International Journal of Learning, Teaching and Educational Research Vol. 22, No. 2, pp. 37-53, February 2023 https://doi.org/10.26803/ijlter.22.2.3 Received Dec 3, 2022; Revised Jan 31, 2023; Accepted Feb 18, 2023

CLIL in the Online Micro-teaching: Factors Affecting Content and Language Achievement

I Komang Budiarta*, Luh Putu Artini, Ni Nyoman Padmadewi and Putu Kerti Nitiasih

Universitas Pendidikan Ganesha (Kampus Tengah Undiksha), Indonesia

Abstract. Content and language integrated learning (CLIL) implementation in online micro-teaching offers dual focuses that become its main consideration. The CLIL implementation in an English teacher education course enables the students to learn both the content of the pedagogical courses and the instructional language. This approach could accommodate their achievements to achieve the predetermined objectives. Thus, this research was mainly intended to determine the factors affecting the students' content and language achievement during the CLIL implementation. In the current research, an explanatory-sequential mixed-methods design was employed. The researcher first collected the data dealing with the students' content and language achievements quantitatively, and to elaborate on the data, qualitative data were also collected through performance tests, selfreflected journals, and interviews. Based on the findings, the research revealed that the CLIL implementation in online micro-teaching could affect the students' content and language achievement positively. It could be seen from the performance test results that they had achieved the minimum passing grade. The CLIL implementation strengthened their content and language achievement by the teacher's recalling of the learning material and instructional languages, organizing a wellstructured presentation, arranging enriching dual-focus activities, applying content and language scaffolding, promoting the development of communicative skills by using clear, simple language instructions, and managing cooperative learning. The students were actively involved, and these activities supported their content and language achievement. These findings revealed that the aforementioned activities should be considered to implement the CLIL approach successfully.

Keywords: content and language integrated learning; English teacher education; online micro-teaching; content and language achievement

@Authors

-

^{*} Corresponding author: I Komang Budiarta; email: mrbudi@unmas.ac.id

This work is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License (CC BY-NC-ND 4.0).

1. Introduction

Content and language integrated learning, henceforth called CLIL, is used as an approach to students' learning. The students can clearly understand the lesson, and the teacher can gain confidence (Ito, 2019). CLIL is widely accepted as an educational approach in which an additional language (i.e., English) is used to teach content and language as a dual focus (Coyle et al., 2010). In addition, the approach is expected to lead to much more innovative learning (Kavanagh, 2018) to support content and language achievement. The integration of the content and language could specifically and intensively enhance the students' content and language achievement although they are not proficient in English.

CLIL has proliferated in Europe as one of the more practical approaches. Catalan and Llach (2017) found that students acquired more comprehensive repositories of vocabulary lists. In CLIL classrooms, English, for example, is the instructional language for delivering the subject content and vice versa (Bonces, 2012). In Asian contexts, CLIL has already been widely implemented. In Japan, it is well-accepted as it provides students with English proficiency for their future careers (Tsuchiya & Murillo, 2015) and boosts their confidence (Ito, 2019). In Thailand, CLIL was found to develop English language ability and content mastery (Chansri & Wasanasomsithi, 2016), as well as enabling active learning (Suwannoppharat & Chinokul, 2015). The implementation of CLIL in Japan and Thailand showed significant acceptance, which could enrich the students in terms of learning content and language.

In Indonesia, CLIL has been considered an innovative teaching approach and has already been widely adopted. The use of English in delivering learning materials and using a second language was accepted by both teachers and students (Floris, 2014). Moreover, interesting and interactive CLIL activities made the students enthusiastic and motivated (Fitria & Susilawati, 2019). Therefore, successful CLIL implementation depends on various supportive learning activities that require the students to participate actively (Budiarta et al., 2020). This research pointed out that teachers and students responded positively to the implementation of CLIL. Thus, CLIL could be applied in teaching content courses, such as pedagogical courses.

In English teacher education, where the pedagogical courses offer content and language, the CLIL implementation is expected to elicit positive responses. The teacher candidates should be equipped with the essential skills that could create meaningful learning experiences, such as explaining, introducing, designing, managing, and evaluating the class (Ata & Kozan, 2018; Banerjee et al., 2015). Moreover, successful CLIL implementation might empower their future CLIL classroom practices (López-Hernández, 2021). This clearly shows that pedagogical courses are necessary so that teacher candidates can be equipped to design and apply the teaching and learning process. They are also provided with the ability to manage their classrooms. As teacher candidates, the students should be provided with the ability to manage their classrooms.

Some research has also been conducted relating to the effects of CLIL implementation on content and language mastery. Research that dealt with CLIL implementation determined that successful implementation of CLIL could be initiated through careful planning and combining content and language knowledge (Biçaku, 2011). This innovative approach is advantageous for the achievement of the dual focus of improving their mastery of both subject content and language skills. (Campillo et al., 2019). This was also supported by research findings that found that appropriate implementation of CLIL enables the students to develop their linguistic competence, content mastery, and motivation (Arribas, 2016). Careful planning, implementation, and assessment also affected the CLIL implementation, particularly in terms of content and language achievements (Ball et al., 2015; Coyle et al., 2010). Further understanding of these factors might support successful CLIL implementation.

Many researchers also found that CLIL implementation affected their dual-focus mastery and motivation. Experimental research carried out in teaching foreign languages showed that the CLIL environment and motivation support the acquisition of both subject knowledge and language proficiency (Godzhaeva et al., 2019). This was also endorsed by Mede and Cinar (2018), who found that the approach used functional instructions to create an engaging learning environment. Moreover, CLIL implementation could be optimized to achieve effective learning results and augment the students' performances (Hu et al., 2022). CLIL implementation at the tertiary level could enhance their content, language, motivation, and other positive attitudes to enrich their learning further. As a result, it was critical to determine the factors that affected the students' content and language achievement so that the teacher candidates would give careful consideration to implementing the CLIL approach.

In English teacher education contexts, the micro-teaching course is mainly intended to enhance the students' ability to teach so that they are ready to deal with the realities of the classroom. Therefore, this course will nurture their competency as future teachers (Mbato, 2020). The micro-teaching practice is useful for teacher candidates to reduce their deficiency in teaching skills and help them to develop much more positive attitudes towards their future profession (Sarıçoban, 2016). Teaching in front of a class needs confidence; therefore micro-teaching as an initial practice of classroom teaching contributes significantly to the proficiency of students who want to be good teachers (Ekşi & Yakışık, 2016). It enables them to gain experience in teaching and improve their teaching, classroom management, and lesson plan preparation skills (Özbal, 2019). In addition, CLIL implementation in the course will strengthen their competency in classroom management as future teachers.

Based on the research background, the present study was focused on exploring the students' content and language achievement in the online micro-teaching during CLIL implementation. This was interesting because research dealing with CLIL achievement in online micro-teaching is scarce in Indonesian ELT contexts. The current research question was carefully constructed as it was crucial to ensure it could be answered. The research question was as follows:

What are the factors that affect the students' content and language achievement as a result of the CLIL implementation in online micro-teaching? In other words, the present research was mainly intended to explore the factors contributing to the students' content and language achievement after CLIL implementation in online micro-teaching.

2. Research Method

2.1 Research Design

In accordance with the present research, the mixed methods were selected as an explanatory-sequential approach. The explanatory-sequential mixed-methods design was initiated by collecting quantitative data; in addition, to elaborate on the quantitative results, qualitative data were sequentially collected (Creswell, 2012). The data dealing with the students' content and language achievements quantitatively were collected first, and to elaborate on the data, qualitative data were also collected. This research was carried out in the English Language Education Study Program (ELESP) Faculty of Teacher and Training and Education, Universitas Mahasaraswati Denpasar, and the students taking the micro-teaching course were considered as the research subjects. These students were sixth-semester students. They became data sources for determining the students' content and language achievement in CLIL.

2.2 Research Instrument

The performance tests, self-reflected journals, and interviews were incorporated into the current explanatory-sequential mixed-methods design. The research instruments were developed based on expert judgment and inter-rater reliability to determine the validity and reliability. They could be described as follows:

- 1. The performance tests were mainly designed to collect the quantitative data dealing with their achievement in content and language after implementing the CLIL approach in online micro-teaching. The performance tests were constructed in written and spoken forms, requiring the students to answer the items. The first item, which assessed their content mastery, was scored using a scoring rubric focused on correctness, comprehension, and grammar. In addition, the second item assessed their content and language mastery and was scored based on fluency, comprehension, vocabulary, and grammar. The scoring rubric was adapted from that of Brown (2004).
- 2. The self-reflective journal was compiled by the students at the end of each CLIL implementation. This instrument required the students to write how they responded to the CLIL implementation concerning their content and language mastery.
- 3. A semi-structured interview was also conducted with 12 subjects representing high, middle, and low achievers. The interview was conducted in Indonesian. They were asked how the CLIL implementation in online micro-teaching affected their content and language mastery.

2.3 Data Collection and Analysis

The data collection was carried out in the semester of the micro-teaching course. The lecturer administered seven performance tests, one at the end of each unit. The tests were intended to assess the students' content and language

achievement after implementing the CLIL approach in online micro-teaching. Moreover, the students were also required to write a self-reflective journal expressing how they experienced the CLIL implementation. The students were further interviewed to collect more comprehensive data. These research instruments were mainly intended to collect data on how the CLIL implementation in online micro-teaching could improve their content and language achievement.

The collected data using the performance tests were descriptively analyzed and presented. In addition, the self-reflected journals and interviews were categorized into relevant themes. The researcher carefully read and reviewed the collected data. These data were then reduced, typed, and organized accordingly. The data analysis resulted from the research instruments used to explore how the students experienced the CLIL implementation.

3. Findings

Seven post-tests were administered at the end of the teaching and learning process to collect the quantitative data dealing with their achievement in the content and language. The post-tests had two items administered at the end of every meeting after the lecturer had explained the basic concepts taught in micro-teaching. The first item, which mainly measured their ability to master the concepts, was scored based on a weighted scoring rubric: correct, comprehensive, and grammatical answers. The second item, which focused on measuring their language mastery, was scored based on fluency, comprehension, vocabulary, and grammar. Two markers scored the results of the tests to increase objectivity, and the results were tabulated and descriptively analyzed as follows:

Table 1: Descriptive analysis summary of content and language achievement

The Basic Concepts of Micro-teaching Course		Content Achievement			Language Achievement		
		Max.	Mean	Min.	Max.	Mean	
Describing Learners	75	91	83.08	35	58	48.50	
Communication, Feedback, and Interaction	77	92	86.12	65	93	81.96	
Reinforcement	77	93	86.35	70	93	82.73	
Questioning	77	93	85.77	75	95	82.73	
ICT-based ELT	81	94	87.54	75	95	85.46	
Classroom Management		93	87.19	80	95	90.35	
Reviewing Lesson Planning		94	88.27	83	95	89.08	
Total Content and Language Achievement	78	92	86.23	71	88	79.92	

Table 1 showed that the micro-teaching contents' average achievement was 78 and 92 for the minimum and maximum, respectively. Moreover, the average minimum and maximum scores of the language were figures of 71 and 88. These scores signified that the students had already achieved the minimum passing grade (i.e., 65 points), which was determined in the English Language Education

Study Program (ELESP). In other words, the students could master the content and language by implementing the CLIL approach. This quantitative data revealed that the CLIL implementation in online micro-teaching positively affected the students' content and language achievement.

At the end of the CLIL implementation in the online micro-teaching, the students were required to write self-reflected journals. Seven self-reflected journals were submitted. They were instructed to write down what they experienced during the CLIL implementation in the online micro-teaching. Based on the results of the self-reflected journals, it could be seen that the CLIL implementation also positively affected their content and language achievement. The students indicated that their content and language achievements had improved. The summary of the seven entries in their self-reflected journals is presented in Table 2:

Table 2: Self-reflected journals summary on the content and language achievement

No	Factors	Descriptions
1	Recalling the learning material and instructional languages	Recalling the learning material, particularly the basic concepts of micro-teaching, enabled the students to remember the previously delivered learning materials that strengthened their language acquisition.
2	Organizing a well- structured learning material and language presentation	When the contents or basic concepts of micro-teaching were well-structured and presented, the students could understand the contents easily, and they had structured language practice.
3	Enriching content and language achievement	Providing rich-practices activities also strengthened their content understanding as they could practise using the basic concepts and the instructional language.
4	Applying content and language scaffolding	Applying content language scaffolding assisted the students greatly, as their abilities to understand content and language were heterogeneous.
5	Developing communicative skills	Developing the students' communicative skills was carried out by providing them with opportunities to practise their language uses and deepen their understanding of the contents.
6	Using simple language instructions	Using simple instructional language assisted the students in developing their ability to use the target language and strengthening their content understanding.
7	Managing cooperative learning	Managing rich-practice activities (i.e., cooperative learning) enabled the students to practise the language uses, and they could explore the contents more critically through pair or group work.

The self-reflected journals the students submitted at the end of the meeting revealed that the lecturer usually recalled the previous learning concepts before presenting a new lesson. This enabled them to revise the previous content and practise the language use again. In addition, the students noted that the lecturer presented well-structured learning material which assisted their content

mastery. It also developed their fluency in using the instructional language as it had been presented in online micro-teaching.

The students also mentioned that the lecturer provided comprehensive practice opportunities to enrich their content and language achievement. They revealed that they could understand the learning material presented and practise the instructional language. The CLIL implementation also signified using content and language scaffolding during the online micro-teaching. The teacher frequently provided examples when she presented the concepts using their second language so that it helped them understand and be able to model the language. She also simplified her explanations when her students were confused. This was necessary because she dealt with students who were categorized as low achievers. The content and language scaffolding encouraged them to achieve the dual focus of the CLIL implementation.

The CLIL implementation is also mainly intended to facilitate communicative activities. The students further mentioned that the lecturer provided them with opportunities to practise their language skills, primarily speaking and listening. In addition, the activities enriched the students' grammar and vocabulary use which in turn strengthened their language ability. The lecturer also gave simple and clear instructions to aid their content understanding and language practices. It provided them with an instructional model that could be adapted in their future teaching. As a result, they could understand the contents and simultaneously practise the language used in delivering the contents of the micro-teaching course.

To strengthen the students' language ability, the lecturer also provided learning activities that facilitated active learning. The lecturer organized cooperative learning activities, which were expected to encourage them to understand the contents and practise their language use. To apply the CLIL approach in online micro-teaching, the lecturer implemented three cooperative learning techniques: Think-Pair-Share, Talking Chips, and Rally Coach. The students stated that pair work and group discussions provided them with many opportunities to practise language use, which supported their content understanding. They also added that the cooperative learning activities enabled them to communicate freely with the other students in the group and with all the class members. These activities enriched their content achievement.

The researcher also conducted interviews with the students to deepen the research findings. Twelve students were interviewed to determine how they experienced the CLIL implementation effect in the online micro-teaching on their content and language achievement. The semi-structured interviews were conducted at the end of the semester to collect the data comprehensively. The data collected from the interview were mainly intended to triangulate the data yielded from administering performance tests and from the self-reflected journals. The results of the interview were elaborated on as follows.

The results of the interviews with the students supported both the performance test results and the self-reflected journals. During the interview, the students also emphasized the learning materials' organization and presentation so that they could comprehend the basic concepts of micro-teaching as covered during the class. The structured learning materials, which were presented with simple and clear instructions, aided the students in having a more profound understanding:

The lecturer structured the learning material in PowerPoint and explained the material with simple and clear instructions that supported my understanding and helped me practice my language. I can see the lecturer presented the learning material procedurally.

The organization of the learning materials and simple, clear instructions supported them in achieving content understanding and language use.

In addition, the students also pointed out that the CLIL implementation in the online micro-teaching encouraged them to learn new knowledge as well as practising the instructional language. They had rich opportunities to learn the content and practise the language use:

Online micro-teaching can give me the knowledge and more time to practice teaching students in the future using instructional languages. It can affect my content and language achievement.

The students were given plenty of opportunities to practise the contents and language use. They were involved in activities that helped them to elaborate on the basic concepts they had learned, while at the same time modelling and practising the instructional language. In other words, it would improve their dual focus and ultimately have a positive effect on their content and language achievement.

During the interview, the students also revealed that the content and language scaffolding the lecturer applied assisted them in understanding the learning materials and practising the language. The lecturer tended to provide examples and simplify her explanation to help the students understand:

The lecturer applied a scaffolding technique in which the lecturer used modelling, or sometimes she simplified the explanation. The scaffolding technique made us easier to understand the content and language.

The students mentioned that the lecturer tended to apply modelling as the main scaffolding technique. She provided many examples to support further understanding of the presented contents and language. Furthermore, she also simplified her explanation if she thought the students could not understand. This helped the students significantly as they were heterogeneous in terms of ability. Thus, detailed explanations would aid their content understanding and language use.

As aforementioned, the CLIL implementation in online micro-teaching encouraged the students' language skills and conceptualisation. Implementing the CLIL approach gave the students plenty of opportunity to practise the

language and understand the contents. It strengthened not only the students' language skills but also their language efficacy.

The lecturer provided us with many opportunities that helped our understanding. These also enabled us to practice language use. Our speaking and grammar improved during the CLIL implementation.

The wide range of opportunities afforded the students by the CLIL implementation in online micro-teaching enabled them to have more chances of using their second language. They were emboldened to communicate freely with the other students in the classroom or to practise their speaking. This, of course, would improve their language ability, and at the same time, they could deepen their grammatical mastery and enrich their vocabulary acquisition. Frequent practices of language use would improve their language achievement.

In addition, various active learning activities were also carried out to involve the students. It was also revealed that cooperative learning techniques which were applied in the CLIL implementation stimulated active involvement:

I love the cooperative learning techniques applied by the lecturer. Those techniques stimulated our deeper content understanding, and the activities enabled them to have more practice in using the language.

During the interview it was also stressed that cooperative learning techniques that required the students to work in pairs and groups facilitated their active participation in the teaching-learning process. The students could interact with their friends in the breakout rooms during the pair and group work. They could practise their ability to use the language and understand the contents to improve their content and language achievement. The students also felt they could freely express themselves during the CLIL implementation and increase their self-confidence.

4. Discussion

The research findings that have already been presented indicated that the CLIL implementation in online micro-teaching positively affected the students' content and language achievement. They were able to achieve the predetermined minimum passing grade. The activities, such as the teacher's recalling the learning material and the instructional language, organizing a well-structured language presentation and learning material, enriching content and language achievement, applying content and language scaffolding, developing communicative skills, using simple language instructions, and managing cooperative learning, could support their content and language achievement. Based on the research findings, further discussions are presented as follows.

The research findings revealed that the CLIL implementation in online microteaching could affect the students' content and language achievement positively. It happened because, during the teaching and learning process, the lecturer always provided an opportunity where the previous learning materials were recalled. This initial engagement would give them more opportunities to foster the development of the content and language learning (Karimi et al., 2019). Moreover, when the lecturer recalled the learning materials and practised the language use, the previously studied learning materials could be further reinforced. Other factors, such as materials selection, task design, and the integration of content and language goals, were also crucial for CLIL courses (Zhyrun, 2016). Thus, recalling the learning materials could facilitate content and language achievement.

The organization of the learning material also affected the students' content and language achievement. Well-structured learning material could support them in gaining a comprehensive understanding of the contents delivered through the target language. They could improve their content learning as the new knowledge, examples, and activities applied to the context (Wentzel, 2021) were well-organized. Furthermore, when the students are presented with organized learning materials, it could motivate them to discover content and language, promoting their content and language achievement (Chostelidou & Griva, 2014). Therefore, the organization of the learning materials during the preparation became essential for the lecturer.

Furthermore, the CLIL implementation in online micro-teaching provided the students with many opportunities to practise the content and language. Rich practices activities could help them understand the basic concepts of the micro-teaching course. When the lecturer provided CLIL classroom practice exercises that involved the students being active participants in developing their potential for acquiring knowledge and skills (Coyle et al., 2010), they could achieve a more comprehensive dual focus. The rich-practice activities also facilitated their understanding of the basic concepts delivered using the target language. Ultimately, it affected their content and language achievement of the micro-teaching course.

The other important factor that affected the students' content and language achievement was the lecturer's ability to scaffold the content of the microteaching course. The scaffolding presented the learning materials in a way that the content delivery could be easily understood (Ball et al., 2015). Various scaffolding techniques were applied, which were very helpful since the lecturer dealt with heterogenous students regarding their ability to understand the learning materials. The CLIL implementation in this context could be best achieved by applying a modelling type of scaffolding (Coyle et al., 2010). The lecturer tried to model the content and language to give further emphasis. The lecturer also attempted to give examples that could improve their dual focus.

The lecturer further simplified her explanations so the students could understand the content and language of the course. Mahan (2022) found that when scaffolding strategies were applied to bridge the students' prior and future knowledge in understanding the content subject by using supportive instructions, their understanding was enriched. During the CLIL implementation, the lecturer applied a modelling technique in which she gave the students clear examples which they could then replicate (Walqui, 2006). She further simplified her explanations when the students had difficulty in understanding the micro-teaching concepts. This technique helped them

significantly and worked well to deepen the understanding of those students who were categorized as low achievers. It also provided frequent instructional language practice.

The students who studied micro-teaching were expected to become communicative teachers in the future. Thus, their communicative skills were essential in delivering learning material to their students. In CLIL implementation, the language use was an additional communicative element to promote comprehensive understanding of the learning material (Van Kampen et al., 2020). In other words, the language use that the students experienced simultaneously was primarily intended to facilitate understanding of the contents being delivered. Moreover, the lecturer and students created a learning environment in which they could use the language to learn the contents (Dalton-Puffer & Nikula, 2014) and simultaneously master the language use. These communicative practices were mainly directed towards the dual goals of CLIL implementation in online micro-teaching, namely content and language achievement.

Furthermore, the main activity that could increase the students' proficiency in language learning was the communicative activity. A communicative classroom activity usually lowers foreign language anxiety levels, with less emphasis on language accuracy to increase classroom interaction (Aiello et al., 2015). The lecturer stressed that the students were required to practise their communicative skills without being afraid of making grammatical mistakes. The lecturer acknowledged those who actively participated. Though the main focus of the CLIL implementation was on the content, the students were also provided with opportunities to practise the foreign language (Kuzminska et al., 2019). Thus, there was a perceived increase in their language learning due to continuous practice both in and beyond the classroom interaction (Wentzel, 2021).

The lecturer provided as many opportunities as possible for the students to practise their language use. A balanced proportion of language use and activities in the CLIL classroom should encourage communicative interaction among the students (Fitriani, 2016). It was also the lecturer's consideration when she managed her classroom. The CLIL lecturer encouraged the students' oral interaction in the classrooms so they could have opportunities to practise language use (Ball et al., 2015). In other words, if CLIL lecturers want to enhance students' speaking skills, they should create more opportunities for extended communicative practice (Dalton-Puffer, 2007). Thus, communicative activities in the CLIL implementation are necessary to improve students' content understanding as well as language use.

The CLIL implementation encouraged the students to learn the contents using the language. It required an approach that addressed the particular communicative skills (Zhyrun, 2016). As a result, the lecturer accommodated communicative activities to practise the language uses. It was necessary for the students to be more motivated to be active, interested in engaging, and eager to work hard in the CLIL class (Karimi et al., 2019). Moreover, this approach

strengthened their English communicative competence in particular when the foreign language was introduced as the instructional language (Salamanca & Montoya, 2018). These communicative practices could support their language proficiency as their second language was frequently used in the CLIL class.

To deal with the current situation during the Covid-19 pandemic in which online learning was conducted, the lecturer managed the virtual class as simply as possible. In the CLIL implementation, the lecturers had to use simple and easy-to-understand instructions as CLIL mainly focused on delivering content and practising foreign language use (Griffith, 2017). Moreover, the lecturers who used the CLIL language were expected to be sufficiently proficient in English to be able to model the sentences and phrases that the students needed (Harmer, 2012). In other words, the instructional language was simplified and easy to understand. Furthermore, a lecturer should provide rich input to motivate students to practise the language (Mehisto et al., 2008). The current research has proven that the students' content and language achievement increased as the lecturer used simple instructional languages so that the students who were heterogeneous in terms of ability could grasp the explanation.

The present CLIL implementation in online micro-teaching was organized by applying three cooperative learning techniques: Think Pair Share, Talking Chips, and Rally Coach. These learning techniques also had a significant effect on the students' language achievement as these techniques stimulated their communicative interactions. It was also mentioned that various interactive methods and activities enabled the students to practise communicative skills (Goncharova et al., 2021). Moreover, in CLIL implementation, it was suggested that the lecturers did not apply only a single technique to activate the students (Zhyrun, 2016). Therefore, the lecturer applied several learning techniques to stimulate the students' active participation during the CLIL implementation in online micro-teaching. The students responded positively to these techniques during the CLIL class.

The CLIL implementation in the ELESP required the lecturer to facilitate the inclusion of students of mix-ability. In a CLIL classroom, the students could be required to cooperate by making use of each other's areas of strength and compensating for areas of weaknesses. In that case, they must learn to work collaboratively and work effectively in groups (Coyle et al., 2010). It was essential to increase their confidence in their pair partner and group members before incorporating the whole class. The application of the cooperative learning techniques was mainly intended to facilitate their collaboration as in CLIL lessons. They often worked in pairs and groups to deal with tasks given during the online micro-teaching (Harmer, 2012). It helped them deal with the tasks that had been delegated and, at the same time, increased their self-confidence, which was an essential element of mastering language use.

The students responded actively to the implementation of the cooperative learning techniques. The abovementioned techniques were chosen as they could facilitate collaborative work and peer feedback (Lazarević, 2019) to optimize

their pair and group discussions. Moreover, the students learned more when they had the opportunity to explain concepts to their peers (Hammoumi et al., 2021). They mentioned that the techniques enabled them to use their second language during pair and group work. They could practise the language in the breakout room for discussions. These techniques were also applied as the lecturer highlighted that, in the CLIL classroom, the students had to work cooperatively with others, use each person's strengths and weaknesses, and operate effectively in groups (Suwannoppharat & Chinokul, 2015). They could engage in pair and group sharing to enrich their learning experiences, particularly in using the language in which the lesson had been taught.

The collaboration among the students during the CLIL implementation significantly affected the students' content and language achievement. It happened because online micro-teaching was conducted effectively to encourage interaction between students and lecturers as well as among students (Pellegrino et al., 2013). The CLIL implementation stimulated active learning participation that created a collaborative learning environment, and the activities significantly affected their content and language achievements (Hashmi, 2019). Furthermore, cooperative learning techniques helped them achieve the learning goals of acquiring the language and as well as learning the subject content (Deswila et al., 2020). The current research also proved that the collaboration among students during CLIL implementation reinforced the online teaching and learning process, and the students were able to improve their language ability. Thus, their content and language achievement achieved the minimum passing grade.

In the present research, the lecturer provided plenty of opportunities for the students to use both the content and the language. CLIL classes require a wide range of activities, more than normal classes (Biçaku, 2011). In the present research, it could be seen that during the implementation of the CLIL approach in online micro-teaching, the lecturer provided many opportunities for the students through pair and group work and discussions. These activities could support the students in deepening their conceptual understanding. Furthermore, some research also revealed that students opted for CLIL classes because they were exposed to activities that could extend their knowledge of the contents (Kavanagh, 2018). It proved that rich learning activities could fortify their understanding of the presented contents and language. In other words, rich practice learning activities in CLIL implementation during the online microteaching could positively affect their dual focus achievement.

5. Conclusion

The present research found that the CLIL implementation in online micro-teaching could positively affect the students' content and language achievement. It could be seen from the performance test results that they had achieved the minimum passing grade. This was as a result of implementing the CLIL approach in the online micro-teaching that was planned and applied to support their learning. The CLIL implementation strengthened their content and language achievement by enabling their recalling the learning material and

instructional language, organizing a well-structured presentation, enriching dual-focus activities, applying content and language scaffolding, developing communicative skills, using clear, simple language instructions, and managing cooperative learning. These activities intensified their understanding of the contents taught in the online micro-teaching course by implementing the CLIL approach. Moreover, they could frequently practise the instructional language. Thus, their content and language achievement could be improved after implementing the CLIL approach.

The current research was mainly intended to explore the factors that affected the students' content and language achievement as the result of CLIL implementation in online micro-teaching. Thus, the research subjects were selected using a purposive sampling method focusing on the subjects taking the course. The present research had a limitation regarding its generalizability. However, the current research might be adapted to other contexts with different content courses and other populations both in ELT and non-ELT contexts.

6. References

- Aiello, J., Di Martino, E., & Di Sabato, B. (2015). Preparing teachers in Italy for CLIL: Reflections on assessment, language proficiency and willingness to communicate. *International Journal of Bilingual Education and Bilingualism*, 20(1), 69–83. https://doi.org/10.1080/13670050.2015.1041873
- Arribas, M. (2016). Analysing a whole CLIL school: Students' attitudes, motivation, and receptive vocabulary outcomes. *Latin American Journal of Content & Language Integrated Learning*, 9(2), 267–292. https://doi.org/10.5294/laclil.2016.9.2.2
- Ata, A., & Kozan, K. (2018). Factor analytic insights into micro-teaching. *International Online Journal of Education and Teaching (IOJET)*, 5(1), 169–178. http://iojet.org/index.php/IOJET/article/view/264/225
- Ball, P., Kelly, K., & Clegg, J. (2015). Putting CLIL into practice. Oxford University Press.
- Banerjee, K., Halder, S., & Guha, A. (2015). Application of micro-teaching skill for improving the quality of teachers: Exploring opinion of trainee teachers. *I-Manager's Journal of Educational Technology*, 12(1), 28–35. https://doi.org/10.26634/jet.12.1.3433
- Biçaku, R. Ç. (2011). CLIL and teacher training. *Procedia Social and Behavioral Sciences*, 15, 3821–3825. https://doi.org/10.1016/j.sbspro.2011.04.379
- Bonces, J. R. (2012). Content and language integrated earning (CLIL): Considerations in the Colombian context. *Gist Education and Learning Research Journal*, 6(6), 177–189.
- Budiarta, I. K., Rasna, I. W., Padmadewi, N. N., & Artini, L. P. (2020). Applying content and language integrated learning (CLIL): Teachers' perceptions and challenges. *International Journal of Innovation, Creativity and Change*, 14(3), 78–94. www.ijicc.net
- Campillo, J. M., Sánchez, R., & Miralles, P. (2019). Primary teachers' perceptions of CLIL implementation in Spain. *English Language Teaching*, 12(4), 149–156. https://doi.org/10.5539/elt.v12n4p149
- Catalan, R. M. J., & Llach, M. P. A. (2017). CLIL or time? Lexical profiles of CLIL and non-CLIL EFL learners. *System*, 66, 87–99. https://doi.org/10.1016/j.system.2017.03.016
- Chansri, C., & Wasanasomsithi, P. (2016). Implementing CLIL in higher education in Thailand: The extent to which CLIL improves agricultural students' writing ability, agricultural content, and cultural knowledge. *Pasaa*, 51(Jan-June), 14–38.

- Chostelidou, D., & Griva, E. (2014). Measuring the effect of implementing CLIL in higher education: An experimental research project. *Procedia Social and Behavioral Sciences*, 116(1982), 2169–2174. https://doi.org/10.1016/j.sbspro.2014.01.538
- Coyle, D., Hood, P., & Marsh, D. (2010). Content and language integrated learning. Cambridge University Press.
- Creswell, J. W. (2012). Educational research: Planning, conducting and evaluating quantitative and qualitative research (4th ed.). Pearson Education.
- Dalton-Puffer, C. (2007). Discourse in content and language integrated learning (CLIL) classrooms. John Benjamins Publishing.
- Dalton-Puffer, C., & Nikula, T. (2014). Content and language integrated learning. *The Language Learning Journal*, 42(2), 117–122. https://doi.org/10.1080/09571736.2014.891370
- Darwish, S. Al, & Sadeqi, A. (2016). Microteaching impact on student teachers' performance: A case study from Kuwait. *Journal of Education and Training Studies*, 4(8), 126–134. https://doi.org/10.11114/jets.v4i8.1677
- Deswila, N., Kustati, M., Besral, B., & Sukandi, S. S. (2020). Content and language integrated learning (CLIL) approach across curriculum in science classrooms: Are the English language use and learning reveal? *Journal of Innovation in Educational and Cultural Research*, 1(1), 15–21. https://doi.org/10.46843/jiecr.v1i1.4
- El Hammoumi, M. M., El Youssfi, S., El Bachiri, A., & Belaaouad, S. (2021). Active learning in higher education: A way to promote university students' autonomy and cognitive engagement in Moroccan universities. *Journal of Southwest Jiaotong University*, 56(6), 325–334. https://doi.org/10.35741/issn.0258-2724.56.6.27
- Ekşi, G.Y., & Yakışık, B.Y. (2016). To be anxious or not: Student teachers in the practicum. *Universal Journal of Educational Research*, 4(6), 1332–1339. https://doi.org/10.13189/ujer.2016.040610
- Fitria, V. N., & Susilawati, S. (2019). Video sharing in content and language integrated learning (CLIL) context: Fostering junior high school students' productive skills. *UPI 2nd INternational Conference on Language, Literature, Culture and Education (ICOLLITE 2018)*, 257(Icollite 2018), 282–286. https://doi.org/10.2991/icollite-18.2019.62
- Fitriani, I. (2016). Grass roots' voices on the CLIL implementation in tertiary education. *Dinamika Ilmu*, 16(2), 211. https://doi.org/10.21093/di.v16i2.320
- Floris, F. D. (2014). Learning subject matter through English as the medium of instruction: Students' and teachers' perspectives. *Asian Englishes*, 16(1), 47–59. https://doi.org/10.1080/13488678.2014.884879
- Godzhaeva, N. S., Logunov, T. A., Lokteva, M. S., & Zolotareva, S. A. (2019). Approaching CLIL from the periphery: Integration of content and language in Russian higher institution. *European Journal of Contemporary Education*, 8(2), 280–293. https://doi.org/10.13187/ejced.2019.2.280
- Goncharova, I., Lazebna, O., & Kotvytska, V. (2021). CLIL in tourism students' multicultural competence development. *Advanced Education*, 19, 4–11. https://doi.org/10.20535/2410-8286.226588
- Griffith, M. (2017). Tapping into the intellectual capital at the university. *Universal Journal of Educational Research*, 5(12A), 134–143. https://doi.org/10.13189/ujer.2017.051320
- Harmer, J. (2012). Essential teacher knowledge: Core concepts in English language teaching. Pearson Education.
- Hashmi, U. M. (2019). Exploring EFL teachers' perceptions of CLIL and its implementation in the Saudi EFL context. *International Education Studies*, 12(10),

- 114-122. https://doi.org/10.5539/ies.v12n10p114
- Hu, H., Said, N. E. M., & Hashim, H. (2022). Killing two birds with one stone? A study on achievement levels and affective factors in content and language integrated learning (CLIL). *International Journal of Learning, Teaching and Educational Research*, 21(4), 150–167. https://doi.org/10.26803/ijlter.21.4.9
- Ito, Y. (2019). The effectiveness of a CLIL basketball lesson: A case study of Japanese junior high school CLIL. *English Language Teaching*, 12(11), 42–54. https://doi.org/10.5539/elt.v12n11p42
- Karimi, P., Lotfi, A. R., & Biria, R. (2019). Enhancing pilots' aviation English learning, attitude and motivation through the application of content and language integrated learning. *International Journal of Instruction*, 12(1), 751–766. https://doi.org/10.29333/iji.2019.12148a
- Kavanagh, B. (2018). An introduction to the theory and application of CLIL in Japan. Bulletin of the Institute for Excellence in Higher Education Tohoku University, 4, 277–283.
- Kuzminska, N., Stavytska, I., Lukianenko, V., & Lygina, O. (2019). Application of CLIL methodology in teaching economic disciplines at university. *Advanced Education*, 6(11), 112–117. https://doi.org/10.20535/2410-8286.167150
- Lazarević, N. (2019). CLIL teachers' reflections and attitudes: Surviving at the deep end. *International Journal of Bilingual Education and Bilingualism*, 1–14. https://doi.org/10.1080/13670050.2019.1703897
- López-Hernández, A. (2021). Initial teacher education of primary English and CLIL teachers: An analysis of the training curricula in the universities of the Madrid Autonomous Community (Spain). *International Journal of Learning, Teaching and Educational Research*, 20(3), 132–150. https://doi.org/10.26803/ijlter.20.3.9
- Mahan, K. R. (2022). The comprehending teacher: Scaffolding in content and language integrated learning (CLIL). *Language Learning Journal*, 50(1), 74–88. https://doi.org/10.1080/09571736.2019.1705879
- Mbato, K. F. W. dan C. L. (2020). Undergratuate students' perceptions on their identity as future EFL teachers. *Journal of English Teaching*, *6*(2), 98. ejournal.uki.ac.id
- Mede, E., & Cinar, S. (2018). Implementation of content and language integrated learning and its effects on student motivation. *LACLIL*, 11(2), 215–235. https://doi.org/10.5294/laclil.2018.11.2.3
- Mehisto, P., Marsh, D., & Frigols, M. J. (2008). *Uncovering CLIL: Content and language integrated learning in bilingual and multilingual education*. Macmillan Education.
- Özbal, A. F. (2019). Implementation of microteaching in special teaching methods I and II courses: An action research. *International Education Studies*, 12(10), 89. https://doi.org/10.5539/ies.v12n10p89
- Pellegrino, E., De Santo, M., & Vitale, G. (2013). Integrating learning technologies and autonomy: A CLIL course in linguistics. *Procedia Social and Behavioral Sciences*, 106, 1514–1522. https://doi.org/10.1016/j.sbspro.2013.12.171
- Salamanca, C., & Montoya, S. I. (2018). Using CLIL approach to improve English language in a Colombian higher educational institution. *English Language Teaching*, 11(11), 19. https://doi.org/10.5539/elt.v11n11p19
- Sarıçoban, A. (2016). Foreign language teaching practicum beliefs of student teachers. *Journal of Language and Linguistic Studies*, 12(1), 166–176.
- Suwannoppharat, K., & Chinokul, S. (2015). Applying CLIL to English language teaching in Thailand: Issues and challenges. *Latin American Journal of Content and Language Integrated Learning*, 8(2), 237–254. https://doi.org/10.5294/laclil.2015.8.2.8
- Tsuchiya, K., & Murillo, M. D. P. (2015). Comparing the language policies and the students' perceptions of CLIL in tertiary education in Spain and Japan. *Latin*

- American Journal of Content and Language Integrated Learning, 8(1), 25–35. https://doi.org/10.5294/laclil.2015.8.1.3
- Van Kampen, E., Meirink, J., Admiraal, W., & Berry, A. (2020). 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*, 23(8), 855–871. https://doi.org/10.1080/13670050.2017.1411332
- Walqui, A. (2006). Scaffolding instruction for English language learners: A conceptual framework. *International Journal of Bilingual Education and Bilingualism*, 9(2), 159–180. https://doi.org/10.1080/13670050608668639
- Wentzel, A. (2021). Less is more: Content compression in CLIL. Latin American Journal of Content & Language Integrated Learning, 14(1), 9–40. https://doi.org/10.5294/laclil.2021.14.1.1
- Zhyrun, I. (2016). Culture through comparison: Creating audio-visual listening materials for a CLIL course. *Latin American Journal of Content & Language Integrated Learning*, 9(2), 345–373. https://doi.org/10.5294/laclil.2016.9.2.5