The Effectiveness of Adjunct Class on the Mastery of Vocabulary and Course Content of

Students of Accounting Department

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Abstract

The paper reports a classroom action research that aimed to determine the impact of a Content and Language Integrated Learning on the mastery of vocabulary and of course contents of a group of students in the Accounting Department of Universitas Ma Chung. It also intended to identify their opinions about the effectiveness of such approach. To achieve these objectives, a Time Series Design was used in a Classroom Action Research framework to introduce an adjunct class to the accounting class. The baseline data in the form of their vocabulary mastery and knowledge of the course contents were gained before the adjunct session was given. Then, the adjunct sessions were given for a period of two months. A few tests were administered to measure their progress in the mastery of vocabulary and course contents. Further, a comparison was drawn between the scores of the baseline data and the subsequent measures. In general, although they gained better mastery of new words, they failed to utilize them to increase their mastery of the course contents. Further exploration into the interview data reveals that most of them did not feel any significant assistance in mastering the course contents, although many of them admitted the benefit of mastering new vocabulary. There are some possible causes of the results. First, the limited duration of the adjunct sessions was felt to hinder the effectiveness. Second, the explanations in the adjunct sessions were not matched quite well with the focus during the main content course. On the basis of the results, the recommended points are the matching between the emphasis of both classes, and the lengthening of the duration of the adjunct sessions.

Keywords: Content and Language Integrated Learning, adjunct class, content course.

Introduction

Technology advancement, cultural exchanges, the increasingly rapid flows of capital and goods as boundaries between countries are fading trigger every nation to participate actively. Such ambition spurs them to educate their young generations to be able to compete on the global stage. One of the ways is to arm them with proficiency in the language that has for many decades been the medium of communication, English language. In the spirit of pursuing high English proficiency, universities across the country have been determined to teach various subject matters in English. Despite the ambition and efforts, however, the outcome is still far from satisfactory. This seems to be attributable to the poor readiness of lecturers and students alike to conduct teaching and learning activities entirely in English. Another additional factor that compounds the problem is the academic style of English which in itself presents a challenge for Indonesian students and lecturers.

The incessant exploration into the realm of language learning has given birth to what is called Content-Based Instruction (CBI) and Content and Language Integrated Learning (CLIL). These two approaches in turn generated two techniques, Sheltered Model and Adjunct Model. Both intend to arm non-language students with adequate receptive and productive English skills that will enable them to study their own subject matters and comprehend written and oral lessons presented in English language. Despite the popularity of the two techniques, not many studies have been undertaken to explore the implementation of these techniques in Indonesian academic contexts. As a result, lecturers are at loss to implement appropriate techniques in their CLIL classes. In many educational institutions the aspiration to teach non-language subjects in English language has not been met with effective realizations, and problems that spring up here and there are solved in piecemeal and incidental fashion. This research was conducted to see how such endeavor can have a

positive impact on non-language students' preparation to follow their content course, and what they think about such effort.

The research was conducted to achieve the following objectives:

1. To identify the impact of English adjunct class on the mastery of vocabulary and mastery of subject matter of students who were learning Intermediate Accounting delivered in English.

2. To identify the students' opinions about the effectiveness and benefits of the English adjunct class.

As the main topic of this paper is CLIL (*Content and Language Integrated Learning*), a definition of CLIL is proposed first as "*an activity in which a foreign language is used as a tool in the learning of a non-language subject in which both language and the subject have a joint role"* (Marsh, 2002: 58)*. Thus, it is obvious that the medium of instruction is inseparable from the content of the instruction. Learning the content will implicate learning the language as well.

Another term often used besides CLIL is CBI, which Davies (2003) defines as "*a teaching method that emphasizes learning about something rather than learning about language"*. Thus, CBI is an approach that makes the learners learn their subject matter through English as the means of communication. They use the language mainly to study the subject matter. Some experts argue that in CBI, the students learn two things simultaneously: their subject matter, and the language. This apparently promising claim has boosted the popularity of CBI among learners whose mother tongues are not English.

Stoller (2002) contends that CBI provides a conducive learning environment for foreign language learning. Students who learn a content matter through CBI can learn the lesson through the language. At the same time, as they advance in their mastery of the subject

matter, they also refine their language mastery. My research was conducted to see if this claim is supported by the empirical evidence from a class adopting CBI approach.

According to Davies, CBI can be implemented in two different methods, namely Adjunct Model and Sheltered Model. Adjunct Model prepares the learners in a special class designed to enable them to follow a subsequent subject matter class. The Adjunct Class is taught by a language teacher, whose main task is to make sure that the learners come to grips with patterns, vocabulary, and other linguistic aspects that will appear in the ensuing subject matter class.

Sheltered Model, on the other hand, combines two teachers in a class, one of whom is the teacher of the content or subject matter, and the other one is a language teacher. While the content teacher teaches the content, the language teacher assists the students with the language matters.

Because of its relatively short period of existence, not many studies have been done to adequately form a solid empirical basis for CBI and CLIL. This is also the   opinion of Dalton-Puffer (2008), "CLIL is still far from being a consolidated and fully articulated educational model in any of the European countries surveyed and that a great deal more needs to be done, for instance, in order to consolidate the theoretical underpinnings of CLIL and create a conceptual framework that is both coherent and applicable to different local conditions."

This makes for a rationale of this present study. This study aims to investigate a CLIL setting and elicit data from it to see if the data can support the claims made by CLIL proponents.

A summary of previous studies on CLIL by Dalton-Puffer (2008) suggest that in general CLIL brings about positive impact on the mastery of subject matter and new

vocabulary. A number of language knowledge and skills that tend to increase after CLIL include morphology, reading, and vocabulary.

Another study that accords with my research is a survey by Bebenroth and Reidfeld (2004) at a university in Japan. They found high level of enthusiasms among the students toward CLIL classes, and they are keen on learning both the language and the subject matter. At Universitas Ma Chung, a survey like that has never been conducted formally and systematically. What is often heard, however, are students' complaints about the difficulty in understanding lectures in their non-language subjects given in English language.

Graaf, Koopman and Westhoff (2007) conducted a thorough investigation of an effective CLIL and conclude at least 5 features of such approach: (1) lecturers expose the learners to English and give them scaffolding to assist with the contents of the lessons and the medium of instruction., (2) lecturers encourage processing of meaning by giving exercises, corrections, and new vocabulary items. (3) lecturers encourage processing of language forms by giving recasts and feedback, without explicit teaching of the forms,; (4) lecturers encourage the learners to produce speech and essays in various genres, such as debate, arguments and the like, (5) lecturers teach them how to use strategies that solve communication breakdown when using English. My study attempted to determine to what extent those instructional aspects can be effective in the context being investigated.

Addressing the question of whether learners in CLIL setting tend to have increased English proficiency, Craen et al. (2007) argue that although they have mastered reading comprehension skills in their L1, they are still unable to attain the same level of comprehension in English as a foreign language. With regard to whether CLIL will enable them to master the subject matter better than when the subject matter is taught in their L1, Craen et al (2007) find that studies in this area are still far from being conclusive. Some find that CLIL will enhance the mastery of subject matter, and some others find otherwise. Thus,

Craen et al conclude that more studies need to be carried out to identify factors that contribute to the success or causes of failure of CLIL. Indeed, some studies maintain that CLIL will promote mastery of a content subject, while some others do not make such claim.

Coyle (2007:548) presents the fact that studies on CLIL abounded in the 1990s. In certain conditions and contexts, CLIL was proved successful in increasing language proficiency, boosting self-confidence, heightening the risk-taking nature and improving problem solving abilities.

With respect to learning aids, Laufer and Hill (2000) suggest the use of electronic or conventional dictionaries. Hyperlinks on some important key words on Power Point slides can gives students easy access to glossaries, which in turn help the learners prepare beforehand prior to following the subject matter course. Still, another way that was also done in this present study is giving the keywords and their meanings prior to the main subject matter class. Students who find materials easy to understand because they have the opportunity to catch a glimpse of it can be more highly motivated to follow the class. This accords with a study by Bab and Ross (2009), who found that the availability of course materials can encourage more attendance and participation from the students.

A notorious constraint in CLIL is the low English proficiency among the students, a phenomenon that plagues even countries where English is a second language. Evans and Green (2007)'s survey among 5000 Hong Kong students reveals that their biggest difficulties lie in English academic writing and academic speaking, especially in the areas of style, grammar, coherence, pronunciation, and fluency.

Finally, of equal importance is the need to master academic words, that is, a set of words that make up around 10 percent of the running words in a common academic text. Chen and Ge (2007), found that in the area of medicine science, the words account for 10 – 12 % of all words. A study by Vongpumivitch, Huang and Chang (2009) in a similar domain

also generates a similar result, that is, 11%. This implies the necessity of teaching the English academic words to students of any discipline.

Method

The research was basically a Classroom Action Research, which according to Burns (2010) is a cycle that starts with planning, execution, observation of the execution, and finally reflection or evaluation, before entering the second cycle with similar steps. Due to time constraint, the research was executed in one cycle only.

The research used a Time Series Design. This design enables a comparison between a set of baseline data, which in this study was the students' mastery of key words and contents of the book chapters prior to the adjunct class, and accumulated data of their mastery of the vocabulary and course contents after a few adjunct class sessions. The scheme is visualized as follows:

$$O1 - O2 - X1 - X2 - X3 - O3 - X4 - X5 - X6 - O4$$

O1 and O2 = initial measurement of mastery of vocabulary and course contents before the adjunct class was given. The data formed the baseline data.

X1 and X2 = adjunct class sessions, where the researcher taught the key words and the outlines of the chapters to be learned, and gave the translation of some important words/phrases and ideas on the Power Point slides.

O3   = measurement of the learners' mastery of the course contents and essential vocabulary.

X4 – X6   = further assistance with some modified aspects based on O3.

O4   = measurement at the final stage.

At the final stage, a profile of progress of their mastery was obtained. The profile gave an indication of the effectiveness of the adjunct class sessions in helping them understand the course content and the vocabulary. However, since there was no control group, a valid claim of causal relationship between the treatment and the effect could not be established. Thus, it is wise to see the finding of this study as a point of reference for further research with more rigorous experimental design. Also, the vocabulary tests did not undergo a strict check on their difficulty level. Because a single lecturer wrote the tests, they were only assumed to be of equal difficulty level.

The second research objective was attained by an interview session with the respondents followed by filling out of questionnaires. The interview transcripts were then analyzed through open, axial, and thematic coding to obtain a relatively comprehensive pictures of their opinions.

The results of the initial interview were used as a basis for determining the questions in the questionnaires. After the questionnaires were collected, a tabulation was done to identify patterns of answers. The coding of the transcripts and the tabulation were used to build an answer to the second research question.

Respondents

The respondents were the students in one class of Accounting Department at Universitas Ma Chung who were taking Advanced Financial Accounting course in the even semester of 2011/2012 academic year. The class was chosen because the course was reportedly conducted in English language. English textbooks were used, and the Power Point slides were also presented in English language. In addition to that, the students were often asked to respond in English, too.

The Adjunct Class

The adjunct class session was given in the period of February 2012 to the end of April 2012, and usually was held a few days before the primary content class. The researcher presented the main slides with some phrases and key words translated into their native language, gave glossaries after the chapter, and the main points of the lesson that they were going to discuss in the primary content class. Occasionally, the researcher also explained a few meaning-related grammatical points which were vital to the understanding of certain parts.

On some occasions before a test, the researcher led the students through a review of the main points of the chapters, drawing attention to some key words, and some grammatical patterns that determine meanings, such as passive voice, compound nouns, and order of adjectives.

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Results

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The Content Course

The Intermediate Financial Accounting, worth 2 credit hours, aimed to teach the fundamental concepts of accounting and the skills of calculating various accounting functions by using sets of formulas explained and elaborated in each chapter. The course referred to the main textbook, "Intermediate Accounting" (15th edition), by Kieso, Weygandt, and Warfield.

Each session presented the students with an average of 50 slides, all of which were written in English and contained elaboration of concepts and formulas, accompanied by examples of cases.

At the end of every session, the lecturer assigned one or two items from the textbook to the students to be done individually.

Baseline Data and Time Series Data

The baseline data were gained through a vocabulary and summarizing test at the beginning of the semester on 16 February 2012. The students were asked to give the native language meanings of some English key words, and summarize the content of Chapter 13 of the main textbook.

The next test was conducted on 28 February 2012. Like the first test, this test measured the knowledge of vocabulary presented in the previous sessions, and assessed the mastery of main concepts through brief questions. The main objective of the test was identifying the students' gain after they attended several adjunct class sessions. The last test with the same objective was done on 12 March 2012.

The results of the three tests were summed up in Table 1 and 2 below:

Table 1
The Results of the Three Tests on Vocabulary

	Baseline	Test II	Test III
Mean	27.41	70	60.48
SD	14.59	25.02	31.68

The students' progress in vocabulary mastery within the two-month period was visualized in the graph below:
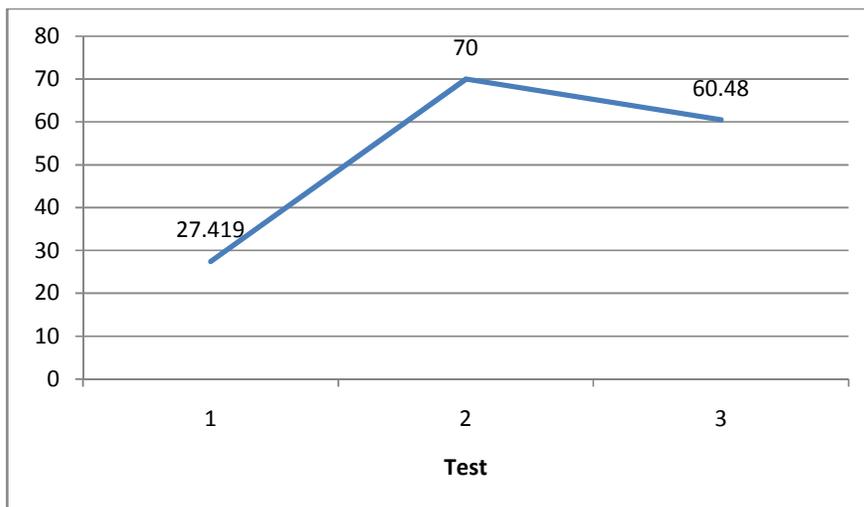

Figure 1. The progress in vocabulary mastery

The following table shows the progress in mastering the contents of the course:

Table 2.
The Results of Tests Measuring Mastery of Contents

	Baseline	Test II	Test III
Mean	0.192	51.16	57
SD	0.750	35.23	38.49

The students' progress in mastering the contents of the course is visualized below:
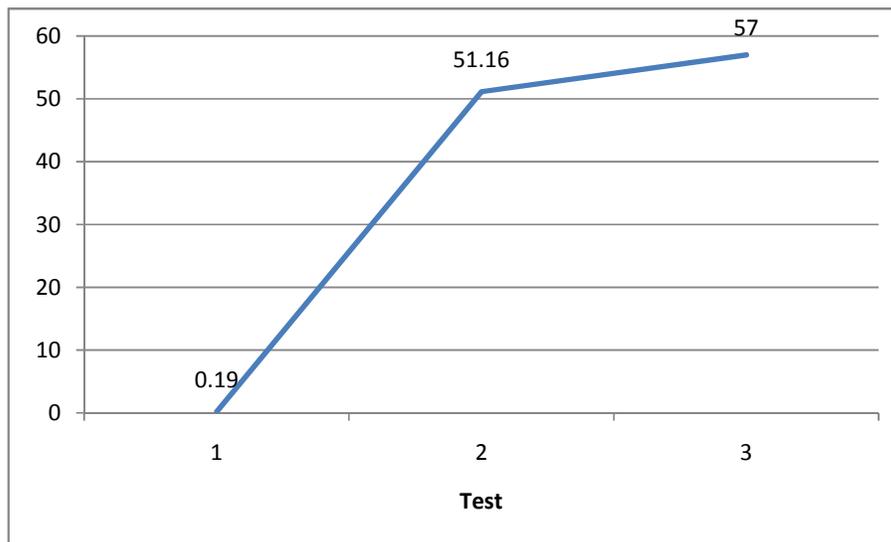

Figure 2. Progress in mastery of contents of the course

The tables and charts above show significant increase in vocabulary one month after the beginning of the project. But, this was immediately followed by a slump in the next period. Nevertheless, the students fared better in their mastery of the contents. After knowing almost nothing at the beginning, they improved a lot a month afterwards, and made another slight increase in the third stage.

Their Opinions

This section answers the second research objective, which is, identifying the students' opinions about the impact of the adjunct class on their learning. Their answers are summarized in the following table.

Table 3.
The Respondents' Opinions

No	Opinions	Answers (in percent)
	How helpful is the adjunct class (N=17)	
1	Very helpful	5.88
2	Helpful enough	58.82
3	Not helpful	35.29
	On what area is the adjunct class very helpful (N=17)	
4	Understanding new words	88.23
5	Understanding contents of the chapters	17.65
6	Understanding the entire content course	17.65
	What part of the adjunct class is most helpful (N=17)	
7	Translation of slides	41.18
8	All of the above	11.76
9	Explanation of the general ideas of the chapter	11.76
10	The glossaries	35.29
	Why is the adjunct class not helpful (N = 6)	
11	The time is too limited	50
12	What is explained in the adjunct class is not the same as in the content course.	50
	Suggestions (N=6)	
13	Explain the exercises	33.33
14	Give more words	16.67
15	Translate the exercises	33.33
16	Translate every slide	16.67

Mastery of New Vocabulary and Course Contents

As the graphs above show, the increase in mastery of the contents goes hand in hand with mastery of new vocabulary. This finds a support in the claim by Stoller (2002) that the increased mastery of course contents is typically accompanied with better mastery of new vocabulary. Likewise, this finding is in line with Dalton-Puffer's study (2008) which found improved reading comprehension skills and vocabulary knowledge in CLIL courses.

Most of the respondents felt they had received considerable assistance in understanding new vocabulary, but only a few of them felt assisted in understanding the course contents and the textbook. It can be concluded that understanding new vocabulary is not a sufficient condition for them to have a firm grasp on the course contents and the primary lecturers' explanation.

There seems to be at least a factor which may have been responsible for this. The new words may have been interpreted in a context as limited as the glossaries, while in the textbook and the lecture, they are apparently embedded in much wider contexts that demand deeper levels of comprehension.

In the area of enhancement of vocabulary knowledge, it is worth noting that the translation of slides and the provision of glossaries are two instructional acts that are highly appreciated. The efforts, however, should have been made more intense by further processing of new vocabulary. As Eckerth (2012), and Djiwandono (2009) point out, the learning of new words can be enhanced by deep processing of the words and the use of the new words in written production. Using the new words and analyzing them will promote better retention and recall than just memorizing them.

A response from a respondent highlighting the mismatch between what was taught in the adjunct session and what was actually explained during the main lecture deserves attention. This seems to have been caused by lack of coordination and synchronization among

the language lecturer and the main lecturer. The adjunct class emphasized on the mastery of new key words and the main points of the chapters, while   the primary class focused more on exercises.

Some respondents also expected to receive more discussion on computational exercises and translation of the exercises. They seem to be overly concerned about working out the exercises, which later led to tests, rather than focusing on the mastery of the concepts. This is a clear reflection of a negative washback effect of the test, whereby the learners insisted on doing more exercises because they knew that the later tests would center around those exercises.

Conclusion

The research set out to identify the impact of and adjunct class on the mastery of vocabulary mastery of content course of some students in Accounting Department.   The adjunct class was given for a period of two months, each lasting 1.5 hours once a week. The sessions started with the gathering of baseline data in the form of their initial knowledge of vocabulary and comprehension of textbook contents, and interspersed with a few measurement of their accumulative mastery. The adjunct class itself provided them with the meanings of key words, and an overview of the contents of the chapter to be discussed. The results show that although they gained significant vocabulary items, they did not proceed equally well with the understanding of course contents. This is attributable to the limited period of the adjunct sessions, and the mismatch between the emphases on the adjunct class and the emphasis on the content class.

Recommendations for CLIL classes and further studies

On the basis of the results it is recommended that CLIL classes, particularly in Indonesian instructional context, strive for the alignment between the activities and the emphases in the adjunct class and the activities and the focuses in the subsequent main

content courses. It is necessary that the language specialist and the content specialist convene to come to a solid agreement beforehand what areas of learning is to be emphasized in the actual teaching. Whenever possible, a stronger emphasis should be placed on the mastery of the contents than on the mere working out of the exercises. It is also suggested that the learning of vocabulary be expanded to productive skills and consider the actual discourse where the words are used.

Further studies along the same line of topic should lengthen the duration of the adjunct sessions so as to form an impact strong enough to be recorded in the tests and other measurements of the effect.

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