The impact of project based-CLIL on students’ English proficiency

Hery Yufrizal
Language and Art Department, Universitas Lampung, Indonesia

ABSTRACT
The objective of this article is to explore the effectiveness of a method of teaching English as a foreign language in Indonesian higher institutions called project based Content Language Integrated Learning (CLIL) higher education institutions. The design proposed was based on the principle of language integrated learning (CLIL). Quantitative data were obtained from the scores of students’ English proficiency before and after CLIL model application. While the qualitative data were obtained from the output of language produced by students during the learning process took place. The results showed that CLIL English language course at higher education institutions in Lampung could work effectively. This is evident from the implementation of the whole program activities, from the implementation of the formation of groups, students work in groups to finish the project, group presentation activities, personal presentations and students’ responses to all activities.

Keywords:
Content language integrated learning (CLIL)
Higher education institutions
Project based

1. INTRODUCTION
The need for mastery of English in the future becomes a challenge for higher education institutions as one the producers for human resources in Indonesia. If the higher education institutions want to win the competition in the world, they must equip their graduates with sufficient English language skills. In addition, for students, having sufficient English skills will be very helpful in completing the tasks of college, especially in reading textbooks in English. To address all the above challenges, it is necessary to improve the teaching of English for non-English Study Program students by using a more appropriate design and teaching approach by placing the learners’ needs as a central issue in the design of learning.

The purpose of this research is to see whether project based content language integrated learning (CLIL) have significant effect on the students’ oral capability. The significance of the study is that in terms of the teaching and learning English at higher institution level is only given for one semester with a load of two or three credits. The teaching of English is only a kind of repetition from the program provided at the high school level. Classes are usually big which consists of 40 to 60 students. The opportunity to practice English in the class was very limited. Therefore, the study provides opportunities for students to process comprehensible input [1] as well to produce comprehensible output [2].

There are two separated but integrated concepts addressed in this study. Firstly the concept of project based learning and secondly the concept of content language integrated learning (CLIL). The first concept, project based learning, was popularized by Michael McDowell [3] who stated project based learning...
is a dynamic classroom approach in which students actively explore real-world problems and challenges and acquire a deeper knowledge. The second concept is CLIL (Content and Language Integrated Learning) was firstly introduced by some experts of education in Europe late in 1990s when this approach was compared with other second language learning concept the content and language integrated learning (CLIL), a dynamic and lively approach, in this approach both the student and teacher are engaged in energetic activities [4-6].

2. THEORETICAL FRAMEWORK

Project based learning works on the basis of teaching strategies that enable teachers to guide students through in-depth studies of real-world topics. A project, by definition, is an in-depth investigation of a real-world topic worthy of a student’s attention and effort. The study may be carried out with an entire class or with small groups of student. Two basic approaches to education are by providing students with a high level of reading, writing, and talking tasks and providing students with a challenging problem or question that involves multiple contexts or situations [3].

Content and Language Integrated Learning (CLIL) is an approach where students learn a subject and a second language at the same time. A science course, for example, can be taught to students in English and they will not only learn about science, but they will also gain relevant vocabulary and language skills. It’s important to note that CLIL is not a means of simplifying content or reteaching something students already know in a new language. CLIL courses should truly integrate the language and content in order to be successful and success is determined when both the subject matter and language is learned.

It’s important to have a strategy in place when applying CLIL in your courses. One of the key things to remember is that the language and subject content are given equal weight and that it shouldn’t be treated as a language class nor a subject class simply taught in a foreign language [7].

According to Coyle’s 4Cs curriculum [8], a successful CLIL class should include the following four elements: Content Progression in knowledge, skills and understanding related to specific elements of a defined curriculum Communication Using language to learn whilst learning to use language Cognition Developing thinking skills which link concept formation (abstract and concrete), understanding and language. Culture Exposure to alternative perspectives and shared understandings, which deepen awareness of otherness and self [9]. CLIL is fundamentally based on methodological principles established by research on language immersion. This kind of approach has been identified as very important by the European Commission because: “It can provide effective opportunities for pupils to use their new language skills now, rather than learn them now for later use. It opens doors on languages for a broader range of learners, nurturing self-confidence in young learners and those who have not responded well to formal language instruction in general education. It provides exposure to the language without requiring extra time in the curriculum, which can be of particular interest in vocational settings.” This approach involves learning subjects such as history, geography, managerial skills/concepts or others, through an additional language. It can be very successful in enhancing the learning of languages and other subjects, and helping children develop a positive attitude towards themselves as language learners [9]. In a second or advanced language learning approach, there is a consensus that language must be taught for communication purposes [10].

Therefore, language teaching that is done in a contextual communicative must be supported continuously to achieve the purpose of language learning is for communication [11]. Mohan [12] even asserted that if there is a principle approach that legitimizes the promotion of language with other subjects, language teaching is the teaching of language can not be combined with other teaching, then this principle is wrong. Mangubhai states that the teaching of languages immersion (combining language with other subjects) is one of the best learning approaches [13]. This is supported by Genesee [14] who suggests that the lesson of the immersion program is the merging of common subjects with language having a more positive effect than separate language learning; Students on immersion-based learning are able to display the same abilities even beyond the abilities of native-speaking children in terms of writing or speech when managed well. While Crandall [15] asserts that the ability to use language in a special situational context can not be accomplished without integrating the material context with language learning. In Europe, the incorporation of content with language learning is very popular. Various studies show that CLIL is very effective in improving student achievement. Dalton-Puffer's findings [16], Ackerl [17] and Lasagabaster [18] demonstrated that students taught through the CLIL program possessed better writing preference than students who were not taught by CLIL. Lasagabaster [18] emphasizes that CLIL is believed to be able to contribute positively to the preparation for international life, improve learning motivation, improve intercultural communication skills, improve implicit and incidental learning abilities and develop all language skills, especially writing skills.
3. RESEARCH METHOD

This research is quantitative and qualitative with quasi experimental principle that is a research design that gives treatment to the subject of research, but the sample is taken purposively, has the main purpose to test whether there is a causal relationship between two or more variables with the data collected from the heterogeneous group. Quantitative data is obtained from the value of students’ English proficiency before and after CLIL model application. While the qualitative data obtained from the output of language produced by students during the learning process took place [19]. Such research models are also called Experimental-quantitative-interpretive [20].

The subjects of this research are the students of Mathematics Study Program of The Department of Mathematics and Science, the students of the Department of Social science, and the students of the Department of Education, the faculty of teaching and education Universitas Lampung who seat in the English Language Course in even semester of 2019/2020 [21]. The number of students who became subject is 88 people.

3.1. Procedures

This research was implemented for one full semester program of a two credit English subject at three study programs. The traditional way of the teaching English within this study program was an integrated English study program in which the lecturers prepare reading materials followed by comprehension questions, completed by practice in vocabulary and grammar. The expriment was done in different way. The new method was giving students opportunity to explore their field of study using English as a medium of communication. Language form practice was done integratedly within the subject study. Complete procedure is:

a. A pre test was undertaken to establish the English ability and to be used as the basis to distribute the students within the group. The groups were established comprising 4-5 students in each group.

b. Each group was assigned to do project in the field of mathematics, physics, biology and chemistry and prepare a paper and power point for oral presentation.

c. The groups were given a week for preparation.

d. Group presentation session was undergone; presentation by the member of the group, question and answer session, lecturer’s comment on the presentation.

e. All presentations were done in English.

4. RESULTS AND DISCUSSION

Content Language Integrated Learning (CLIL) is held in the Department of Mathematics, the Department of Social science, and the Department of Education, the faculty of teaching and education Universitas Lampung and Natural Sciences of Lampung University as the realization of English Language Course which weighs 2 (two) credits. This course is aimed to provide English language skills for students in listening, speaking, reading and writing skills English as a student to develop academic ability in their field of study. Formally English courses consist of 120 minutes face-to-face activities, 120 minutes of structured activity, and 120 minutes of self-help. The total number of meetings for one semester is 16 times including mid-term exam (MTE) and final-term exam (FTE).

Group projects were implemented in eight initial meetings including mid-term exam. Activity details consist of:

a. Group formation was done randomly. Each group consists of four or five students, so as to produce eight groups per class.

b. Each group was given different project topics based on the field of science. For example the field of mathematics, the field of physics, the field of biology, and the field of chemistry.

c. The group was tasked with determining project topics, executing projects, preparing written reports, preparing presentations based on discussions undertaken in the project.

4.1. Student english competence

Student's English competency is obtained through written test provided before and after project-based CLIL implementation. Table 1 below illustrates the students’ descriptive statistics. Table 1 shows the average score of the students on the pretest of 70.37 with the deviation stand of 8.25 and the mean of the post-test 73.64 with the deviation of 5.95. To determine whether there is a significant difference between the mean score of pre-test and post-test, a t-test was conducted with the following result.

| Tabel 1. Descriptive statistics of students’ English competence |
|---------------|----------------|----------------|----------------|
|               | Pre-test        | Mean           | Std. Deviation  | Std. Error Mean |
|                | N              | 88             | 70.3750        | 6.26303         |
| Post-test      |                |                |                | 66.664          |

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Table 2 shows the comparison between the English students' ability to test students before and after the implementation of the project-based CLIL. T-test shows the value of T at the pre-test of 106.408 and the post-test of 116.137. The difference between these values are significant at the 0.001 level. This means that there is a significant difference between the competence or competences of the students before and after CLIL-based project implementation.

| Test Value = 0 | T | Df | Sig. (2-tailed) | Mean Difference | Lower | Upper |
|---------------|---|----|----------------|-----------------|-------|-------|
| Pre-test | 105.40887 | 87 | .000 | 70.37500 | 69.0480 | 71.7020 |
| Post-test | 115.13787 | 88 | .000 | 73.54545 | 72.2758 | 74.8151 |

### 4.2. Student performance

Student performance is the ability of students to express their ideas in English orally. The student's oral skills include aspects: pronunciation, grammar, vocabulary, fluency, and comprehensibility. These five aspects are summarized into an overall verbal ability (overall). Table 3 describes the descriptive statistic of students' oral ability from the initial ability (pre-test).

| N | Minimum | Maximum | Mean | Std. Deviation |
|---|---------|---------|------|----------------|
| Vocab | 88 | 2.00 | 4.00 | 2.8864 | .56082 |
| Pronun | 88 | 2.00 | 4.00 | 2.7557 | .56728 |
| Gramr | 88 | 2.00 | 4.00 | 2.8466 | .59713 |
| Fluency | 88 | 2.00 | 4.00 | 2.4866 | .59383 |
| Compreh | 88 | 2.00 | 4.00 | 3.0909 | .58006 |
| Overall | 88 | 55.00 | 100.00 | 72.1307 | 10.4648 |

From the result of oral performance test of English, it was found out that for pronunciation aspect, the lowest value was 2 and the highest score was 4. While the average value 2.76 (SD=0.55). For the vocabulary aspect, the lowest score was 2 and the highest score was 4. The mean value of are 2.88 (SD= 0.55). For grammar aspect the lowest value was 2 and the highest value was 4 with an average value of 2.84. For the fluency aspect, the highest value was and the highest was 4 with an average value of 2.84 SD=0.59. For aspects of comprehensibility (comprehensibility), the lowest score was 2 and the highest score 4 with an average 3.08 (SD=0.58).

In total, the average oral ability obtained by mahasiswa is 72.1307, SD=12.14. This means that the average oral ability of the Mathematics Student students before being given a CLIL-based learning action project is quite high. Table 4 describes the descriptive statistic of students' oral ability of the final ability (post-test).

| N | Minimum | Maximum | Mean | Std. Deviation |
|---|---------|---------|------|----------------|
| Vocab2 | 88 | 2.00 | 4.00 | 3.0511 | .55211 |
| Comp | 88 | 2.00 | 4.00 | 3.0006 | .49772 |
| Flu2 | 88 | 2.00 | 4.00 | 2.9261 | .53358 |
| Pron2 | 87 | 2.00 | 4.00 | 2.9310 | .50677 |
| Gram2 | 88 | 2.00 | 4.00 | 2.9489 | .46757 |
| Overall2 | 87 | 57.50 | 9.25 | 74.3707 | 6.85023 |

From the result of oral competence test of English students it is known that for the pronunciation aspect the lowest value was 2 and the highest value was 4, with the average score was 2.93 (SD=0.50). For the vocabulary aspect, the lowest score was 2 and the highest score was 4, the mean score was 3.05 (SD=0.55). For the grammar aspect the lowest score was 2 and the highest score was 4 with a mean score of 2.94. For the fluency aspect, the lowest score was 2, th highest score was 4 with a average value of 2.92.
(SD=0.53). For the aspects of comprehensibility, the lowest score was 2 and the highest score 4 with a mean score of 0.03 (SD=0.49).

In total, the average oral ability obtained by the students was 74.37 (SD=6.85). This means that the average oral competence of Mathematics students of The Faculty of Teaching and Education, Universitas Lampung before being given a CLIL-based learning action project was quite high. Table 5 is a set of paired T-test between five aspects of students' oral ability on pre-test and post-test.

| Tabel 5. Paired sample statistics of students’ oral performance |
|---------------------------------------------------------------|
| Mean | n | Std. Deviation | Std. Error Mean |
|-----------------------|-----------------------|
| Pair 1 Vocab | 2.8864 | 88 | .56082 | .05978 |
| Pair 2 Pronun | 2.7586 | 88 | .56989 | .06110 |
| Pair 3 Gram | 2.9310 | 88 | .50677 | .05433 |
| Pair 4 Fluency | 2.8466 | 88 | .7913 | .06174 |
| Pair 5 Compreh | 3.0909 | 88 | .67772 | .06183 |
| Pair 6 Overall | 74.3707 | 87 | 6.85023 | 73442 |

Paired Differences | t | df | Sig. (2-tailed) |
|-------------------|---|----|----------------|
| Pair 1 vocab - vocab2 | -.16477 | 87 | .004 |
| Pair 2 pronun - pron2 | -.1647 | 87 | .016 |
| Pair 3 gram - gram2 | -.10227 | 87 | .156 |
| Pair 4 fluency - flu2 | -.07955 | 87 | .285 |
| Pair 5 compren - comp2 | .00934 | 87 | .208 |
| Pair 6 overall - overal2 | -.21552 | 87 | .032 |

The paired T-test showed that there was a significant difference between the pre-test and the post-test on vocabulary with a level of significance of .005. There was a significant difference between the pre-test and post-test on pronunciation with a level of significance of .05. There were no significant differences between the pre test score and the post-test score on the aspects of grammar, fluency, and comprehensibility. However, there was significant difference between the pre test score and the post-test score in overall performance.

4.3. Observation Results

Another aspect studied in this research is how students follow all lecture activities through observation of the ability they are involved in group activities completion of their project. The results of the observations are summarized in Table 6. The table presents that majority students’ level ability are in A level (very well).

| Table 6. Students’ capability observation |
|------------------------------------------|
| No | Activity | A | Level of ability |
|----|----------|---|-----------------|
| n | % | n | % | n | % |
| 1 | Students’ ability in working in group | 68 | 77 | 12 | 13.6 | 8 | 09.1 |
| 2 | Students’ ability in discussing in group | 64 | 72.7 | 16 | 18.2 | 8 | 09.1 |
| 3 | Students’ ability in assisting peers who have not mastered the concept | 58 | 65.9 | 20 | 22.7 | 10 | 11.4 |
| 4 | Responsibility in accomplishing the group task | 62 | 71.5 | 20 | 22.7 | 6 | 06.8 |
| 5 | Students’ ability in answering the peers’ question | 56 | 65.7 | 24 | 27.2 | 8 | 09.1 |
| 6 | The students’ ability to present the results of discussion | 58 | 65.9 | 23 | 26.1 | 7 | 8.0 |
| 7 | The students’ ability in answering lecturer | 54 | 61.3 | 25 | 31.0 | 7 | 8.0 |

A: Very well
B: Well
C: Enough

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4.4. Student perceptions

To find out how students’ perceptions of English learning activities using CLIL-based projects, students are asked to respond in two ways, first by completing the questionnaire and answering 5 questions in the form of a complete answer. Answers to the maahasiswa are summarized in Table 7, whereas written responses are described separately.

| No | Questions                                                                                      | Opinion |
|----|-----------------------------------------------------------------------------------------------|---------|
|    |                                                                                               | Yes     | No     |
| 1  | Is the learning through CLIL Project Based Learning easier?                                   | 80 (90.9%) | 8 (9.1%) |
| 2  | Does the learning through project based CLIL more motivate to learn                           | 82 (93%)  | 6 (7%)  |
| 3  | Is the learning through project based CLIL more enjoyable                                     | 70 (79%)  | 18 (21%) |
| 4  | Do you feel autonomy learning by learning through model CLIL Project Based Learning?          | 70 (79%)  | 18 (21%) |
| 5  | You feel learning through CLIL Project Based Learning more active in the teaching learning process? | 74 (84%)  | 14 (26%) |
| 6  | You feel learning through CLIL Project Based Learning can use your learning time more effectively? | 72 (82%)  | 16 (18%) |
| 7  | You feel learning through CLIL Project Based Learning can raise your interest in learning?     | 82 (93%)  | 6 (7%)  |
| 8  | You feel learning through CLIL Project Based Learning can raise your English mastery?          | 74 (84%)  | 14 (26%) |
| 9  | You feel learning through CLIL Project Based Learning can raise your understanding of English  | 74 (84%)  | 14 (26%) |
| 10 | You feel learning through CLIL Project Based Learning should be applied to other subjects?     | 82 (93%)  | 6 (7%)  |

5. DISCUSSION

From the research results can be known things as follows: project bases-CLIL for the English language course in Mathematics, in the Department of Social science, and in the Department of Education, the faculty of teaching and education Universitas Lampung the faculty of teaching and education of the University of Lampung can run well. This is evident from the implementation of the whole program activities from the implementation of the formation of groups, students work in groups to finish the project well. Group presentation activities in English, personal presentations and student responses to all activities. This is in line with the opinion of Mangubhai [13] and [22] who stated that the teaching of language immersion (combining language with other subjects) is one of the best learning approaches.

Another thing gained from this research is product oriented learning and process oriented learning. Product-oriented learning is generally based on psychological theories Behaviorism, based on Pavlov's classical experiments, Thordike's work on studying, and Watson and Rayner's studies applying Pavlov's principles to psychological disorders [23]. Skinner's work is considered an important reference in this field and its application in education [24].

In language teaching, the learning model in this group generally has characteristics that Krashen [25] calls "learning", such as bound by formal procedures, product-oriented/appearance, and sorted by grammatical sequence. The role of teachers is very dominant in determining the direction and procedure of learning. This role is particularly prominent in the tubian and substitution activities that are most prevalent in these approaches. Among the most popular approaches in this group is the Audiolingual Approach.

Audiolingual Approach is rooted from two schools of thought that are parallel in the field of psychology and linguistics [26, 27]. In the field of psychology, this approach is rooted in behaviorism and neo-behaviorism, whereas in the linguistic field this approach is rooted in structural or descriptive flow [24]. The learning methods resulted from this approach are given the same name, the audio method, which is also known by the following names: Functional Skills, New Key Information, and American Methods [28].

Unlike the learning model in product-oriented learning, learning-model in this group is rooted in the thoughts of social theorists, which emphasizes the social nature of human beings, the way humans learn social behavior and the way social interaction serves to strengthen the success of academic learning [29]. In practice, these principles form the development of cooperative learning societies. The assumptions underlying the practice have been summarized by Joyce, Weil, and Calhoun [24], namely:

a. The synergy generated in a cooperative setting produces a stronger motivation than that produced by individualistic and competitive environments. Hence, an integrative social group is more than a collection of parts of it. The sense of being connected produces positive energy.

b. Cooperative group members learn from each other. Each student gets more help than in a yielding order solitude.

c. Interaction between members produces cognitive complexity in addition to social complexity, creating more intellectual activity that supports learning rather than self-study.
d. Cooperation enhances positive feelings toward others, reduces alienation and loneliness, builds relationships, and provides solid views of others.

e. Cooperation improves self-image not only through increased learning but also through a sense of being appreciated and cared for by others in the environment.

f. Students can respond to experience in performing tasks which requires cooperation through the improvement of their work skills together. In other words, the greater the students are given the opportunity to work together, the better their skills in working together. This ability helps their general social skills.

g. Students, including elementary school students, can learn from practice for improving their cooperation skills.

The implication of this study toward the theories of CLIL and Project based learning is that in the teaching of English at tertiary level in Indonesia, there are choices that can be made. Firstly, whether to continue the teaching learning practice in traditional way, that is, by repeating the explanation of grammatical structure, or generic structure of a text or texts. Or secondly, by applying the project based CLIL practice, where input is not solely contributed by the teacher or the text book, but is also contributed by variety of sources taken from internet resources.

6. CONCLUSION

From the results and discussion, it can be concluded that: 1) There is a significant influence on the project-based Content Language Integrated Learning approach to the fluency and accuracy of English students of the Department of Education, Faculty of Mathematics and Natural Sciences, University of Lampung. This is evident from the significant differences between the ability of students before and after following the English language learning through project-based Content Language Integrated Learning; 2). Students’ responses to English learning before and after project-based Content Language Integrated Learning are very positive. This is evident from the responses of students to the questionnaire given or written responses of students in the form of essays.

REFERENCES

[1] Krashen, S., The input hypothesis and its rivals. Implicit and explicit learning of languages. London: Academic Press, pp. 45-77, 1994.

[2] Swain, M and Lapkin, S., "Problems in output and the cognitive processes they generate: A step towards second language learning," Applied Linguistics, vol. 16, no. 3, pp. 371-391, 1995.

[3] George lucas educational foundation, “Michael McDowell,” 2020. [Online] Available: https://www.edutopia.org/profile/michael-mcdowell

[4] Fernández-Sanjurjo J, Fernández-Costales A, and Arias Blanco J., "Analysing students’ content-learning in science in CLIL vs. non-CLIL programmes: empirical evidence from Spain," International Journal of Bilingual Education and Bilingualism, vol. 22, no. 6, pp. 661-674, 2019.

[5] Coyle, De., "Content and language integrated learning: Towards a connected research agenda for CLIL pedagogies," International Journal of bilingual education and bilingualism, vol. 10, no. 5, pp. 543-562, 2007.

[6] Orwinowska, A and Forýs, M., "They learn the CLIL way, but do they like it? Affectivity and cognition in upper-primary CLIL classes," International Journal of Bilingual Education and Bilingualism vol. 20, no. 5, pp. 457-480, 2017.

[7] Robinson, P. C., ESP Today: A practitioner’s guide. Hemel Hempstead. Phoenix, 1991.

[8] Astri Hapsari., "English bilingual education: The challenge of communication and cognition aspects of content language integrated learning (CLIL) in Indonesia," UII Journal of English and Education, vol. 6, no. 2, pp. 12-20, Dec 2012.

[9] Dalton-Puffer, Linares, Lorenzo, and Nikula., "You can stand under my umbrella": Immersion, CLIL and bilingual education. A response to Cenoz, Genese & Gorter (2013)." Applied Linguistics, vol. 35, no. 2, pp. 213-218, 2014.

[10] Morton, T., "Reconceptualizing and describing teachers’ knowledge of language for content and language integrated learning (CLIL)," International Journal of Bilingual Education and Bilingualism, vol. 21, no. 3, pp. 275-286, 2018.

[11] Hadley, A. O., Teaching language in context third edition. Boston, MA: Heinele and Heinle Thomson Learning, 2001.

[12] Mohan, Bernard, Language and content. Addison Wesley Publishing Company, 1986.

[13] Mangubhai, Francis, "Language-in-education policies in the South Pacific. Some possibilities for consideration," Journal of Multicultural Matters, vol. 23, no. 6, pp. 490-511, 2002.

[14] Gensee, F., Integrating language and content: Lessons from immersion. McGill University. National Center For Research On Cultural Diversity and Second Language Learning, 1994.

[15] Crandall, JoAnn, "Collaborate and cooperate: teacher education for integrating language and content instruction," English Teaching Forum, vol. 36, no. 1, pp. 2-9, 1998.
Dalton-Puffer, C., Outcomes and processes in content and language integrated learning (CLIL): current research from Europe. In W. Delanoy, & L. Volkmann, Future Perspectives for English Language Teaching (S. 139-157). Heidelberg; Carl Winte, 2008.

Ackerl, "Lexico-grammar in the essays of CLIL and non-CLIL students: Error analysis of written production,” Vienna English Working Papers, vol. 16, no. 3, pp. 6-12, 2007.

Van Kampen, et al., "Do we all share the same goals for content and language integrated learning (CLIL)? Specialist and practitioner perceptions of ‘ideal’ CLIL pedagogies in the Netherlands,” International Journal of Bilingual Education and Bilingualism, vol. 23, no. 8, pp. 855-871, 2020.

Lasagabaster, D., "Foreign language competence in content and language integrated courses," The Open Applied Linguistics Journal, vol. 1, pp. 31-42, 2008.

Hedrick, T. E., L. Bickman, and D. J. Rog, Applied research design: A practical guide. Sage, Newbury Park, California, USA, 1993.

Fakultas Keguruan Ilmu Pendidikan (FKIP) Universitas Lampung, "Curriculum academic year 2017 (For 2017 and 2018), Bachelor of Information Technology Education (in Bahasa)," 2017. [Online] Available: http://pti.fkip.unila.ac.id/sebaran-mata-kuliah/

Lal, P and Mangubhai, F., "What learning strategies do ESL learners in Fiji use? An exploratory study," Journal of Educational Studies, vol. 22, no. 1, pp. 53-69, Jun 2000.

Watson, J. B. and Rayner, R., "Conditioned emotional reaction,” Journal of Experimental Psychology, vol. 3, no.1, pp. 1-14, 1920.

Joyce, B., Weil, M, and Calhoun, E., Models of teaching sixth edition. Boston: Allyn and Bacon, 2000.

Krashen, S. D., Second language acquisition and second language learning. New York: Pergamon, 1981.

Benseler, D.P and Schulz, RA, "Methodological trends in college foreign language instruction," The Modern Language Journal, vol. 64, no. 1, pp. 88-96, 1980.

Arju Muti’ah, "Approach of content and language integrated learning (CLIL) on Indonesian language learning for vocational school (Smk): Learning language through asking course (in Bahasa)," FKIP e-PROCEEDING, 2020.

Krashen, S. D., Principles and practices in second language acquisition. Oxford: Pergamon, 1982.

Lasagabaster, D., "English achievement and student motivation in CLIL and EFL settings,” Innovation in Language Learning and Teaching, vol. 5, no. 1, pp. 3-18, 2011.

Hutchinson, Tom and Waters, Alan, English for specific purposes: A learner-centered approach. Cambridge University Press, 1987.

Jones, G., "ESP textbooks: Do they really exist?" English for Specific Purposes, vol. 9, no. 1, pp. 89-93, 1990.

Bozdogan, Derya and Karlıdağ, Buket, "A case of CLIL practice in the Turkish context: Lending an ear to students," The Asian EFL Journal, vol. 15, no. 4, pp. 89-110, 2019.

BIOGRAPHY OF AUTHOR

Hery Yufrizal is currently a senior lecturer at the Department of Language and Art Education, FKIP Universitas Lampung. He teaches Second Language Acquisition, Semantics, Pragmatics and Speaking. He got his Ph.D in Applied Linguistics from La Trobe University, Melbourne, Australia. His research interests include: classroom interaction, teachers’ development, and discourse analysis.