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## International Students' Experiences of Content Language Integrated Learning in a Korean University: Focusing on Korean as a Medium of Instruction

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**Abstract:** This study explores international graduate students' experiences of content-language integrated learning (CLIL) at a university in Korea. This study focuses on a course that allows international students to simultaneously learn the Korean language and content knowledge. Korean as a medium of instruction (KMI) was applied to 16 international graduate students in two graduate courses during the 2021 Fall semester. The survey examines the perception and satisfaction of students' experiences in the KMI classes. Among survey participants, interview applicants were selected for in-depth interviews. Study results showed that international graduate students developed content knowledge through KMI classes. They also improved their Korean language ability. Overall, international students were generally satisfied with KMI classes. However, it is difficult for international students to dramatically enhance their Korean academic proficiency within one semester. Recommendations are provided on effectively conducting CLIL classes, such as KMI for international students in higher education.

**Keywords:** CLIL, content-language integrated learning, higher education international students, KMI, Korean as a medium of instruction.

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### Introduction

As society enters the globalization era, international exchanges between countries are more active than ever, and higher education institutions worldwide are also affected by this global trend (Hannum et al., 2010). South Korea (Korea hereafter) is one example that actively seeks international students worldwide (Choi & Kim, 2014). Korean universities offer various programs and opportunities to attract diverse international students since the number of Korean undergraduate first-year students has gradually decreased due to the low birth rate (Choi & Kim, 2014). Specifically, international students in Korean universities are increasing yearly, exceeding 100,000 in 2016 (Education Statistics Service in Korea, 2021). According to a recent report, the total number of international students in degree-granting programs is 152,281 as of October 2021 (Education Statistics Service in Korea, 2021). Therefore, providing rich post-secondary education experiences and high-quality instruction to international students is now crucial for higher education institutions in Korea.

In response to the increased number of international students and educational mobility, scholars began investigating international students' academic learning experiences at Korean universities (Jon, 2012; Jung, 2020; Lee & Bailey, 2020). However, these studies have shown that many international students continue experiencing challenges understanding the lecture and course materials due to their low Korean language proficiency levels (Jon, 2012; Jung, 2020; Lee & Bailey, 2020). In particular, international students expressed difficulties understanding lectures and content in their majors due to language barriers (Jung, 2020). Therefore, dismantling international students' language barriers for specific academic subjects and purposes is essential for their academic success in Korean higher education.

Given the challenges international students encounter, it is critical to explore a new teaching method and approach to meet their diverse learning needs. It is suggested that new teaching approaches allow international students to learn academic language and content simultaneously. One of these teaching approaches is content-language integrated learning (CLIL) which has been actively discussed and applied in higher education in European countries (Cenoz, 2015; Dalton-

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Puffer, 2011). English as a medium of instruction (EMI) is one language-focused CLIL method that delivers content knowledge in English. Previous studies have reported positive educational effects on international students' academic success in EMI classes (Kirkpatrick, 2014; Lee et al., 2021; Qiu & Fang, 2019). One study conducted at a university in Korea reported students' positive attitudes toward EMI courses after experiencing them while studying abroad (Lee et al., 2021). However, students' level of satisfaction in these courses was highly dependent on the instructors' effectiveness in teaching EMI courses and their English proficiency level (Kim et al., 2014). Thus, it is crucial to shift to a teaching approach that maximizes the local instructors' and international students' potential and needs.

This study attempts to offer a new teaching approach by re-applying EMI in Korean higher education. Korean as a Medium of Instruction (KMI) was implemented in this study as a method to teach content subjects while focusing on developing students' Korean academic language skills. KMI can enhance international students' academic language proficiency in Korean to help them comprehend content knowledge in specific disciplines. Furthermore, it could eliminate barriers for higher education instructors to provide high-quality education to international students without the concerns of providing instruction in English. This study aims to understand the effectiveness and contribution of KMI courses to educate international graduate students and help them complete their academic studies in Korea. This study applies KMI to international graduate students in a Korean university. Guiding research questions are the following: (a) How does a KMI class impact Chinese graduate students' knowledge and Korean language skills? (b) How does a KMI class influence Chinese graduate students' understanding and perception of multiculturalism? (c) What is the satisfaction level of Chinese graduate students with KMI classes?

### Literature Review

In the past two decades, CLIL has become an approach widely implemented in European countries as active research in second language acquisition promoted the effectiveness of CLIL in meeting students' academic and linguistic needs. According to Lasagabaster and Sierra (2010), students receiving European K-12 education should have the ability to communicate at least two other languages except their native language to qualify for graduation. CLIL naturally emerged in this multilingual environment and widely spread to the European educational setting in alignment with this trend (Cenoz, 2015; Dalton-Puffer, 2011). As a result, CLIL has gained popularity worldwide as an ideal approach to advancing learners' language and content knowledge in a bi-/multilingual environment.

CLIL is *any dual-focused educational context in which an additional language is used as a medium of teaching and learning in a non-language content area* (Cenoz, 2015; Dalton-Puffer, 2011). Specifically, Coyle et al. (2010) argued that successful CLIL includes four critical elements, namely (a) content, (b) communication, (c) cognition, and (d) culture. Among these elements, the content indicates the content knowledge that learners need to acquire during CLIL classes. Communication refers to the mediated language required to understand the subject taught in class. Mediated language includes four language skills: speaking, listening, reading, and writing. Cognition means developing students' ability to reflect on subject matter content deeply. Finally, culture indicates students' understanding of the different perspectives in other cultures.

EMI is commonly incorporated in classrooms to emphasize language development when implementing a CLIL approach. The definition of EMI is using English to teach academic subjects (other than English) in countries where the first language of the majority of the population is not English (Dearden, 2014). Previous studies have demonstrated the effectiveness of EMI in attracting international students while meeting both their academic and linguistic needs (Fujimoto-Adamson & Adamson, 2018; González & Andrés, 2018). In alignment with the concept of EMI, this study proposes a new teaching approach, Korean as a Medium of Instruction (KMI). KMI classes can be defined as using Korean to teach academic subjects in the context where students' first language is not Korean, such as international students in Korean higher education institutions.

Although the term KMI has not yet been used commonly in previous studies, research on CLIL for international students at Korean universities has proved the advantages of providing support in both content and communication (Kim, 2005; Ko, 2019; Yoon, 2019). Yoon proposed CLIL to naturally enhance international students' Korean language skills while learning modern history in East Asia. Yoon's study indicated the benefits of CLIL in helping international students gain a deeper understanding of historical content. International students could acquire knowledge related to the discipline while improving their Korean language skills to comprehend and reproduce the content knowledge in Korean. In Oh and Kim's (2021) examination of the learning effectiveness of CLIL and international students' perception of the course, all international students recognized CLIL as an effective teaching method. Also, instructors in this study responded that CLIL could improve students' overall academic competence instead of students' academic performance being highly dependent on their Korean language proficiency.

Previous studies have shown that CLIL benefits international students by improving their academic achievement in content learning and developing their Korean language skills (Kim, 2005; Ko, 2019; Yoon, 2019). Thus, this study incorporates KMI into the CLIL approach to advance Chinese international students' content learning and elevate their overall educational experience in Korea.

## Methodology

### Research Context

Due to COVID-19, synchronous online classes were conducted throughout the 2021 Fall semester. Two KMI courses were offered to international students in the following content areas: teaching methods and educational technology. One instructor taught both KMI classes using Zoom, an online video conferencing platform. The participants were Chinese international graduate students in various master's and Ph.D. program stages. The survey was administered at the end of the semester to explore international students' perceptions and satisfaction regarding KMI classes. One-on-one semi-structured interviews were conducted at the end of the semester with three participants based on voluntary participation.

### Research Design

Both KMI courses were three-credit-hour courses during a 15-week-long semester. Three hours of the course were divided into three sections; the first section was approximately 30 minutes long and designed as a self-directed learning session for international students to preview the course materials. In the second section, a graduate teaching assistant in the education department taught academic Korean to the students. The teaching assistant is a bilingual speaker who speaks Chinese and Korean fluently. The academic Korean language session was delivered in a bilingual KMI approach, using both languages to review key terms and academic language necessary to understand the professor's lecture that week. The KMI instructor led the third section to teach the course content in Korean. The lecture followed small group discussions and presentations during the third section. Table 1 shows the basic structure of the KMI courses.

Table 1. Structure of KMI Class

Class Section	Section 1	Section 2	Section 3
Time Span	30 minutes	1 hour	1 hour 30 minutes
Activities	Watch a pre-recorded video and read course materials (Self-directed learning)	Academic Korean learning (Bilingual KMI class by teaching assistant)	Content learning (Professor's KMI lecture)

### Data Collection and Analysis

16 Chinese graduate students participated in the survey. Among the 16 participants, there were six male and ten female students. The participants' stages in the program ranged from students in their first semester of the Master's program to students in their fourth semester of the Ph.D. program. Participants enrolled in the Master's program were four, and there were 12 students in the Ph.D. program.

The survey was administered at the end of the 2021 Fall semester through Qualtrics XM, an online survey software. The survey was created based on previous studies on CLIL and CBI (Kim, 2012; Yoon, 2019). In addition, the research team modified and reconstructed the pre-existing surveys to include the KMI approach. Once the modified survey questions were drafted, three experts in educational research and teaching methods were invited to review and examine the validity of the questions. The survey consisted of questionnaires in the following six areas: background information, content knowledge, Korean proficiency and communication, cognitive skills, understanding of multiculturalism, and satisfaction with KMI classes. All areas except personal information included two to nine statements measuring participants' agreement to each statement on a five-point Likert scale.

There were a total of 35 questions in the survey provided in Chinese. IBM® SPSS® 26.0 was used to analyze the quantitative survey data. In addition, one-on-one semi-structured interviews were conducted with three voluntary participants to understand their experiences and reflection on the KMI course. One male student and three female students volunteered to participate in the interview. Two of them reported limited to no experience learning Korean in the past, and the other two had spent one to two years learning Korean (Table 2).

Table 2. Interview Participants

Student Number	Gender	Grade	Previous Korean learning	Current Korean level	Previous KMI experience
S1	Male	Master's	Three months	beginner	No
S2	Female	Ph.D.	A year and a half	Intermediate	No
S3	Female	Master's	Two years	Intermediate	No

The interview took 30-50 minutes and was conducted using Zoom's virtual video conference platform. Interview questions are based on the survey items and aim to explore international students' personal experiences and reflections on KMI classes. Sample interview questions are: (a) How would you describe your experiences of KMI classes this semester?; (b) How did the KMI class influence your content knowledge learning?; and (c) How did the KMI class

influence your Korean language learning? The interview was conducted in Chinese by a research assistant. After obtaining the participants' informed consent form, all interviews were video-recorded.

A five-step thematic analysis approach was taken to analyze the qualitative interview data (Clarke & Braun, 2014). First, the interview transcription was reviewed and translated into Korean and English. Second, the research team developed the initial codes and sub-codes. Third, the research team categorized several themes into specific coding schemes. Fourth, the research team reduced the number of themes based on similarities and differences among interview participants. Finally, the interview findings were compared and analyzed with survey data results to generate the final report.

## Results

### Survey Results

The survey data showed content knowledge and language skills in KMI classes. Table 3 shows a descriptive analysis of the survey.

Table 3. Descriptive Analysis Results

Components	Question Content	M	SD
Content Knowledge	1. I can understand the contents of the KMI curriculum.	4.44	.629
	2. I can understand the textbooks and PPT slides written in Korean.	4.50	.516
	3. I can understand and remember the specific contents in Korean.	3.94	.680
	4. I think that KMI lectures deepen my knowledge of the field of study.	4.38	.619
	5. I think KMI class helps me improve my content knowledge.	4.63	.719
	6. I can learn a lot of content knowledge through KMI class.	4.75	.577
Korean proficiency and communication	1. I can refer to major terms in Korean.	3.69	.793
	2. I can identify key keywords in the PPT slides or textbooks written in Korean.	4.06	.929
	3. I think KMI class helps me improve my Korean proficiency.	4.31	.793
	4. I can improve my ability to speak Korean through KMI class.	3.81	.981
	5. I can improve my reading skills in Korean through KMI class.	4.31	.793
	6. I can improve my ability to listen to Korean through KMI class.	4.19	.834
	7. I can improve my ability to write Korean through KMI class.	3.88	.885
	8. I can improve my Korean vocabulary skills through KMI class.	4.38	.806
	9. I can improve my knowledge of Korean in my major through KMI class.	4.19	.750
Cognitive skills	1. I can explain keywords in Korean to other friends.	3.56	1.031
	2. I can take notes of key content in Korean during KMI class.	3.75	1.183
	3. I can use the knowledge learned from KMI class to present in Korean.	3.69	.946
	4. I can use the knowledge learned from KMI class to create assignments in Korean.	3.94	.998
	5. I can communicate with other friends in Korean.	3.13	.806
Understanding multiculturalism	1. I can increase my understanding of Korean culture through KMI classes.	4.25	.775
	2. Active exchange with professors allows me to experience and understand the perspective of Korean culture.	4.13	.885
Satisfaction with KMI classes	1. I think the curriculum of KMI classes is effective.	4.50	.730
	2. This KMI class increases my interest in my major field.	4.31	.873
	3. My overall satisfaction with KMI classes.	4.50	.730
	4. I am willing to take KMI classes again next time.	4.63	.610
	5. I would like to actively recommend KMI classes to other students (to my classmates).	4.63	.719

First, it is reported that KMI classes have positively impacted international students' learning of content knowledge. They rated that they were able to learn the content effectively through KMI classes ( $4.75 \pm .577$ ) and improve their content knowledge base through KMI classes ( $4.63 \pm .719$ ). In addition, international students assessed that they were able to deepen their understanding of the subject knowledge ( $4.44 \pm .629$ ), comprehend the PPT or textbooks ( $4.50 \pm .516$ ), and master their major fields ( $4.38 \pm .619$ ) through the Korean medium language.

KMI classes also positively impacted the international students' Korean language skills. They responded in the survey that KMI classes helped improve their Korean language proficiency. Specifically, students' self-evaluation of their language proficiency in KMI classes predicted that these language skills areas could improve in KMI classes: Korean speaking skills ( $3.81 \pm .981$ ), reading skills ( $4.31 \pm .793$ ), listening skills ( $4.19 \pm .834$ ), and writing skills ( $3.88 \pm .885$ ).

The international students' understanding of multiculturalism was also positively influenced by KMI classes. The students responded that their knowledge of Korean culture and language increased through KMI classes ( $4.25 \pm .775$ ). In

particular, they experienced various perspectives of Korean culture while actively interacting with Korean professors (4.13±.885).

Lastly, international students were generally satisfied with KMI classes (4.50±.730) and thought they were effective (4.50±.730). Furthermore, after experiencing KMI classes, students expressed a stronger willingness to take KMI classes in the future (4.63±.610). They also responded that they would like to recommend KMI classes to other international students (4.63±.719).

### *Interview Findings*

One-on-one interviews were conducted with three volunteer participants. Qualitative analysis of the interview data revealed three main findings: (a) learning course content through KMI, (b) advancement of language skills and cultural knowledge, and (c) satisfaction with KMI classes.

First, international students reported learning the course content effectively in KMI classes. The KMI approach helped improve their understanding of content related to their major. For instance, one student described how the KMI and flipped learning methods helped her learn the course content effectively.

*This semester's KMI classes helped me improve my content knowledge. In addition, it was a very helpful course to experience various teaching methods, such as flipped learning in KMI classes (S3).*

Similarly, another student described how the course was timely to introduce and learn new teaching and learning approaches, given the circumstances of the COVID-19 pandemic and high demands of global exchange in a virtual space.

*The KMI class allowed me to learn the Korean language related to the content beforehand. Then, if I listened to the lectures again, I could understand the content more in-depth than simply using a translator (S1).*

The KMI approach facilitated students' learning to understand the course materials better as students understand the importance of learning content related to teaching methods and educational technology. Furthermore, the language support encouraged students to proactively learn and review the course content instead of relying on online translators.

Second, KMI classes advanced international students' Korean language skills and cultural knowledge. Participants discussed how KMI classes improved their Korean speaking, listening, reading, writing skills, and vocabulary knowledge. One participant, who had previously learned Korean for two years, pointed out that the courses helped her Master the Korean language beyond the basic communication skills.

*In previous Korean classes, I mainly learned basic Korean for simple communication. But KMI class was great for my Korean academic language skills in my discipline (S3).*

Another participant, who also learned Korean for about a year and a half, discussed how the KMI classes helped her communicate academic language and terms related to her research with professors.

*I learned many important terms through this KMI class...It is also great to communicate with the professor when I know specific terms in my research topic (S2).*

In addition, they mentioned that KMI could eventually help them write their Master's thesis or Doctoral dissertation in the Korean academic language. Finally, participants reported advanced knowledge and skills in Korean that contributed to their overall success in classes and completion of the graduate program.

Study participants also mentioned that the graduate assistant was fluent in Chinese and Korean, so this bilingual KMI approach helped them understand the content and acquire Korean skills more quickly. One participant described the process of learning Korean from the graduate assistant.

*The grammar taught during KMI classes is practical and can be used when writing academic papers in Korean. Therefore, the explanation of the bilingual teaching assistant was more effective. Furthermore, in KMI classes, I can learn a lot quickly, so I think learning efficiency is relatively higher (S2).*

The graduate assistant's Korean lesson using Chinese and Korean helped the students learn grammatical rules and master academic composition skills more quickly. Another participant also mentioned how the graduate assistant's bilingual approach helped her acquire Korean academic vocabulary.

*During this semester's KMI class, a bilingual graduate assistant explained the meaning of Korean vocabulary and taught us how to use grammar in academic papers (S3).*

KMI classes helped international students to master the Korean language for specific academic purposes, such as understanding the course content, writing academic papers, and communicating their knowledge in an academic setting. Thanks to the Chinese-Korean bilingual graduate assistant, students also reported the effectiveness of grasping specific grammatical rules and academic vocabulary more quickly.

Participants also explained that KMI classes had broadened their understanding of multiculturalism. In particular, one participant discussed better understanding Korean culture, manners, and honorific forms in the Korean language.

*Although the geological location between Korea and China is close, I noticed cultural differences between the two countries. In particular, I found that Korean politeness culture is more important than China's. For example, when meeting older people, Koreans greet them with a bend of their back and use a specific honorific language (S1).*

Another participant also described her experience of learning the importance of using the correct honorific form of language in Korea as she became more aware of Korean culture.

*I have called my professor a teacher because I habitually call a teacher in China. However, as my understanding of multiculturalism increased, I understood better in Korean cultures. I can respect and accept this kind of Korean culture. (S3)*

The KMI approach contributed to international students' content and language learning, but it also helped them understand specific Korean culture, which became very important when building interpersonal relationships.

In terms of students' satisfaction with KMI classes, all participants generally expressed satisfaction with the teaching approach. They also showed a strong willingness to take KMI classes again and were more willing to recommend KMI classes to other international students who did not take KMI courses before. One participant described that KMI was particularly helpful because it allowed her to focus on the content without the language barrier.

*The bilingual graduate assistant taught grammar based on course PPT slides at the beginning of the class. Since I learned academic Korean first, I could focus on the professor's content later. I think it's a very effective way of teaching and learning. I recommended the KMI course to another friend (S2).*

The structure of the KMI classes allowed international students to preview the content through a bilingual method and lower the language demand in class. They also expressed satisfaction because of the opportunity to learn the Korean academic language, which directly leads to their success in the courses related to their major and specialization.

*If I have the opportunity, I'd like to take KMI classes again because the Korean language I learned in this class is the kind of academic language I cannot learn at the Korean language institute. So it was really helpful to study in the courses related to my major (S1).*

As students engaged in the professor's content lecture, they could meet the cognitive demands in the subject area because the language demand was lower. The balance between language and cognitive demands in KMI classes encouraged international students' learning at a Korean university, leading to higher satisfaction.

## Discussion

This study explores KMI classes for Chinese graduate students attending a private university in Korea. The study specifically focuses on the effectiveness of KMI classes and understanding international students' learning experiences. The study results are summarized as follows. First, study results indicate that KMI classes facilitated a more effective understanding of the course content for international students. Therefore, KMI classes could positively contribute to learning content knowledge for international students. This finding is similar to previous studies' results regarding the effectiveness of the CLIL approach, which results in higher achievement and learning in content knowledge and a better understanding of the lecture materials (Kim, 2012; Yoon, 2019).

Second, KMI classes advanced international students' Korean language skills, knowledge, and proficiency. The international students' self-reported Korean proficiency level showed improvement from KMI classes. In addition, many students reported that KMI classes helped enhance their Korean language skills, especially expanding their vocabulary knowledge. This finding is consistent with the argument that the CLIL approach is effective in learning a new or additional language (Kim, 2005; Shin & Kim, 2000). Previous studies have also stated that identifying key academic vocabulary in content lectures is important for international students to successfully learn the content knowledge in class (Kim, 2005; Shin & Kim, 2000).

Furthermore, international students responded that the bilingual teaching assistant in KMI classes was more effective than native Korean teachers in the language institute. In other words, the bilingual approach in KMI classes was more beneficial in preparing students for writing academic papers by using Chinese to understand Korean grammatical rules. These findings support the effectiveness of bilingual usage in CLIL, particularly for beginner-level language learners (Fujimoto-Adamson & Adamson, 2018; González & Andrés, 2018). In addition, instructors' bilingual teaching methods significantly reduce learners' anxiety and increase learning interest (Fujimoto-Adamson & Adamson, 2018; González & Andrés, 2018), which supports the advantages of incorporating a bilingual teaching approach in KMI classes.

Third, this study demonstrated that KMI classes broadened international students' perspectives and views about multiculturalism by developing their cultural knowledge. Most international students reported becoming more aware of Korean culture, including the honorifics or other forms of language expected in particular settings. This result highlights previous studies emphasizing the importance of learning languages while studying abroad, as languages are developed

around the culture that reflects a group's lifestyle, social system, mindset, and values (Carrió-Pastor & Bellés-Fortuño, 2021). KMI classes allowed international students to learn the Korean language and the corresponding cultural practices to communicate appropriately in an academic and professional setting.

Fourth, KMI classes received positive feedback from international students for providing holistic support. International students in this study were generally satisfied with KMI classes because they were provided support beyond academic content. This holistic approach to international students affects their motivation, self-esteem, and overall well-being to succeed in post-secondary institutions (Heng, 2017). Therefore, participants in this study showed high satisfaction with the structure of KMI classes due to the cultural, linguistic, and academic support provided. In the end, students' willingness to take KMI classes was also strong. These results are also consistent with the satisfaction of CLIL from previous studies (Mehisto et al., 2008).

Nevertheless, international students also expressed that it was difficult to significantly improve their academic language skills within a single semester. They answered that they still lack the skills and understanding of Korean grammatical patterns and sentence structure when writing academic papers in class. Since most international graduate students in this study are beginner-level Korean language learners, it is difficult for them to make significant improvements in the Korean academic language within a semester. This finding is linked to previous studies that stress how improving academic language skills in a short period is challenging for beginner-level language learners (Lee et al., 2021; Pérez Cañado, 2018). Thus, a comprehensive curriculum at the institution level is necessary to provide consistent and high-quality CLIL KMI instruction to guarantee international students' success.

### Conclusion

This study investigated international graduate students' experiences of CLIL in a Korean university. This study focused on a specifically designed course that allows international students to learn the Korean language and content knowledge. KMI course was implemented in two graduate courses for 16 international graduate students during the 2021 Fall semester. The survey examined the perception and satisfaction of students' experiences in the KMI classes. Among survey participants, interview applicants were selected for individual in-depth interviews. Study results showed that international graduate students developed content knowledge effectively through KMI classes. International graduate students also reported that they improved their Korean language ability. Overall, international graduate students were satisfied with KMI classes. Lastly, they were willing to take KMI courses in the future. However, it was reported that international graduate students could not dramatically enhance their Korean academic proficiency in a short period due to their low proficiency in Korean language skills.

### Recommendations

Based on the results from this study, several recommendations could be made. First, CLIL, such as the KMI approach in this study, could benefit and support international students' academic success in higher education. This recommendation is consistent with previous studies that focused on CLIL and its effectiveness for international students, as it was pivotal to their academic achievement (Carrió-Pastor & Bellés-Fortuño, 2021). It is recommended that content courses are conducted using the CLIL approach so that international students can develop academic language skills while simultaneously acquiring content knowledge.

Second, bilingual teaching methods implemented in CLIL classrooms can benefit students to learn more effectively. Previous studies have emphasized the effectiveness of bilingual teaching approaches in CLIL courses (Fujimoto-Adamson & Adamson, 2018; González & Andrés, 2018). For instance, Kuteeva (2020) emphasized using learners' native language to help students effectively learn a second or additional language. In this study, the fact that international students shared the same native language in the classroom created an opportunity to provide KMI instruction using bilingual teaching methods. Thus, using bilingual or multilingual teaching approaches in CLIL courses can help international students advance language skills and content knowledge. In addition, encouraging CLIL instructors to use multiple languages can increase international students' satisfaction and motivation in CLIL classes (Kuteeva, 2020; Lee et al., 2021).

Third, higher education institutions must provide professional development for faculty to conduct CLIL classes. Recent studies have shown that instructors are not necessarily native speakers of a particular language when conducting CLIL methods in their courses. Rather, international students reported their preference for instructors who can properly understand and utilize CLIL methods (Aguilar, 2017; Escobar Urmeneta, 2013). This study also demonstrated that international students were extremely satisfied with the graduate assistant, a Chinese-Korean bilingual speaker in the CLIL KMI classes. Therefore, it is necessary to provide professional development opportunities for faculty and instructors to apply a bilingual or multilingual approach to meet international students' content and language learning needs (Escobar Urmeneta, 2013).

Lastly, further research is needed to find effective bi/multilingual teaching methods for implementing CLIL in languages other than English. While numerous studies have proven the effectiveness of CLIL EMI instruction in higher education, limited research investigated the importance of CLIL in other languages, particularly in Asia-Pacific contexts. As educational mobility and the internationalization of higher education expand to Asia (Becker & Kolster, 2012; Choudaha,



2017), it is critical to explore effective ways to teach international students in higher education by utilizing bi/multilingual teaching methods.

### Limitations

Although this study provides several suggestions for international education and CLIL teaching approaches, this study has some limitations. First, this study focused on Chinese international students attending a private university in Korea. Thus, considering many diverse international students' characteristics and levels of academic achievement, it is difficult to generalize this study's results to all universities. In addition, since there were only 16 participants in this study, the number of samples was relatively small. Therefore, a follow-up study with a larger sample size should be conducted to verify the effectiveness of CLIL for international students from various educational contexts.

### Authorship Contribution Statement

Lee: Conceptualization, design, writing the first draft. Kim: Editing, data analysis. Li: Data collection, data analysis.

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