red line (series 2).

It can be seen from the graph that the blue series 1 group has benefited considerably by the pedagogy of writing. The red line in the final test score shows an increase in total scores of 20.5% from the placement test score. The average scores increased from 56% to 68% whilst the median increased from 61% to 69%. The placement test score for the test group was a total of 1938 and the final score at the end of the semester was 2334.

This control group graph shows the results of the placement test and the end of semester test for the control group. The y axis displays the score in percentage points whilst the x axis show the student number. The placement test score is depicted by the blue line and the end of semester score by the red line.

It can be seen from the graph that the blue series 1 group has not benefited by the pedagogy of writing. The red line in the final test score shows an increase in total scores of 3% from the placement test score. The average scores increased from 59% to 61% whilst the median increased from 59% to 61%. The placement test score for the test group was a total of 1530 and the final score at the end of the semester was 1581.

The two placement tests were tested evidence of significant difference in the scores. Using a two tail t test the result was .70 which exceeds the standard of ≤0.05. The result showed that there was no significant difference between the placement tests of the control and test group at a 5% significance level.

At the end of the semester a one tail t test was undertaken. The one tail t test was used on the basis that the descriptive analysis suggested that there was evidence of a significant difference in the scores at the end of the semester. The null hypothesis was that the test would show that there was evidence of significant difference between the scores at a 5% significance level. The test result of ≤0.05 was achieved and therefore the null hypothesis is accepted. The result showed that there is a significant difference between the two groups in the end of semester tests at a 5% significance level.
1.7 Conclusion

The average score in the control group in the placement test was 59% as against the test group which was 56%. Therefore it would be expected, all things being equal, that the increase in score and the final score of the control group would have been higher than the test group at the end of the semester period. The test group scores increased by 20.5% to 68% whilst the control group increased by 3% to 61%.

The inferential tests showed that there was no evidence of any significant difference in the placement test scores at a 5% significance level however at the end of the semester there was evidence of a significant difference at the 5% significance level.

The use of CLIL combined with genre process writing was useful to determine if the method was successful with this group of students. The research was limited by the number of students available and there should be a larger research project undertaken to verify the results of this test.

Notwithstanding the low number of students the results supported those researches undertaken previously Carson and Leki (1997), Dalton-Puffer, C, Hüttner, J, Schindelegger, V, Smit, U; (2009), Loranc-Paszylk, B, (2009), Sophia Md Yassin et al (2010), Carson and Leki (1997) Dalton-Puffer, C, Hüttner, J, Schindelegger, V, Smit, U, (2009). The quote from Tabachnick and Fidell, (2007) sums up this research very well. They state that “If groups of undergraduates are randomly assigned to the same material but different types of teaching techniques, and afterward some groups of undergraduates perform better than others, the difference in performance is said, with some degree of confidence to be caused by the difference in teaching technique”.

References


European Commission (2005), *Content and Language Integrated Learning (CLIL)at School in Europe*, Directorate-General for Education and Culture


Tabachnick, B & Fidell, S (2007), *Using Multivariate Statistics*, California State University, Northridge, California State University, Northridge Boston


AVERAGE AND MEDIAN SCORES OF CONTROL AND TEST GROUP

<table>
<thead>
<tr>
<th></th>
<th>Placement test</th>
<th>1st semester</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Average score</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>control group</strong></td>
<td>59</td>
<td>61</td>
</tr>
<tr>
<td><strong>test group</strong></td>
<td>56</td>
<td>68</td>
</tr>
<tr>
<td><strong>Median score</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>control group</strong></td>
<td>59</td>
<td>61</td>
</tr>
<tr>
<td><strong>test group</strong></td>
<td>61</td>
<td>69</td>
</tr>
</tbody>
</table>

*Significant At 5% Significance Level

Writing results - Graph of end of semester 1 (series 2) against start of semester 1 (series 1)

Writing results - Graph of end of semester 1 (series 2) against start of semester 1 (series 1)
This academic article was published by The International Institute for Science, Technology and Education (IISTE). The IISTE is a pioneer in the Open Access Publishing service based in the U.S. and Europe. The aim of the institute is Accelerating Global Knowledge Sharing.

More information about the publisher can be found in the IISTE’s homepage: http://www.iiste.org

CALL FOR PAPERS

The IISTE is currently hosting more than 30 peer-reviewed academic journals and collaborating with academic institutions around the world. There’s no deadline for submission. **Prospective authors of IISTE journals can find the submission instruction on the following page:** http://www.iiste.org/Journals/

The IISTE editorial team promises to the review and publish all the qualified submissions in a **fast** manner. All the journals articles are available online to the readers all over the world without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. Printed version of the journals is also available upon request from readers and authors.

**IISTE Knowledge Sharing Partners**

EBSCO, Index Copernicus, Ulrich's Periodicals Directory, JournalTOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC WorldCat, Universe Digital Library, NewJour, Google Scholar