Language Skill Assessment Through Content and Language Integrated Learning

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Abstract. According to the importance of English Language as it became a medium of communication among ASEAN country, Thailand Ministry of Education launched the policy to enhance the English proficiency of both learners and instructors. Faculty of Education, Khon Kaen University, as one of the famous institutes for teacher education, then encourage the instructors to use Content and language Integrated Learning (CLIL) approach in their classrooms. The purpose of this study was to find out how to assess the language skills through CLIL approach. Two classes were taught by one instructor on Topic “Search Engines on English Material” during August of 2018. There were 28 and 28 learners respectively. Observation technique was used for data collection. The Lesson Plan was well-prepared by the Instructor and the researcher then was implemented to each classroom. Additionally, the speaking assessment form was used to assess the students’ learning at the end of the lesson. The research findings were as follow. To identify the learning objectives of this topic based on two parts: Thailand Qualifications framework of Higher Education (TQF; HED) (Thailand Higher Education Commission [TOHEC], 2006) and the language Triptych (Coyle et al., 2010). The TQF classifies desirable university students learning outcomes into five domains: ethical and moral development, knowledge, cognitive skills, interpersonal skills and responsibility, and analytical and communicative skills in mother language and English. While the Language Triptych composed of: Language of learning, Language for learning, and Language through learning. The first step was to design the Lesson Plan by forming a Conceptual Map for understanding CLIL. Under the mapping integration of “Search Engines on English material” topic, there were three learning objectives: to identify the English Material and Search Engines, to use Search Engines to find English Material, and to present how to use Search Engines to find English Material orally. The second step was to plan the classroom activities, materials, and assessment form. The third step was to implement the classroom activities. The instructor roughly explained about how to find the information by using Google and how to type the keywords. The learners were assigned to try searching according to individual interest and posted their finding in Group Facebook, comment on the findings. The next step was to let the learners find out “What Google can do else?” for example, Google Calculator. Then posted it in their group Facebook. The last step was to assess the learners’ language skill in oral presentation. The rubric score was used by two assessors. In conclusion, to assess the learners’ achievement of the first two learning objectives, the instructor could check the correctness from the Group Facebook posing. To assess the third learning objective, two assessors used the Rubric for Oral Presentation Form. Comparing between previous semester and the recent lesson, the instructors reflected that it was useful to design the Lesson Plan and language skill assessment as in this semester. Formerly, he used to focus on only content or correctness of the searching.

Keywords: Content and language Integrated Learning (CLIL), Language assessment

INTRODUCTION

One of the goals of the Association of Southeast Asian Nations (ASEAN) in accordance with Bangkok Declaration 1967 (ASEAN Secretariat, 1967) is to promote collaborative activities to achieve quality education in the region, particularly in term of professional development programs, educational research and other technical administrative support. Because of English is a formally adopted official working language, a lingua franca, it has become the medium for communication among the ASEAN countries. As a result, English language policies and language education programs were launched and implemented in the differently in ASEAN countries (Luanganggoon, Phantharakphong, Sae-Joo, & Huntula, 2018).

Thailand’s Ministry of Education has embarked on educational policies and special programs to develop Thai teachers’ English language proficiency in both basic and higher education in...
order to improve Thai students’ English language proficiency (Luanganggoon et al., 2018). On this line of reasoning, Thailand Qualifications Framework for Higher Education (TQF: HEd) was developed and adopted to ensure Thai universities in fulfilling standards and award titles of higher education qualification consistently and to make clear the equivalence of academic awards with those granted by universities in other parts of the world such as the United Kingdom and ASEAN University Network Quality Assurance (Thailand Higher Education Commission [TOHEC], 2006). The TQF classifies the desirable learning outcomes of university students consisting of five domains namely ethical and moral development, knowledge, cognitive skills, interpersonal skills and responsibility, and analytical and communicative skills in Thai and English languages. Learning outcomes are directly related to the specialization undertaken and should be specified in the program and course documents particularly in the knowledge and cognitive skills domains. Meanwhile, the basic mathematical and statistical technique, effective communication in both oral and written forms as well as the use of information and communication technology are also including in the generic learning outcomes significantly and should be contextualized in all the programs and courses of the universities.

This research university (KKU) was established as a public university in the Northeastern part of Thailand in 1964 and gradually developed to be one of the top universities in Thailand now. KKU not only is one of the nine national research universities but also is an educational center in the Mekong sub-region. The major mission of KKU is preparing future global citizen to work in a continually changing world with its strategic goal as a leading research university both regionally and internationally. Currently, KKU is made up of a variety of institutions, including 23 faculties with a full range of academic departments which are organized into three divisions, namely social sciences, health sciences, and sciences. KKU has more than 40,000 students and provides 43 international or English programs with a wide coverage of various disciplines. Besides, KKU has excellent facilities that providing conducive learning environment and academic supports for students to achieve their academic success. In addition, KKU also takes an investment-minded approach in education by providing funds for students to further study at postgraduate level and be researchers (Luanganggoon, 2018).

In order to comply with the aim of the TQF as mentioned above, KKU offers three main activities to raise the English competencies of its students. There are four compulsory English language courses consisting of 12 credits provided to all the undergraduate programs. In addition, some additional language courses so called as English for Specific Purposes are offered in some faculties mainly focusing on content and vocabulary in that particular discipline. The most recent action of KKU is to promote the Content and Language Integrated Learning (CLIL) approach in many of the university programs. Regular professional development workshops were conducted mainly to train lecturers to implement CLIL approach in their instructional design and delivery processes (Luanganggoon, 2018).

The CLIL approach was introduced in English classes of Thailand since 2006 through the cooperation between Thailand Ministry of Education and British Council aiming to improve Thai educational outcomes (MacKenzie, 2008). This is because CLIL approach is able to meet the demands of Thailand context because it provides opportunities for the learners to expose to English communication in the classroom thus increasing their confidence of using English. Particularly, Thai university lecturers have to find a most effective teaching approach to assist their students to possess higher proficiency in their English language, sufficient knowledge in their subject matter, critical thinking, good communicative skills, and intercultural competency skills besides encouraging students to use English as a medium of communication (Suwannoppharat & Chinokul, 2015).

This research used CLIL approach and 4Cs framework by Coyle, Hood and Marsh’s (2010) as well as Taxonomy of Anderson and Krathwohl (2001) to conceptualize the study.

Language teaching methods and CLIL

Approaches for teaching second language vary. Most traditional methods focus on language processes and required skills such as listening, speaking, reading, writing, vocabulary, pronunciation, and grammar. Traditionally, language learning occurs in distinct programs and courses prior to, or parallel with disciplinary programs and courses. Horwitz (2008) identified the following main recent approaches to language teaching: the Audiolingual Method, Grammar Translation, Total Physical Response, the Natural Approach, Communication Language Teaching, and Proficiency-Oriented Language Teaching, Content-Centered Language Teaching, Sheltered-Immersion, and Task-Based language learning.

An alternative approach to the aforementioned is to integrate the disciplinary knowledge development with learning the new language. The term “Content and Language Integrated Learning” (CLIL) was adopted in 1994 (Marsh, Maljers & Hartiala, 2001) within the European context to describe and design good practices in different
school environments where teaching and learning take place in the new language at the same time that the language is being developed. In other words, CLIL is a dual-focused educational approach in which are foreign/second language is used for the learning and teaching of both content and language (Coyle, et al., 2010). As English is being increasingly used as a medium of instructions around the world, this approach has gained wide implementation in different countries (Graddol, 2006). With the demand of language proficiency development, the interest in CLIL is growing recently and is widely accepted as, what can be called, the best practice in education. However, there are various modes of implementation of the CLIL approach.

**CLIL models**

Hood (2005) indicated four alternative CLIL models emerging in the UK. The first model is the *Surface cross-curricular linking*, which involves both language teachers and subject matter teachers planning together. The second model is the *Integrating language and recycling/deepening content* where the subject topic/syllabus adapted for teaching in the target language to explore the subject whilst improving foreign language skill. The third model is *Integrating language and new content*. In this model, it is possible to re-conceptualize the curriculum in an integrated way. For example, CLIL might consist of the study of ‘water’ in a foreign language, which is investigated from different perspectives such as scientific, geographical, historical, current catastrophes, water shortages, water for leisure, poetry, art, drama and music, linking wherever possible language to space and place. The fourth model is known as *Immersion (content approach)*, where language teachers develop a more content type approach to a theme, which might include taking a typical topic such as house and home and carrying out a comparative study between house and home in an African country and in an English-speaking western culture.

**The 4Cs Framework**

The 4Cs Framework integrates four contextualized building block namely (i) content (subject matter); (ii) communication (language learning and using); (iii) cognition (learning and thinking processes), and (iv) culture (developing intercultural understanding and global citizenship). By doing so, it takes into account of integrating content learning and language learning within specific contexts and acknowledging the symbiotic relationship that exists between these elements. In addition, Coyle et al. (2010) suggest that effective CLIL takes place as a result of this symbiosis through:

- Progression in knowledge, skills and understanding of the content;
- Engagement in associated cognitive processing;
- Interaction in the communicative contexts;
- Development of appropriate language knowledge and skills;
- The acquisition of deepening intercultural awareness, which in turn bringing about the self and 'otherness' position.

![Figure 1. The 4Cs Framework](Source: Coyle et al., 2010)

**Taxonomy of Anderson and Krathwohl**

Anderson and Krathwohl (2001) published an updated version of Bloom’s taxonomy by adding a ‘knowledge’ dimension to Bloom’s ‘cognitive process’ dimension. This transparent connection of thinking process to knowledge construction resonates with conceptualizing content learning in the CLIL setting. The cognitive process dimension consists of lower-order thinking (remembering, understanding and applying) and higher order thinking (analyzing, evaluating and creating), both of which are integral to effective learning. The knowledge dimension provides a framework to explore the demands of different types of knowledge that is conceptual, procedural and metacognitive (Coyle et al., 2010: 30).

To conclude the above concepts in CLIL settings, students have to progress systematically in both language and content learning and usage, as argued previously. Both learning processes are equally important namely ‘using language to learn’ and ‘learning to use language’, these requirements are indicated in the following as language of learning, language for learning, and language through learning.

**Language of learning**

Language of learning refers to an analysis of language needed for students to access the basic
Language for learning

Language for learning focuses on the type of language needed to operate in a foreign language environment. Learning to use English language is challenging for lecturers and students as both parties have to play their roles. Students need the strategies to enable them to use English language effectively such as writing a research project report and presenting their research findings.

Language through learning

Language through learning means the principle that effective learning may not take place without active involvement of language and thinking. While students are encouraged to convey their understanding, a deeper level of learning is expected to occur. On the other hand, lecturers are challenged on how to capitalize on, recycle, and extend new language or so called as language progression. For example, students need language to express their new ideas and data from their group discussion outputs. Nevertheless, students need dictionary skills to read some academic articles and review the past research literatures when they are doing their research. This is supported by Coyle et al. (2010) who emphasized that CLIL model demands a higher level of interaction and dialogue activity which is totally different from the traditional language or content instructional approach.

The need for speaking skills among undergraduate students

In addition to its role in developing knowledge and skills in the various disciplines, Language is essential to communicate and express ideas in various situations. Here, we argue that in the context of globalization, such communication would include communication in English. In particular, speech is an essential component of communication in the day to day interactions of professionals. To attain academic success, it is most important for students in higher education in countries that have adopted a foreign/second language to have a good English proficiency in general, and in particular speech, in addition to their deep knowledge of their respective disciplines (Less, 2003). Consequently, developing students’ speaking skills is a primary concern for the participation courses in this study.

The purpose of this study was to find out how to assess the language skills through CLIL approach: a case study of regional Thai university.

METHOD

Research design and samples

There were three phases: Firstly, Content Analysis were used. All the lecturers who had voluntarily participated in the initial professional development program on CLIL from year 2015 to 2016 were included in this study. Twenty five syllabi of the courses they designed were analyzed in the first stage of document analysis technique (as shown in Table 1).

Secondly, Qualitative Research, specifically multiple case study (Yin, 1994), was used in this investigation. Six classes were selected for observations in order to find out the CLIL implementation of each class (as shown in Table 2)

Thirdly, Pre-experimental Research was used. Two classes of Undergraduate students were selected by purposive sampling. There were 28 and 28 learners respectively. Both classes were studying in TESOL Program (Teaching English to Speakers of Other Languages), Faculty of Education.

<table>
<thead>
<tr>
<th>Table 1. Course syllabus taught by using CLIL model</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Categories (N)</strong></td>
</tr>
<tr>
<td>Sciences (3)</td>
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<tr>
<td>Health Sciences (6)</td>
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</tbody>
</table>
Faculty of Education

- Introduction to Listening
- Academic Speaking 2

Social Sciences (16)

International College

- English for Communication in Multicultur Societies
- Academic English
- University Study Skills in English
- Mathematics 1
- Aesthetics for Life
- Wellness Dimension
- Information Literacy
- Human Relations & Communications
- Global Business Management
- Introduction to Sociology
- Academic Year: First Term
- International organizations
- International Law
- International Communication Arts for Touris

Graduate College of Management

- Human resource Economics

<table>
<thead>
<tr>
<th>Categories</th>
<th>Course name</th>
<th>No of learners</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sciences</td>
<td>Dissertation Seminar on Biochemistry</td>
<td>15 M.Sc. students</td>
</tr>
<tr>
<td>Health Sciences</td>
<td>Pharmaceutical Practice 2</td>
<td>38 undergraduate students</td>
</tr>
<tr>
<td></td>
<td>Research 2 (Lab computer)</td>
<td>38 undergraduate students</td>
</tr>
<tr>
<td>Social Science</td>
<td>Introduction to International Affairs</td>
<td>34 International college Students</td>
</tr>
<tr>
<td></td>
<td>Multiculturalism</td>
<td>34 International college Students</td>
</tr>
<tr>
<td></td>
<td>Research Methodology for Science</td>
<td>5 Ph D. science education students</td>
</tr>
</tbody>
</table>

Table 2. Classroom observation

Data collection techniques

Document Analysis: As the current curricula or programs provided in Khon Kaen University follow outcome-based design, the learning objectives of all courses were identified along with the learning activities, materials and assessment. The course syllabi were analyzed using the domain of learning from TQF: Higher Education and, in particular the 4C Framework consisting of Content, Communication, Cognition, and Culture. The rubric based on 4Cs framework (Coyle et al., 2010) was used to analyze the data. Such complete analysis will not be discussed here. Rather, we will identify examples from them to discuss the first research question.

Classroom Observations: The classroom observations were done during March 2015 to August 2017. The framework of the observation consisted of Language of Learning, Language for Learning, and Language through Learning. The research findings from this observation will also not be presented in this article.

Pre-experimental Design: Two classes were taught by one instructor on Topic “Search Engines on English Material” during August of 2018. There were 28 and 28 learners respectively. Both classes were studying in TESOL Program (Teaching English to Speakers of Other Languages), Faculty of Education.

Data analysis

Content analysis was used to analyze all the obtained qualitative data in both the analysis of the syllabi and the observations from the classroom. To analyze the information in each course syllabus, the researcher grouped the learning objectives of each course under the five Domains of Learning: ethical and moral development, knowledge, cognitive skills, interpersonal skills and responsibility, and analytical and communicative skills. Moreover, the Content and the Cognition of each course syllabus was carefully considered (how it get along with the Communication and Culture identified in classroom activities and assessment).

To analyze the observations and interview, content analysis was used also as a research tool to determine the presence of certain words or concepts within the texts and sets of texts. Researcher quantified and analyzed the presence, meanings and relationships of such words and concepts, then made inferences about the messages within the texts. Firstly, the researcher transcribed all the collected data from the document
analysis field notes, classroom observation rubric and checklist, and interviews to get a general sense of the whole and the ideas presented. To conduct a content analysis on such text, the text is coded, or broken down into manageable categories on a variety of levels, i.e. word, word sense, phrase, sentence, or theme, and then examined using conceptual analysis (Creswell, 2002).

To analyze the speaking scores of the samples, researcher used Descriptive Statistics. After two classes were taught by one instructor on Topic “Search Engines on English Material” during August of 2018. (There were 28 and 28 learners respectively.) Observation technique was used for data collection. The Lesson Plan was well-prepared by the Instructor and the researcher then was implemented to each classroom. Additionally, the speaking assessment form was used to assess the students’ learning at the end of the lesson.

**FINDINGS**

The research findings were as follow. To identify the learning objectives of this topic based on two parts: Thailand Qualifications framework of Higher Education (TQF; HEd) (Thailand Higher Education Commission [TOHEC], 2006) and the language Triptych (Coyle et al, 2010). The TQF classified desirable university students learning outcomes into five domains: ethical and moral development, knowledge, cognitive skills, interpersonal skills and responsibility, and analytical and communicative skills in mother language and English. While the Language Triptych composed of: Language of learning, Language for learning, and Language through learning. There were five steps of “How to assess the language skills through CLIL approach” as follow.

**Figure 2: Conceptual Map for “Search Engines on English Material”**

**The first step** was to design the Lesson Plan by forming a Conceptual Map for understanding CLIL (as shown in Figure 2). Under the mapping integration of “Search Engines on English Material” topic, there were three learning objectives:

- to identify the English Material and Search Engines,
- to use Search Engines to find English Material, and
- to present how to use Search Engines to find English Material orally.

There were three components; language of learning, language for learning, and language through learning. Language of learning focused on vocabularies, particularly on Technical Terms, Search Engines, and English Material. Language for learning focused on grammar used for explaining the position of objects, and for describing. Language through learning focused on language skills that was necessary in classroom activities.

**The second step** was to plan the classroom activities, materials, and assessment form (Rubric Score for Oral Presentation).

**The third step** was to implement the classroom activities. The instructor roughly explained about how to find the information by using Google and how to type the keywords. The learners were assigned to try searching according to individual interest and posted their finding in Group Facebook, comment on the findings.

**The fourth step** was to let the learners find out “What Google can do else?” for example, Google Calculator. Then posted it in their group Facebook.

**The last step** was to assess the learners’ language skill in oral presentation. The rubric score was used by two assessors.
The average speaking score of both classes were 77.70% and 82.70% respectively. The number of students who pass the criteria (of speaking skill) were also 75% for both classes.

In conclusion, to assess the learners’ achievement of the first two learning objectives, the instructor could check the correctness from the Group Facebook posting. To assess the third learning objective, two assessors used “the Rubric Score for Oral Presentation” Form.

DISCUSSION

Both classes showed a similarity in term of ‘Language for Learning’. Results indicated that both classes were not taught the language structure directly and expected students to learn by themselves. The ‘Language through Learning’ was focused on the correctness of the content. The assessment results showed that students’ understanding about the content and they can think critically due to their improvement in language competencies. The activities that concerning ‘Language through Learning’ include ‘using feedback’, extending presentation skills’, ‘presenting evidence’ or ‘recycling discussion’ are found to be helpful in order to improve English language competencies.

The particular techniques used in implementing the Content and Language Integrated Learning, the classroom activities provided in CLIL classroom mostly focus on research-based learning, critique and presenting skills in the course. Even if the vocabularies and patterns of language were provided, the opportunity to practice communicative skill individually was very limited. It was noticed that there were a few learning objectives focused on communication. However, learning outcomes of each course covered the Domain of Learning from TQF: HEd. More importantly, efforts in CLIL program implementation should be aware of students’ language background, classroom context and culture (Luanganggoon et al, 2018).

Based on the findings of this study we identify two types of recommendations, for the practice of CLIL classrooms and for further research. One problem identified in this study is that all four skills of language learning should be focused equally. All of them are important in learning language, particularly speaking skill. As Thai learners have less chance to speak English in the context, speaking skill development should not be neglected. In particular, most of the assessment methods observed were found to focus more on reading and writing skills than speaking and listening skills. Similarly, because being content teachers, most learning objectives adopted in the courses focused on the content knowledge of the students. However, in CLIL classroom, communicative skill aspect identified by the TQF: HEd is also important, so teachers should pay more attention to communication and language skills.

Perhaps further research is needed in this area. In particular, it would be quite interesting to study the other factors, such as social context and classroom culture leading for the success in CLIL classroom in Higher Education level. Lastly, comparative study methods could be useful between different countries attempting to teach English as a second/foreign language.

REFERENCES


ASEAN Secretariat. (1967). The ASEAN Declaration (Bangkok Declaration). Bangkok, ASEAN.


### APPENDIX

Rubric for Oral Presentation

<table>
<thead>
<tr>
<th>Description</th>
<th>Excellent (4)</th>
<th>Good (3)</th>
<th>Average (2)</th>
<th>Below average (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Content</td>
<td>Content completely accurate. Learner shows a deep understanding of topic.</td>
<td>Content mostly accurate, mostly on topic. Learner shows a good understanding of topic.</td>
<td>Some information accurate but some off topic. Learner shows some understanding of topic.</td>
<td>Learner shows no real understanding of topic. Some information not relevant.</td>
</tr>
<tr>
<td>2. Language (grammar)</td>
<td>Very few grammar mistakes. Sounds almost like a native speaker.</td>
<td>A few grammar mistakes, but they do not hinder presentation.</td>
<td>Grammar mistakes occasionally hinder presentation and make it unclear.</td>
<td>Grammar mistakes hinder communication and make presentation difficult to understand</td>
</tr>
<tr>
<td>3. Presentation skills and aids</td>
<td>Captured the attention of the audience. Great variety and use of visual aids. Clear, articulate and confident speech.</td>
<td>Interesting to watch. Used a variety of visual aids effectively. Spoke clearly and confidently most of the time.</td>
<td>Sometimes interesting. Some visual aids. Speech sometimes unclear. There is eye contact and facial expression.</td>
<td>Information difficult to follow. Few visual aids. Speech often incomprehensible, and audience frequently lost interest.</td>
</tr>
<tr>
<td>4. Coherence and organization</td>
<td>Thesis is clearly stated; examples relevant; information in a logical order; conclusion clear and transitions smooth.</td>
<td>Most information is in a logical order; thesis and conclusion present; some transitions choppy.</td>
<td>Concepts and ideas are loosely connected; lacks transitions; thesis and conclusion vague.</td>
<td>Presentation does not flow; no apparent logic to order of the information; no thesis and few conclusions and transitions.</td>
</tr>
</tbody>
</table>