A Review of English-medium Instruction in South Korean High Education

Guanying Wu

School of Foreign Languages, Huangshan University, Huangshan, Anhui, 245041, China;

1246763022@qq.com

Abstract. The implementation of English-medium instruction (EMI) has encountered challenges and difficulties at all levels of education and diversity around the world, particularly in high education. To gain a broader sense of the EMI implementation environment, this study, taking existing EMI studies in South Korean universities as its reference, examined the following questions: (1) What are the contents of the Korean HE EMI classroom? (2) What are Korean HE EMI classrooms like? (3) What are the attitudes towards EMI from the research? Based on an analysis of 40 empirical studies from 2008 to 2020, the results show that the contents are mainly in engineering-related majors crossing different academic years; the South Korean EMI classroom is challenging in the following three main binary relations: lecturing vs. verbal participation/interactive activities, students' higher vs. lower English proficiency, and achievements in English proficiency vs. content knowledge, which are also the universal challenges in the EFL EMI environment; and the attitudes, perceptions, and motivations of both students and professors were positive in general. This paper expects to provide references for future EFL EMI studies in different environments.

Keywords: English-medium Instruction (EMI); English as Foreign Language (EFL); classroom teaching.

1. Introduction

English-medium instruction (EMI) has been applied, questioned, researched, summarised, and reflected on from many angles till now. Doiz and Lasagabaster view EMI in three levels: "the individual level, the EMI classroom, and the institutional/global level as part of the internationalisation process, in other words, the driving forces at the micro, meso, and macro levels" [1: 257]. As for EMI content, Airey devised the disciplinary literacy discussion matrix for communicative competence in the specific sites of society, the workplace, and the academy, which well-illustrates the disciplinary literacy of EMI [2]. According to Airey, teachers should ensure these cells are "ticked" for a clear picture of what their courses should be focused on. However, EMI embraces a wide range of content-related issues, which requires not only clarifications but also attention.

Focusing on the issues present in EMI classrooms, Inbar-Lourie and Donitsa-Schmidt examined student preferences for native/non-native teachers and found that EMI teachers are required to master both content subject and English language knowledge [3]. To be more specific, Macaro observed language issues arising from teachers' language use in a classroom setting, adding that a homogeneous classroom setting using students mother tongues should be legitimated by a fair reason, and so on[4]. In fact, the use of L1 is a source of constant controversy in the EMI classroom [e.g., 5, 6, 7].

Researchers concerned with EMI often focus on its effectiveness and motivations under various circumstances, and teachers' development has gained significant attention. Farrell claimed that EMI teachers should develop their professional skills through reflective practises, such as dialogue, writing, classroom observations, action research, narratives, team teaching, and so on [8]. In China, Cao and Yuan argued for EMI teacher development through examining the effectiveness of EMI teaching in a business course [9].

The existing EMI-related research has provided incredible insights for future study. Even though there is no cure-all method, a holistic view of these EMI-related issues could be critical for its future global implementations; therefore, given the multifaceted implementation of higher education (HE)

Advances in Education,	Humanities and	Social Science Research

Volume-5-(2023)

ISSN:2790-167X

EMI, this study views EMI from the perspectives of content, classroom, and attitudes through South Korean EMI studies (2008–2020).

1.1 EMI Content

EMI in the EFL environment is closely connected with the method of *content-based instruction* (CBI), and instruction was originally related to content-based teaching in the ESL environment. The effectiveness of adopting CBI in ESL was borrowed for the EFL setting soon after. To maximize English exposure and be effective, EMI has been combined with content from various disciplines, such as economics and engineering, and has become popular in the EFL environment.

Another variation of EMI can also be seen in *content language integrated learning* (CLIL), defined by Marsh as "situations where subjects, or parts of subjects, are taught through a foreign language with dual-focused aims, namely the learning of content and the simultaneous learning of a foreign language" [10:2]. The adoption of EMI with additional content was assumed to help students achieve both English proficiency and content knowledge simultaneously. Propelled by such teaching approaches, EMI in the EFL environment has been conducted with different subject matters at different educational levels, especially in HE, not only in Nordic Europe but across many non-English-speaking countries, including in Asia [11, 12]. To this extent, content knowledge achievement is one of the important aspects of EMI implementation.

1.2 EMI Classrooms

The amount of English use in EMI classroom has been a crucial issue. The popularly adopted definition of EMI was provided by Dearden [12], who examined EMI studies across 55 countries in different situations and academic levels and found that classroom instruction was almost entirely in English, ensuring oral exposure for the students, following the rationale of first language acquisition[12]. In an EFL environment, EMI is defined differently by Korean higher education's English-only policy, which emphasise the amount of English use in a class [13].

Ko has not been the only researcher to offer clarification for EMI [14]. For example, Ancliff and Kang mentioned that classes in English with teachers and students might actually be in Korean[14]. J.-Y. Kim, meanwhile, defined a foreign instructor and an English-only policy as their research contexts^[15], and McDonald identified the English-only policy in South Korea as the exclusive use of English instruction throughout the entire curriculum[16]. Hultgren argued that the instruction transfer between the languages of L1 and L2 may be significantly different depending on many factors, such as the instructor's English proficiency and teaching experience[17]. One of the important discrepancies found by Macaro's review was that the researchers, across 62 studies, labelled, defined, or implemented EMI with ambiguous variation and understanding[13]. The choices of classroom instruction can be totally different in each of these studies: Whether teachers instruct students in English or there are interchanges of teacher-students or student-student conversations in English for the improvement of students' English proficiency, this needs to be carefully stated or explained in each study for the validation of the outcome. However, rarely has this been the case in most of the extant studies. Given these definitions and L1-use controversies in classroom language choice, EMI has not been well-assessed. Further to this, English originality has also aroused researchers' attention, particularly regarding the "E in EMI, questioning what the "E" stands for: English as an international language, English as a lingua franca, or English as an official language? [e.g., 18, 19].

Obtaining of language or content knowledge in a face-to-face EMI classroom setting is another issue. A language teacher differs from a content teacher, in that the language teacher majors in a language with the goal of teaching it. A content teacher majors in other subjects, for instance, economics, so the goal is economic knowledge in addition to language achievement. Teaching a language in a class requires support: a classroom setting, a teaching curriculum and plan, instructional language, class materials and designed activities, a blackboard or whiteboard, technologically based multimedia equipment, and so on. A learner receives information about the

Advances in Education, Humanities and Social Science Rese	arch
ISSN:2790-167X	

Volume-5-(2023)

language from a variety of sources in their environment and in the classroom, such as the teacher, textbooks, recordings, other students, and reference books [20:146]. In an EMI classroom, teachers play more roles than just that of the instructor. They have to integrate all the resources of teaching for an effective result. In communicative language teaching, the main roles of a teacher were described by Richards and Rodgers as practice director, counselor, or model [21].

Generally, even though language focus, teaching approaches, and teaching activities are the critical aspects of EMI, few studies have specified these elements. Macaro et al. claimed that many of the studies they reviewed did not observe classroom interaction in HE EMI classrooms, which may be due to the heavy focus on English proficiency and content learning as a whole in many HE EMI study contexts [13]. By reviewing the previous research, this study will explore these aspects.

1.3 EMI-Related issues in South Korea

Korea is one of the countries that has implemented EMI most widely, which is confirmed both from the top-down of its policies and from the bottom-up of the country's EMI practitioners. The Korean government announced a strategic plan of internationalisation in 2007 to promote the use of English in HE for students career development, to attract foreign scholars and international students, and to increase the mobility of Korean academia. According to Korea's Ministry of Education and Human Resource Department (MoEHRD), the Korean government began to provide universities with financial support for EMI in the late 2000s, and HE was no exception. As for the policies in Korea, English has been strongly encouraged at all levels of Korean education and has even been required in some Korean higher education as the instructional language since 2000, particularly in contextualised subject matter (content-based) learning or disciplinary classes. EMI or English-only policies are the terms used in Korean higher education. English-only (mostly as required) means the exclusive use of English in the classroom in any taught subject. EMI implementation has long been researched and questioned by scholars in Korea, and English-mediated classes are conducted at all levels varying contexts in the education system. It has been reported that 30% of university courses in Seoul provide EMI, while about 10% of the university classes outside of the Seoul area. Byun, Chu, Kim, Park, Kim, and Jung investigated the effectiveness of the EMI policy at Korea University through surveys and interviews of professors and students and proposed a development of "a more flexible approach" and claimed that a "more thorough preparation" [22: 431] was needed.

This scenario has been driven by the promotion of internationalization and globalization. Kang's article created a sensation in the field because it claimed that EMI enforcement was ineffective[6]. Consequently, many scholars responded with further studies. The number of papers published peaked at five and eight in 2012 and 2013, respectively (Table 1), while around three papers were usually published most of the other years. Representatively, Lee and Prinsloo responded to Kang with the discussion on the challenges of EMI in a teacher-centered and content-driven approach, including reduced interaction and participation, a lack of and ineffective questioning, and the absence of group work, and proposed the cultivation of an open mindset, professional development in teaching methodology, and improved financial and human resources[23].

Williams tried to provide a systematic review of EMI studies from the perspective of the students' and lecturers' language proficiency, the varying demands of different academic situations, and EMI support, concluding that the challenges of implementing EMI in Korea are greater than the opportunities[24]. Instead of reviewing EMI-related articles in Korean as key sources (about six articles), Williams reviewed 23 articles from many other countries, some of which included the international classroom background of EMI adoption. In conclusion, Williams denoted two main conflicting forces in one's insufficiency of both language proficiency and disciplinary knowledge and ignorant of students' specific needs [25].

These studies provide a solid foundation for the examination of Korean EMI implementations. To acquire a systematic overview of Korean higher education (HE) EMI implementation for the

ICEACE 2023

Volume-5-(2023)

global trend of it, this study conducted an in-depth analysis of relevant studies published between 2008 and 2018. The following research questions are considered:

- 1. What are the contents of the Korean HE EMI classroom?
- 2. What are the HE EMI classrooms in Korea like?
- 3. What are the attitudes towards EMI found in this research?

2. Method

2.1 Data Collection

Articles were collected from the databases of DBPIA and KYOBO, by using search terms such as "EMI," "English-mediated instruction," "English instruction," and "EMI". Of about 50 articles, 40 empirical articles with keywords related to EMI at the Korean university level from 2008–2020 were selected. No EMI related publications was shown during 2021and 2022. These 40 articles were selected strictly by their research methods, that is, whether they employed quantitative, qualitative, or mixed methods. Table 1 displays the selected EMI publications by year. As aforementioned, the numbers of publications in 2012 and 2013 were double the yearly average.

	•	Table 1	. EMI	public	ations e	every y	ear	_
0	2010	2012	2012	2014	2015	2016	2017	201

Number of Publications 1 2 2 5 8 3 3 3 2 2 3 2 35	Year	2008	2009	2010	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total
	Number of	1	2	2	5	8	3	3	3	2	2	3	2	1 3 1

Table 2 lists the selected articles and their respective research methods. Except for 12 articles written in Korean with English abstracts, the remainder of the articles were all published in English. Twenty-eight articles (about 74%) were found with mixed research methods.

	Table 2. Select		
ID	Articles (Year)	Published	Research methods
		Language	(qualitative/quantitative/mixed)
1	Han and Kim (2020)	Korean	qualitative
2	Ahn and Park (2020)	Korean	qualitative
3	Ahn (2019)	Korean	case study
4	Lee (2019)	Korean	mixed
5	Kim (2018)	Korean	qualitative
6	Lee and Prinsloo (2018)	English	mixed
7	Lahaye and Lee (2018)	English	mixed
8	Lee (2017)	Korean	mixed
9	Ancliff and Kang (2017)	English	mixed
10	Kim, Kweon, and Kim (2017)	English	mixed
11	Kim (2016)	Korean	mixed
12	Choi (2016)	English	ethnographic research/qualitative
13	Lee and Hong (2015)	Korean	mixed
14	Kim (2015)	English	mixed
15	Kym and Kym (2014)	English	mixed
16	Lee (2014)	English	mixed
17	Shin, Kang, and Shin (2014)	Korean	qualitative
18	Kim (2013)	English	mixed
19	Choi (2013)	English	qualitative
20	Joe and Lee (2013)	English	mixed
21	Lee and Traynor (2013)	English	qualitative
22	Bang (2013)	English	mixed
23	Hwang (2013)	Korean	mixed
24	Kim and Chang (2013)	Korean	mixed
25	Choi (2013)	English	qualitative
26	Shin and Choi (2012)	Korean	mixed

Table 2. Selected articles

27	Joe and Lee (2012)	English	mixed
28	Cho (2012)	English	mixed
29	Shim (2012)	Korean	mixed
30	Kim (2012)	Korean	mixed
31	Byun, Chu, Kim, Park, Kim, and Jung (2011)	English	mixed
32	Hwang and Ahn (2011)	Korean	mixed
33	Kim (2011)	English	mixed
34	Oh (2011)	English	mixed
35	Ha (2011)	English	mixed
36	Oh and Lee (2010)	Korean	qualitative
37	Yun (2009)	Korean	mixed
38	Kim and Sohn (2009)	English	mixed
39	Kim, Son and Sohn (2009)	English	mixed
40	Ko (2008)	English	qualitative

Most of the articles used a mixed research method (Table 2) with a combination of quantitative and qualitative techniques, such as surveys, questionnaires, and interviews with either teachers, students, or both [e.g., 25, 26]. Some also featured pre-post tests for effectiveness evaluation [e.g., 8, 27], discourse analysis [e.g., 25, 28], and comparison analysis between English-mediated instruction and Korean-mediated instruction [e.g., 29, 8]. Other methods included action research [e.g., 30], conjoint analysis [31].

3. Results

3.1 Content

As seen in Table 3, EMI implementations in South Korea have been most widely examined in the field of engineering-related majors. The studies across different disciplines, academic years, and lectures were the most common, followed by those on EMI use in the disciplines of natural and applied sciences, technology, and engineering. Nevertheless, EMI implementation shows a wide range of disciplines, including physics, mechanics, accounting, medicine, economics, business, and even art theory, Chinese, and English theory courses.

Contents	Articles	Total Number
Natural and applied sciences, technology, and engineering	Lee and Prinsloo (2018); E. G. Kim, Kweon, and Kim (2016); Hwang (2013); Cho (2012); Kim and Sohn (2009)	5
Physics	Lahaye and Lee (2018); Ancliff and Kang (2017)	2
Mechanics	Lee (2017)	1
Accounting	Kim (2016)	1
Medicine	Joe and Lee (2012)	1
Mathematics	G. Lee and Traynor (2013)	1
Economics	Oh (2011)	1
Business	Kym and Kym (2014)	1
Different disciplines (the research covers different disciplines)	Lee (2014); Shin, Kang, and Shin (2014); SJ. Choi (2013); Shin and Choi (2012); Oh and Lee (2010); Kim, Son, and Sohn (2009); Ko (2008)	7
Art theory	Yun (2009)	1
Chinese	Kim (2013)	1
English	Kim (2012); Hwang and Ahn (2011); Ha	3

Table 3. Contents in Korean EMI Research

	(2011)	
Different academic years and lectures	Kim (2015); Bang (2013); Kim and Chang (2013); Kim (2011)	4

3.2 Classroom

According to the articles reviewed, the EMI classroom is challenging in the following three main binary relations: lecturing vs. verbal participation/interactive activities, students' higher vs. lower English proficiency, and achievements in English proficiency vs. content knowledge.

3.2.1 Lecturing vs. Verbal Participation/ Interactive Activities

Most EMI classes are still conducted in the form of lectures rather than verbal participation/interactive activities. Lee and Prinsloo investigated and identified the EMI problems of reduced interaction and participation, a lack of and ineffective questioning, and the absence of group work and found that many EMI classes were conducted as lectures[25]. Lecturing is a basic and popular form of teaching, used by most teachers, and expected by most students. In this situation, the teacher's English functions as the instructional language. Through questionnaires and semi-structured interviews, Bang observed that "the students of this study displayed a strong desire for more interactive instruction"[32:39]. As for verbal participation, Ha paid close attention to "students' verbal participation through their engagement in the types of classroom speech events [32]. However, this action research was undertaken in class environments of 23 and 27 students, respectively; in a large class, this kind of activity might not be applicable. Hwang suggested that class size be limited to guarantee frequent feedback and interactions between instructors and students since the fact that fewer interaction activities are used might be due to the constraints of classroom settings with numerous students or lectures with little freedom to move[33].

3.2.2 Students' Higher vs. Lower English Proficiency

The articles showed that, in general, students with higher English proficiency benefited from EMI, while those with lower proficiency suffered, and even experienced anxiety. Students with strong English skills may have excessive expectations of the class; for example, Kim, Son, and Sohn investigated students' satisfaction at Yonsei University (a highly ranked university in both Korea and globally) and found that students were not very satisfied with their EMI courses, while students with lower English proficiency had difficulties in understanding and acquiring content knowledge[33]. Kym and Kym held the same opinion and found that students with lower proficiency had difficulties in comprehension and handling of the content[34]. According to Bang, students with low proficiency tend to have more comprehension problems and concerns about their English level compared to students with higher proficiency[34].

3.2.3 English Proficiency vs. Content Knowledge

EMI courses aim to achieve content knowledge and improve English proficiency simultaneously. The ineffectiveness of acquiring content knowledge in Korean EMI implementation was considered a large concern [e.g., 35, 36]; however, the reviewed articles revealed that there is no significant relation between EMI classes and achievements in content knowledge or English proficiency. For example, Joe and Lee conducted research comparing English-mediated and Korean-mediated lectures and found no direct relation between the instructional language used in the classroom and either the students' understanding or general English proficiency[8]. Park (2007) examined 51 students with pre-posttests of the content in an introductory university course on English linguistics and found that the students' English proficiency was not closely related to their content knowledge learning[37]. These students, meanwhile, expressed their positive attitude towards EMI by enhancing their language input skills (reading and listening), rather than output skills (speaking and writing). Lee also found that English proficiency is not significant to one's achievement of content knowledge [38]. Kim observed that English proficiency was not related to students' accounting knowledge achievement, but rather to their own understanding and learning efforts beyond the

Volume-5-(2023)

classroom[39]. Results from Kym and Kym further demonstrated that students' overall level of satisfaction with EMI was relatively high, regardless of their English proficiency, but their ability to comprehend was significantly influenced by their language proficiency[36].

Strictly speaking, speaking Korean should not be allowed in EMI classes; however, in many of the reported situations, it could not be avoided as it was necessary for explanations and to ensure students ' understanding of the content knowledge. Perspectives regarding the use of L1[In the present study, L1 refers to Korean. L2 refers to English.] are controversial; for instance, Kim, Kweon, and Kim found that the use of L1 in EMI classes is supportive, with 90% of university students (524 students from three universities) believing that the use of L1 facilitated their understanding in class[40]. On the other hand, Kang argued that the use of L1 in an EFL situation reduces the authenticity of the use of L2, so a decision concerning the use of L1 should be carefully considered when conducting EMI classes[6]. Johnson and Swain discovered that using L1 was indispensable because it helped both lecturers and students cope with problems in an EMI course[41]. Hwang studied the effectiveness of EMI and found that it was helpful to become familiar with engineering terminology and English reading comprehension, but with low or negative efficiency to explain and understand terms[35]. According to Lee and Hong, based on a survey of approximately 2,000 students, 60% of "English-only policy" classes were, in reality, conducted with the additional use of Korean[42]. Though 25% of the students believed that they had improved their English through EMI classes, the effect of EMI on improving English proficiency was limited. The research in the reviewed studies also found negative relations between EMI and class satisfaction.

3.3 Attitudes towards EMI Implementations

The attitudes displayed in Table 5 mainly represent those of the reviewed articles' authors, together with researched opinions on EMI effectiveness from professors and/or students. In general, the present study categorized their attitudes towards EMI implementation in six ways: proposing, positive, supportive, not significantly related, negative, and challenging. According to Table 4, more articles (47%) evaluated EMI implementation negatively (8) and as challenging (7). Some articles exhibited active attitudes (proposing: 3; positive: 7; supportive: 2), while others found that there was no significant relationship between achieving students'' content knowledge and English proficiency goals and adopting EMI in the classroom (5). This summary offers a representative view of the attitudes towards EMI implementation over the past decade.

Attitudes	Articles	Total
		Amount
Proposing	Yun (2009); Oh and Lee (2010); Kim, Son, and Sohn (2009)	3
Positive	Lahaye and Lee (2018); Kym and Kym (2014); Kim and Chang (2013); Joe and Lee (2012); Byun, Chu, M. Kim, Park, Kim, and Jung (2011); Oh (2011); Ko (2008)	7
Supportive	Ancliff and Kang (2017); Shin, Kang, and Shin (2014)	2
Not significantly related	Lee (2017); Kim (2016); Joe and Lee (2013); Shim (2012); Hwang and Ahn (2011)	5
Negative	Kim, Kweon, and Kim (2016); Lee and Hong (2015); Kim (2015); Lee (2014); Kang (2012); Cho (2012); Kim (2012); Kim (2011)	8
Challenging	Lee and Prinsloo (2018); Kim (2013); Choi (2013); Lee and Traynor (2013); Bang (2013); Hwang (2013)	6

Table 4. Attitudes towards in EMI from Both Korean teachers and students

4. Discussion and Conclusion

As for the effectiveness of EMI courses, two main aspects are proposed: content knowledge support before class and the EMI teaching experience. From the data examined in the present study, proposals for effective EMI use with flipped classes, problem-based learning, and blended learning have been made. On the one hand, content knowledge in Korean prior to the attendance of EMI classes has been proposed as a necessary prerequisite; on the other hand, many research professors need to acquire EMI teaching experience at the first.

Content knowledge is one of the main student achievement goals in an EMI course/class. Bang emphasised the need to enhance students' comprehension, motivation, and confidence in the content[34]. Kim, Kweon, and Kim suggested giving students the option of either English- or Korean-conducted classes and bilingual materials before classes[43]. In this way, they can gain understanding before the EMI courses. Kym and Kym found that background knowledge has a great impact on the successful implementation of an EMI programme [36]; therefore, in this regard, it is suggested that prior content knowledge support be offered, or even required, before students enter an EMI class.

EMI teachers have faced difficulties in the EFL environment since 2000. Over the past decade, many studies have investigated effective EMI classes. Some researchers have combined it with other teaching approaches such as problem-based learning, flipped classes, or blended learning, while others have examined classroom discourse for a more detailed perspective. Lahaye and Lee designed a four-semester problem-based learning course for an EMI physics classroom, finding that the number and duration of problems were significant factors in conducting such classes[43]. However, they believed that this kind of teaching could benefit students' interactive learning and suggested interactive activities for classroom teaching. Ancliff and Kang implemented a flipped class design in the EMI context with the suggestion that students learn more when they are engaged in the pre-class activities, concluding that it was necessary to pay close attention to techniques and highlight that the design of critical-level learning activities and a safe learning environment in classroom teaching, with more ice-breaking activities, was both necessary and helpful[15]. These three aspects could be crucial to the effectiveness of EMI classes. Yun proposed the use of blended learning with EMI in art classes, with positive results[28]. As for the details of the EMI classroom discourse, many teaching techniques have been mentioned. Oh and Lee pointed out that an experienced EMI teacher could adjust the pace and content of the instruction while considering the students' level[44]. Not only professors but also students can feel the difference in a professor's techniques in an EMI class: According to Hwang, students could tell when the teacher was using particular strategies, such as speaking slower, repeating, and using more frequent words, to facilitate content understanding[35]. Generally, instead of implementing EMI with a strict focus on language instruction, EMI has been shown to be more effective when combined with other teaching approaches and techniques. These are possible areas for EMI teachers to focus on in the future.

Acknowledgement

This paper is supported by the Project 2018xskq002, hxkt2022100, 2019 Anhui provincial-level first-class undergraduate construction of English major, Huangshan University, Anhui, China.

References

- [1] Doiz, A., & Lasagabaster, D. Dealing with language issues in English-medium instruction at university: A comprehensive approach. International Journal of Bilingual Education and Bilingualism, 2020. 23(3), 257–262.
- [2] Airey, J. The content lecturer and English-medium instruction (EMI): Epilogue to the special issue on EMI in higher education. International Journal of Bilingual Education and Bilingualism, 2020. 23(3), 340–346.

- [3] Doiz, A., & Lasagabaster, D. Dealing with language issues in English-medium instruction at university: A comprehensive approach. International Journal of Bilingual Education and Bilingualism, 2020. 23(3), 257–262.
- [4] Macaro, E. Exploring the role of language in English medium instruction. International Journal of Bilingual Education and Bilingualism, 2020. 23(3), 263–276.
- [5] Kang, H.-S. English-only instruction at Korean universities: Help or hindrance to higher learning? English Today, 2012. 28(1), 29–34.
- [6] Jenkins, J., & Leung, C. Assessing English as a lingua franca. In E. Shohamy, I. G. Or, & S. May (Eds.), Language testing and assessment (3rd ed.) (pp. 103–117). New York, NY: Springer. 2017.
- [7] Joe, Y., & Lee, H.-K. Does English-medium instruction benefit students in EFL contexts? A case study of medical students in Korea. Asia-Pacific Educational Research, 2013. 22(2), 201–207.
- [8] Farrell, T. S. C. Professional development through reflective practice for English-medium instruction (EMI) teachers. International Journal of Bilingual Education and Bilingualism, 2020. 23(3), 277–286
- [9] Cao, H., & Yuan, R. Promoting EMI in university teaching: An action research experience. Journal of Education for Teaching, 2020. 46(2), 240–243.
- [10]Marsh, D. LIL/EMILE—The European Dimension: Actions, trends and foresight potential. Public Services Contract EG EAC. Strasbourg: European Commission. 2002.
- [11] Dearden, J. English as a medium of instruction: A growing global phenomenon. British Council. 2014.
- [12] Macaro, E., Curle, S., Pun, J., An, J., & Dearden, J. A systematic review of English medium instruction in higher education. Language Teaching, 2018. 51(1), 36–76.
- [13] Ko, M. H. Localizing English-only Policy at a University English Reading Program in Korea. The Journal of Asia TEFL, 2008. 5(4), 141–162.
- [14] Ancliff, M., & Kang, A. Flipping an EMI Physics Class: Implications of Student Motivation and Learning Strategies for the Design of Course Contents. International Journal of Contents, 2017. 13(4), 1–11.
- [15] Kim, J.-Y. Roles of Gender and Motivation in Learning Chinese in the English Immersion Context. Foreign Languages Education, 2013. 20(3), 345–370.
- [16] McDonald, M. Elite South Korean University rattled by suicides. The New York Times, p. A8. May 23, 2011.
- [17] Coleman, J., Hultgren A. K., Li, W., Tsui, C.-F. C., & Shaw, P. Forum on English-medium Instruction. TESOL Quarterly, 2018. 52(3), 701–720.
- [18] Jenkins. J. English as a lingua franca in the international university: The politics of academic English language policy. London, England: Routledge. 2014.
- [19]Maria, K. Revisiting the 'E' in EMI: students' perceptions of Standard English, lingua franca and translingual practices, International Journal of Bilingual Education and Bilingualism, 2020. 23(3), 287-300.
- [20]Hedge, T. Teaching and Learning in the Language Classroom. Shanghai: Shanghai Foreign Language Education Press. 2002.
- [21] Richards, J. C., & Rodgers, T. S. Approaches and Methods in Language Teaching (3rd ed.). New York: Cambridge University Press. 2014.
- [22] Byun, K., Chu, H., Kim, M., Park, I., Kim, S., & Jung, J. English-medium teaching in Korean higher education: Policy debates and reality. Higher Education, 2011. 62(4), 431–449.
- [23] Lee, G., & Prinsloo, C. Pedagogic challenges of English-Mediated Instruction in the Korean EFL Context. The Journal of Asia TEFL, 2018. 15(1), 217–224.
- [24]Williams, D. G. A Systematic Review of English Medium Instruction (EMI) and Implications for the South Korean Higher Education Context. Special Issue on CLIL. April, 2015.
- [25] Kim, J. Y. Roles of Gender and Motivation in Learning Chinese in the English Immersion Context. Foreign Languages Education, 2013. 20(3), 345–370.
- [26] Yun, M. H. A study on art theory education in the art & design college using English medium instruction (EMI). Art Education Review, 2009. 34, 1–39.

- [27] Shim, Y.-S. The effect of English-medium instruction on university students' listening ability. Modern English Education, 2012. 13(1), 149–166.
- [28] Lee, G., & Traynor, K. M. Two Korean Content Professors' English-mediated Instruction: Issues and Use of Feedback. English Teaching, 2013. 68(4), 165–191.
- [29] Hwang, J.-B., & Ahn, H.-D. The Effects of College-Level English-Mediated Instruction on Students' Acquisition of Content Knowledge and English Competence. Korea Journal of English Language and Linguistics, 2011. 11(1), 77–97.
- [30] Ha, M. J. EFL Learners' willingness to communicate in the EMI college classes. Korean Journal of Applied Linguistics, 2011. 27(4), 27–53.
- [31] Kim A., Son, Y. D., & Sohn, S. Y. Conjoint analysis of enhanced English Medium Instruction for college students. Expert Systems with Applications, 2009. 36(6), 10197–10203.
- [32] Bang, Y. EFL college students' perceptions toward content-based learning. Modern English Education, (2013). 14(1), 23–47.
- [33] Hwang, S.-Y. Engineering majors' perception of EMI courses. Modern English Education, 2013. 14(3), 209–235.
- [34] Kym, I., & Kym, M. H. Students' perceptions of EMI in higher education in Korea. The Journal of Asia TEFL, 2014. 11(2), 35–61.
- [35] Ham, D. K. Intellectual colony, our language burnt to ashes. Hankyoreh, 2008. 21(698), 56–57.
- [36] Kim, M. K. A study of effectiveness of content-based instruction for Korean college-level learners. Unpublished doctoral dissertation, Sookmyung Women's University, Seoul. 2008.
- [37] Park, H. English medium instruction and content learning. English Language and Linguistics, 2007. 23, 257–274.
- [38] Lee, Y. S. Analysis on the Effects of English Mediated Instruction at Universities: Focusing on students' academic self-efficacy and self-concept of English communication. Journal of Research in Curriculum & Instruction, 2017.21(2), 84–99.
- [39] Kim, E. H. Satisfaction: Study Based on Students Taking Cost Accounting in University. Korean Journal of Accounting Research, 2016. 22(4), 8, 157–179.
- [40] Kim, E. G., Kweon, S. O, & Kim, J. Korean Engineering Students' Perceptions of English-Medium Instruction (EMI) and L1 Use in EMI Classes. Journal of Multilingual and Multicultural Development, 2017. 38(2), 130–145.
- [41] Johnson, R. K., & Swain, M. From core to content: Bridging the L2 proficiency gap in late immersion. Language and Education, 1994. 8(4), 211–229.
- [42] Lee, G.-H & Hong, J.-Y. Study on the Situations and Learning Effect of English Medium Instruction at Korean Universities. The Korean Society for the Study of Local Education Management, 2015. 18(1), 1-22.
- [43] Lahaye, R., & Lee, S. Development of Problem-Based Learning in an English-Mediated College Science Course: Design-Based Research on Four Semesters Instruction. Educational Technology International, 2018. 19(2), 229–254.
- [44] Oh, H. J., & Lee, H. Characteristics of effective English medium instruction and support measures. Modern English Education, 2010.11(1), 191–212.