EMI COURSES AT NATIONAL ECONOMICS UNIVERSITY DURING COVID ERA: LECTURERS' CHALLENGES AND COPING STRATEGIES

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ABSTRACT

English medium instruction is a globally emerging phenomenon and countries have recorded an exponential growth in EMI courses in the past few decades. Studies examining EMI have been conducted in various contexts, especially in higher education sector, posing its beneficial language and content outcomes. The implementation of EMI programs in Vietnam, however confronts a number of problems and constraints. This study attempts to figure out challenges facing teachers in applying English as medium instruction in teaching core curriculum subjects in National Economics University. The study also aims to investigate teachers' strategies to cope with difficulties, especially their adaptation to teach online EMI courses during the Covid-19 pandemic. Findings from the study shed some light for positive improvements in EMI programs offered in higher education. Possible implications will also be proposed to EMI curriculum developers and education policymakers for future effective development of EMI tertiary programs in blended-learning context.

Key words: EMI; Challenges of EMI courses; EMI coping strategies

1. INTRODUCTION

In non-English speaking countries, English as a medium for instruction (EMI) has been widely implemented and become mainstream in higher education since 1990s (Kirkpatrick, 2014). There are many reasons given, of which the main one is the trend of internationalization of education. The dominant role of English-speaking countries in the economy, international politics and the growth of English as a lingua franca in academia as well as on the internet has greatly impacted on the language policies of countries. Despite unquestionable benefits of EMI, much deep concerns have been expressed in many studies consulted because EMI is not simply switching the means of communication and continuing the same teaching practices as usual (Brandford, 2016).

All the challenges from face-to-face EMI classes have not gone unnoticed while the sudden change from face-to-face EMI classes to the online modality due to the COVID-19 emergency have required lectures to put greater effort on teaching. Lecturers were forced to improvise an emergency educational response by carrying on their teaching on online platforms, sometimes unplanned. This has raised the concerns about students' participation, teaching strategies, and quality of distance education. It is against this background and context that this study was conducted to make a humble contribution to the research into the EMI practices during first half of academic year 2021 as well as lecturers' coping strategies to new challenges.

2. LITERATURE REVIEW

2.1 EMI and its challenges

EMI is not simply switching the means of communication and continuing the same teaching practices as usual (Brandford, 2016). Published literature has emphasized some conditions to the success of EMI programs. Parallel with EMI, Content and Language Integrated Learning processes (CLIL) refers to students learning a subject through the medium of a foreign language. These two terms are usually put under the same research umbrella (Aguilar, 2015). While CLIL researchers are more aware of the dual focus on language and content learning and recommend lecturers to ensure that students are not cognitively overloaded by content and language at the same time, EMI solely focuses on teaching the subject content. Course content and learning materials thus are vital components to the success of EMI adoption. Both students and teachers in the study of Tseng et al. (2020) reported English textbook is more updated, practical, integrated which makes them more superior than the ones in native language. However, most teachers are concerned about retaining integrity of content as EMI classes may run at a slower pace compared to the ones delivered in native language. Focusing on depth of learning while ensuring the EMI classes cover all the curriculum is a real challenge to many lecturers.

Even though EMI tends not to focus on developing learners' language skills beyond those required for learning the subject content, language proficiency is still highlighted as the key issue for EMI teaching which has caused growing concerns among institutions in recently published literature. Students may have studied English for many years, but in most reported cases do not reach a linguistic competence sufficient to comprehend all subject knowledge in English. In Asia context, Chang (2010) found that students overall confessed low level of comprehension of the lectures, subject content and learning materials. Similar results were later reported by Huang (2012). On the other hand, Shohamy (2012) has identified a number of issues in EMI with the most immediately salient being the linguistic competence of lecturers of academic disciplines to effectively deliver the content of their subject through the medium of a second language. Generally, the EMI teachers are required to conduct courses in English with eligible language performance such as pronunciation, accent, fluency, intonation, and non-verbal behavior. Tran (2018) reported in her study that the overall impression of students towards lecturers was their insufficient English proficiency to deliver good lectures and provide satisfactory explanation of subject content. Some lectures reported to be confused and struggled with teaching in English during lectures, and EMI prevented their knowledge transmission and explanation to students' queries. EMI lecturers themselves also mainly concern about language proficiency, particularly non-colloquial English, poor communication skills and confusion or misunderstanding of subject vocabularies in English (Gustafsson, 2018; He & Chiang 2016).

It is reported that many lecturers are not familiar with the methods to teach subject content in English. Even overseas-trained lecturers who meet the language requirements have many concerns about adapting lectures to suit students' foreign language proficiency

and interacting with students in English (Manh, 2012). Lecturers were reported to reduce their speech rate unintentionally when teaching the lesson in English. They might subconsciously slow down lecturer delivery to accommodate for the students' level of language proficiency (Thogersen & Airey, 2011; Ariffin & Husin, 2011; Wilkinson, 2005). Set lecturing aside, a variety of teaching strategies is crucial factor to facilitate student engagement and improve learning experiences because students confessed that it was difficult to acquire the subject content without any hands-on activities (Chuang, 2010).

The extent to which lecturers and students can critically engage with content delivered in English is another issue to be considered. Wu (2006) found that EMI discouraged discussion and interaction between students and professor and stop students from expressing themselves smoothly in class. Set aside classroom interaction, students need to demonstrate their knowledge acquisition by some form of spoken and/ or written academic assignment and lecturers need to be critical in reviewing students' works and providing appropriate feedback. Many lecturers feel nervous in dealing with questions and ensuring that their response meet student need.

2.2 Online teaching and its challenges

Literature on online education has reported common existing challenges in teaching online courses, which can be classified into issues related to learners, instructors and content.

Regarding learners, learners' expectations, identity and participation are the main factors interfere with effectively teaching online courses (Luyt, 2013; Aragon, 2002; Mayes et al. 2011, Koole, 2014; Ching & Hsu, 2015). Irrelevant expectations, inappropriate learning style and lack of technical skills all make online courses more challenging for learners. Learners may feel disconnected in online class if they fail to create a sense of belonging or a sense of community.

In terms of instructors, changing role, time commitment, teaching styles are the main concerns. Berge (1998) identified four different roles of online instructors including pedagogical – teaching methods, social – establishing social relationships, managerial – administrative and organizational tasks and technical responsibilities. The variation in roles is made more challenging in online context due to heavy workload and technical issues (Choi & Park, 2006). In addition, the method of online content delivery which differs from traditional face-to-face education also poses challenges to instructors.

Teachers cannot simply copy the content from a face-to-face class to an online one. Almala (2015) recommended that multimedia – games, videos, and stimulations should be integrated in content development to enhance learning

Interaction and communication in an online course take a variety of different forms: oral or written, formal or informal, direct or indirect. No matter what form it is, interaction and communication are vital in helping learners comprehend and acquire the course content. However, in online settings, the quality and quantity of engagement, interaction and communication greatly depends on the students themselves. It is instructors' role to motivate students' engagement and enhance their interaction and communication in

online classes. Hathaway (2013) and Niess (2013) both encouraged the use of multiple types of learning media tools to engage students in online classroom.

In general, online education and EMI both have become increasingly popular in various educational settings and are believed to be critical for the future of higher education. However, many issues need to be addressed to ensure the quality of online EMI education.

3. METHODOLOGY

The study was conducted at School of advanced education program, National Economics University where 22 fully or partially EMI-based programs have been offered in forms of Advanced Education Programs (AEP), The Excellent Education Programs (EEP) and Profession-Oriented Higher Education – POHE. While all courses of AEP are delivered in English, EEP and POHE programs offer courses in both English and Vietnamese. The number of core subjects taught in English account for 30% of total number of credits. In recent years NEU has recorded a spike in foreign language proficiency of students enrolling in EMI programs. Many students have lelts English certificates with scores between 5.5 and 7.5. However, students' language competence varies between skills. The diversity of language proficiency in a class causes many difficulties in the process of teaching content knowledge.

The study focuses on two specific research questions:

- (1) What are challenges of online EMI classes perceived by lecturers?
- (2) How have lecturers been coping with these difficulties?

To answer these questions both quantitative and qualitative data were collected from an online questionnaire and an informal interview. The research participants comprised of EMI lecturers from a range of economics disciplines (N=19). Among the lecturers, 58% were at a high level of English proficiency with lelts 7.0-8.0. A third were at intermediate level with lelts 6.0-6.5 while the other 2 lecturers haven't obtained an international English language proficiency certificate. Table 1 gives a brief description of their backgrounds.

Table 1: Demographic

Variable	Category	Percentage
Educational status	Master	58%
	Doctorate/Ph.D	32%
	Associate Professor	11%
Teaching experience	1-2 years	11%
	3-4 years	11%
	5-7 years	20%
	8-10 years	16%
	Over 10 years	42%

EMI experience	1-2 years	11%
	3-4 years	58%
	5-7 years	20%
	8-10 years	11%
English proficiency	No certificate	11%
	5.5-6.5 Ielts	32%
	7.0-8.0 Ielts	58%

The online questionnaire included both open and closed questions. The quantitative data then was analyzed while the qualitative data from the participants' responses including answers, opinions and suggestions were transcribed and classified into categories using a comparative method of analysis.

4. FINDINGS & DISCUSSION

4.1 Challenges of online EMI course

Both qualitative and quantitative data reveal that the sudden switch to online teaching during Covid era has caused new difficulties to EMI teachers while many original concerns regarding EMI remain unsolved or get worse. These challenges were classified as below.

Table 2: Challenges of EMI courses

Challenges	Mean	SD
Online EMI courses require the simplification of content.	2.36	.51
Online EMI courses require the changes in teaching approaches.	3.47	.96
Online EMI courses require greater time, effort in preparing lessons.	4.57	.69
Online EMI courses slow down the teaching speed.	3.57	1.30
Online EMI courses reduce teaching fluidity.	3.68	1.20
Online EMI courses reduce interaction.	3.77	.87

4.1.1 Time and effort commitment

The main issue reported by lecturers is that online EMI courses requires greater commitment in terms of time and effort (mean = 4.57 & SD = 0.69, Table 2). Lecturers mentioned their efforts to improve English proficiency which definitely does not occur overnight. Adapting materials and designing presentation slides in English is originally a time-consuming process. Unavailable online learning materials posed another challenge. Teaching online EMI courses is even more time-consuming and demanding because there are no available inbuilt online resources so teachers had to design new materials for online EMI courses.

On the other hands, the mean score is not extremely high which means that this personal cost is possibly acceptable to some teachers considering the higher payment they receive for EMI classes. 10.5% of lecturers showed a neutral attitude toward this

issue. Two expressed in the interview that the time investment in improving English competence unfortunately does not always help teachers in teaching EMI. The reason is that general English competence is not equivalent to the ability to explain key concepts effectively and make the lectures comprehensible to students. The other three doubted that time and efforts that they ever put on preparing new materials for the online lessons might end up being wasted because of technical issues.

4.1.2 Complicated subject content and the need for content simplification

Online teaching affected the content delivery to some extent. Students' low English proficiency coupling with the complexity of subject content are reported as other factors affecting the knowledge acquisition. Students struggled with picking up difficult disciplinary vocabulary in EMI courses in general so comprehending online lectures in English is even more challenging to the majority of students.

"Student with low level of English proficiency found it hard to listen to online lectures."

"Students needed more time to complete learning activities online so I sometimes ran out of time for class and had to end the lesson abruptly."

Surprisingly, most teachers did not see the need to simplify the subject content taught in English in general (mean = 2.36, Table 2). This finding is in contrast to the ones from the study of Hu et al. (2014), in which Chinese teachers sometimes gave up on some complicated curricular content for the sake of students' comprehension as well as overall achievement in EMI courses. They believe that minimizing the quality of education to facilitate content acquisition is better than aiming for high standard quality delivery but no-one understands you. However, almost 60% of teachers in this study did not favor this idea.

Even though lecturers did not feel the need to simplify the subject content, some confronted time constrain in delivering EMI course online. Due to the technical issues, delays in students' responses and group works, lecturers sometimes ran out of time for class and had to end the lesson abruptly.

4.1.3 Reduced teaching speed and fluidity

According to Table 2, the second most concerned issue among EMI teachers is that delivering EMI courses online reduces the speed and fluidity of teaching. Also, a noticeable difference was recorded in teachers' responses towards this issue. High SD of 1.30 and 1.20 reveals that some lecturers totally agreed that they had experienced a decrease in teaching speed and fluidity while some others did not encounter any problems. In detail, while a quarter of lecturers could deliver the content of their subjects smoothly and effectively, another two thirds needed to modify their speaking speed. The possible reason is the difference in teachers' English proficiency or technological literacy which hindered their teaching in online EMI courses.

4.1.4 Poor student engagement and interaction

Students need to demonstrate their knowledge acquisition either via classroom interaction or, some form of spoken and/or written academic assignment. However, Wu

(2006) found that EMI discouraged discussion and interaction between students and professor and stop students from expressing themselves smoothly in class. This issue seems to get worse in online EMI class. 50% of the lecturers reported a deterioration in students' concentration, learning energy as well as interaction during the second half of the semester. One the one hand, students struggled in performing effective collaborative tasks due to lack of face-to-face contact and less control over the group discussion.

"The cameras needed to be turn off for smooth connection. I, therefore, felt less control over the class and students also became distracted when the teacher did not visually present."

On the other hands, the long lockdown, lack of spaces as well as in-person interaction with friends/classmates caused negative emotions to students and made them get tired easily. Personal emotion is another factor affecting students' engagement and interaction, which in turn contributes to a positive learning environment for online EMI classes. The longer the lockdown lasted, more student were distracted from the lesson and less motivated in learning.

"Students were depressed from long lockdown."

"Students did not pay close attention to the lesson. They sometimes lost attention and missed a lot of knowledge."

"There was a lack of interaction, especially in oral form, among students in online EMI classes. Students preferred to communicate via chatting box. Just a few answer my questions orally."

Written communication and online listening or observing is still considered a substantial component of learners' participation in online settings as learners engage with the content, thought, and reflection (Wise et al., 2013; Romiszowski and Mason, 2004; Hrastinki, 2009). However, written communication is time-consuming and inconvenient for in-class discussion. Oral communication is still vital in helping students feel connected and motivated to contribute to the lesson.

4.1.5 Technical issues

Half of interviewees confessed that their poor technical literacy did hinder the online teaching practices. Readiness to online learning and teaching, which includes technical skills is mentioned by Aragon, Johnson and Shaik (2002) as an important contributor to the effectiveness of online learning. Without ability to exploit educational features of technology, teachers probably will encounter difficulties in planning lessons and managing online class.

"I had bad knowledge of online teaching tools and platforms."

Also, lecturers reported that they had experienced many technical difficulties such as clots on Microsoft Teams which result mainly from the poor internet connection and heavy data traffic.

"Students sometimes had difficulties in understanding the lecturer's pronunciation due to poor internet connection."

"I needed to wait for students' responses which are sometimes delayed."

Eight out of nineteen lecturers (about 40%) complained that the small computer screen could not present all students' pictures which led to difficulties in managing students or small smart phone screen did not allow students to participate effectively in many activities. In other word, online activities were not always accessible to all students.

In general, time and effort commitment, delivering sufficient disciplinary knowledge, engaging students, encouraging their interaction and technical issues have been main challenges in online EMI classes during Covid-19 pandemic.

Table 3: Themed interview responses

Challenges	Coping strategies
Complicated subject content &	Collaborate to design online learning materials and share materials within teacher community
Students' low English proficiency	Upload presentation slides on learning management platform
	Design more problem-solving activities instead of lecturing Give clear instruction in either oral or written form
Students' poor engagement	Record lectures
& interaction	Q&A forum on learning management platform
	Provide PPT slides in advanced
	Teacher's camera should always be on
Technical issues	Attend online training courses/ workshops provided by university
	Self-study teaching tools/ application by watching online videos

4.2 Coping strategies to online EMI teaching

4.2.1 Coping process

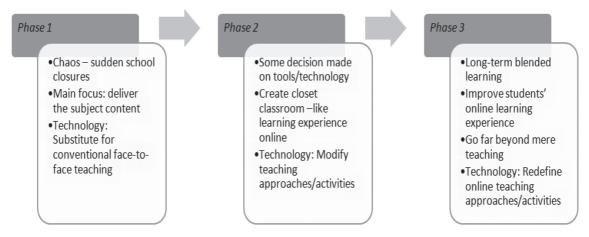
From lecturers' interview responses, over the duration of more than one-year teaching online, they have undergone *three phases* in coping with sudden shift from face-to-face to online teaching. In the first phase, at the outbreak of the pandemic which led to the university's sudden closure, the priority task was to find out teaching tools and platform that can quickly substitute for the face-to-face class and ensure the course schedule. Lecturers reported using different tools according to their own preferences and technological literacy to facilitate online teaching. However, majority of lecturers focused on providing learning materials, summary of lessons, recorded lectures, self-learning tasks and assignments on the Moodle learning management platform.

In the second phase, when the university had made decision on combining Microsoft Teams and Moodle learning management platform, all lecturers switched to real-time online teaching and tried to create a closet classroom-like learning experience to students. Some reported to have modified their teaching approaches to make use of new teaching tools as well as to match students' needs.

The last phase started around the second year of the pandemic, when lecturers gradually got familiar with real-time online teaching. Two third of the lectures confessed that they believed in benefits of long-term blended learning for EMI courses. They explored

more technological tools and applications to facilitate teaching and improve students' online learning experiences. Also, lecturers refined their online teaching strategies and activities.

Figure 1: Coping process



4.2.2 Coping strategies

Teachers have implemented various strategies in dealing with difficulties in teaching online EMI classes. Their responses to the interview were transcribed and classified into categories using a comparative method of analysis (Table 3).

4.2.2.1. Strategies coping the complexity of subject content

Online teaching affects the content delivery to some extent. The interviewing results reveal that lecturers did not feel the need to simplify the content for online EMI class, however some did adjust their teaching approaches and instructions. Uploading presentation slides on learning management platform at least 24 hour before the class, designing more problem solving activities instead of lecturing are common strategies implemented by lecturers. Students' low English proficiency is also reported as a factor affecting the knowledge acquisition. They could not catch difficult disciplinary vocabulary or comprehend complicated knowledge in online lectures. To resolve this issue, some lecturers made used of the Q&A forum on the learning management platform. They encouraged students to post questions and discussed the lessons. Recorded lectures were also useful for students to review the lessons and look for the information they possibly had missed during the class.

4.2.2.2. Strategies coping the reduced teaching speed and fluidity

Proper preparation for the class is essential for teaching fluidity. Unlike Vietnamese instructed classes, without careful lesson planning, teachers may mess up their EMI class. As mentioned above, preparing extra problem-solving activities apart from lecturing may become handy in case students lose their interest or struggle with comprehending the lecture.

Giving clear instructions in both oral and written forms is believed to enhance students' comprehension of the tasks. All lecturers agreed that they should check

students' understanding of the instructions before letting them move forward with their individual or group works. This will ensure students' smooth and effective performance. This solution is also expected to benefit students with low English proficiency.

4.2.2.3. Strategies coping students' poor engagement and interaction

Three teachers mentioned that live class should be considered the new "face to face" class and teachers need to create a sense of community by allocating more time for group works and class-open sharing/discussion. Teacher's regular presence is also another potential solution as three lecturers suggested that teachers' camera should always be on. Students are easily distracted and burned out if they face a screen with bare presentation slides. To create a closet-classroom learning environment, teachers should definitely present on camera the whole lesson.

4.2.2.4. Strategies coping technical issues

Acknowledging their own weaknesses, all lecturers attended online training workshops organized by the university. These workshops provide guidelines and handon practices of the online learning management system of the university and technical tools for real-time online teaching such as Microsoft Teams and Zoom. Two third of the teachers also studied online videos on using Microsoft Teams effectively. A small proportion, five teachers even sought for new technical tools to enhance their online teaching and improve not only students' learning experiences during the Covid pandemic but also their blended learning experiences after the pandemic.

5. CONCLUSION

In lecturers' perceptions, new challenges have top-up the unsolved problems in online EMI classes. Many of these barriers could be attributed to internal and external factors involving students and technology. Both students and lecturers were not familiar with digital platforms, faced stressful issues arising from the pandemic itself, technical devices and poor internet connection. Lecturers also had to face further challenges: mastering new teaching tools, adjusting teaching approaches to encourage students' engagement and ensuring the effective delivery of complicated disciplinary content.

However, the lecturers after being forced to shift almost overnight onto online teaching platforms have provided a quick response. Despite difficult circumstances, lectures with positive attitude and confidence to adjust teaching approach or search for effective tools and strategies have managed to involve students through their screen. They did play crucial role in making the learning happen.

Even though this study is limited to a small sample of lecturers of Economics related disciplines, it helped identify EMI teaching practices and challenges and lecturers' strategies to deliver content, encourage students' engagement and interaction in online EMI classes. Further research may be conducted to measure the impacts of these challenges as well as relevant training for lecturers to implement new teaching strategies in online classes.

REFERENCES

- Aguilar, M. (2015). Engineering lecturers' view on CLIL and EMI. *International Journal of Education and Bilingualism*, 1-14. doi:10.1080/13670050.2015.1073664
- Almala, A. H. (2005). A constructivist conceptual framework for a quality e-learning environment. *Distance Learning*, 2, 9–12.
- Aragon, S. R., Johnson, S. D., & Shaik, N. (2002). The influence of learning style preferences on student success in online versus face-to-face environments. *American Journal of Distance Education*, 16, 227.
- Ariffin, K., & Husin, M.S. (2011). Code-switching and Code-mixing of English and Bahasa Malaysia in Content-Based Classrooms: Frequency and Attitudes. *The Linguistics Journal*, 5(1): 220-247.
- Berge, Z. L. (1998). Barriers to online teaching in post-secondary institutions: Can policy changes fix it? *Online Journal of Distance Learning Administration*, 1, 1–12
- Bradford, A. (2016). Toward a Typology of Implementation Challenges Facing English Medium Instruction in Higher Education: Evidence from Japan. *Journal of Studies in International Education* 20(4): 339-356.
- Chang, Y.Y. (2010). English-medium instruction for subject course in tertiary education: Reactions from Taiwanese undergraduate students. *Taiwan International ESP Journal*, 2(1), 53-82.
- Cheng, W., & Warren, M. (1997). Having second thoughts: Student perceptions before and after a peer assessment exercise. *Studies in Higher Education*, 22(2): 233-239.
- Ching, Y., & Hsu, Y. (2015). Online graduate students' preferences of discussion modality: Does gender matter? *Journal of Online Learning and Teaching*, 11(1). Retrieved from http://ezp.waldenulibrary.org/login?url¼http://search.proquest.com/docview/17 00641543?accountid¼14872
- Choi, H. J., & Park, J. (2006). Difficulties that a novice online instructor faced: A case study. *The Quarterly Review of Distance Education*, 7, 317–322.
- Luyt, I. (2013). Bridging spaces: Cross-cultural perspectives on promoting positive online learning experiences. *Journal of Educational Technology Systems*, 42, 3–20.
- Manh, L.D. (2012). English as a medium of instruction in Asian universities: The case of Vietnam. Commentary. *Language Education in Asia* 3(2): 263-267.
- Mayes, R., Luebeck, J., Yu Ku, H., Akarasriworn, C., & Korkmaz, O. (2011). Themes and strategies for transformative online instruction. *The Quarterly Review of Distance Education*, 12, 151–166.
- Gustafsson, H. (2018). Capturing EMI Teachers' Linguistic Needs: A Usage-Based Perspective. *International Journal of Bilingual Education and Bilingualism*, 1-12.
- Hathaway, K. L. (2013). An application of the seven principles of good practice to online courses. *Research in Higher Education Journal*, 22, 1–13.
- He, J.; Chiang, S. (2016). Challenges to English-medium instruction (EMI) for international students in China. *English Today*, 32: 63–67.

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- Huang, Y. P. (2012). Design and implementation of English-medium courses in higher education in Taiwan: A qualitative case study. *English Teaching & Learning*, 36(1): 1-51.
- Kirkpatrick, A. (2014). English as Medium of Instruction in East and Southeast Asian Universities. Dynamic Ecologies. *Multilingual Education*. Vol. 9. Springer Dordrect.
- Shohamy, E. (2012). A critical perspective on the use of English as a medium of instruction at Universities. In English-Medium Instruction at Universities: Global Challenges; Doiz, A., Lasagabaster, D., Sierra, J.M., Eds.; Longman: London, UK, pp. 196–213.
- Thogersen, J., & Airey, J. (2011). Lecturing undergraduate science in Danish and in English: A comparison of speaking rate and rhetorical style. *English for Specific Purposes*, 30(3): 209–221
- Tran, T.T. (2013), Is the learning approach of students from the Confucian heritage culture problematic?, *Educational Research for Policy and Practice*, 12(1):57-65, doi: 10.1007/s10671-012-9131-3.
- Tseng, P.H., Richards, K. and Pilcher, N. (2018). Constructing English-medium instruction indicators in the shipping courses of Taiwan's higher education, *Maritime Business Review*, 3(1): 20-35.
- Tseng, P.-H., Pilcher, N. and Richards, K. (2020). Measuring the effectiveness of English Medium Instruction Shipping courses, *Maritime Business Review*, 5(4): 351-371
- Wilkinson, R.; Zegers, V. (2008). *Introduction. In Realizing Content and Language Integration in Higher Education*; Wilkinson, R., Zegers, V., Eds.; Maastricht University: Maastricht, The Netherlands; pp. 1–9.
- Wu, W. S. (2006). Students' attitudes toward EMI: Using Chung Hua University as an example. *Journal of Education and Foreign Language and Literature*, 4: 67-84.