

A Review of Linguistic Challenges That Students Confronted in English Medium Instruction in Chinese and Japanese Higher Education

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Abstract: Using English as a medium of instruction (EMI) becomes prevalent outside European countries, such as China and Japan, where there is a great need for internationalizing higher education. The number of EMI programs and courses skyrocketed recently in those two countries and many local universities are still following the pattern. However, with the boom of EMI in higher education, concern about its influence on students' academic achievement is also rising. Although the benefits of using EMI have been demonstrated in different contexts, researchers investigating Chinese and Japanese EMI education doubted whether holding the current EMI classes is an efficient way of delivering academic knowledge and improving students' language abilities at the same time. This review intends to report on linguistic challenges students have stated based on research in China and Japan. It is one of the most determining factors in EMI class. The researcher also discusses the similarities and differences between students' learning experience in China and that in Japan in the main body part. Through the comparison, suggestions on setting appropriate language requirements and providing language support are presented.

Keywords: English medium instruction (EMI), China, Japan, language support, internationalization of higher education

1. Introduction

English, as a global language, has currently been regarded as a useful international communication tool. It is also a teaching language in many educational contexts [1]. There are many labels describing the phenomenon that subjects are delivered through English, for example, 'immersion' or 'content-based instruction' (CBI) in North America and 'content and language integrated learning' (CLIL) in Europe. English medium instruction (EMI) is also a term related to this phenomenon. Compared with CLIL and CBI, EMI is now more frequently discussed in Higher Education Institutions (HEIs) [2]. This is because the flourishing of EMI is highly linked to the need for the internationalization of HEIs. In the process to become an internationalized university, English plays the role of a dominant lingua franca and supports the mobility and exchange of international students, teachers, and research resources [4]. With the same aim, Chinese and Japanese universities adopted EMI according to official documents published by governments [5]. It is hoped that the use of EMI will attract more international quality learners and experts to study and work, which offers both international and home

students' opportunities to experience interculturality [6]. At the same time, policymakers and other stakeholders, after finding its usefulness in the improvement of English proficiency, believe EMI also has practical benefits in both content learning and language improvement [7]. English education is a big problem for teachers and students in countries where English is a foreign language for people [8]. This is because it is hard to construct an environment for students to practice their English in daily life. Most of the information is exchanged in their mother tongues. The advent of EMI programs in those contexts, therefore, is hoped to solve this problem and provide a meaningful environment where students can enhance their English abilities and learn academic knowledge [9]. However, when researchers investigated whether EMI programs run smoothly in Japan and China, they found debates on the efficiency of EMI programs in practice become heated. It is not scarce to find students who presented their need for better language support in recent empirical research. Teachers also expressed worries about the influence of students' inadequate English proficiency on subject learning. Therefore, this review paper is to explore three questions related to language problems students met in EMI programs. One is the difficulties students confronted in Japan and China and the reasons for their presence. The second is whether there are any differences and similarities between students learning in China and Japan. The last is the possible influential factors that lead to these differences. All three questions will be discussed in detail in the main body part. Before analyzing the above problems, the researcher will first discuss students' general understanding of EMI and the definition of EMI in the two countries since students' learning context is also an important variable that researchers should take into account when analyzing data and presenting findings related to students' learning experience [10]. At the end of the paper, possible solutions that are found to be effective to solve certain language difficulties will also be given. Similarly, the researcher also gives a rationale on the importance of further research on the design of language support courses in EMI teaching contexts based on current findings.

2. Understanding of EMI in Japan and China

It is one result of globalization that English serves as a common communication tool in many countries [11]. The spread of EMI programs or courses in Japan and China is also linked to the trend of globalization or internationalization of world universities. However, there are differences in the interpretation of EMI in HEIs in these two countries compared with European contexts. The first one is that labels used to describe courses and programs taught in English are diverse. Instead of calling them EMI, students and their teachers prefer to use other labels. 'English-taught programs' (ETPs) or 'teaching and learning in foreign languages' are prevalent in research on Japanese higher education and 'bilingual education' are popularly accepted in China [14]. The second is the reason to set up EMI programs and courses. Policymakers and local universities apply EMI to cultivate students with high English proficiency and knowledge of academic subjects [17]. It means that the learning outcomes that students in Chinese and Japanese EMI classes are hoped to achieve are both related to language proficiency improvement and content acquisition. This is slightly different from the aim of the application of EMI in European HEIs where EMI programs are mainly focused on academic subjects rather than English teaching [3]. At the same time, it is also found that the percentage of English in classes vary in different research. It is not a must for teachers and students in these two contexts to use English all the time and with it the view that if English hinders teachers' instructions and students' content understanding, translation or using students' mother language may be acceptable.

3. Specific Linguistics Challenges Faced by Students

3.1. Chinese EMI Contexts

Although the understanding of Chinese EMI education shows relevance in language acquisition, it has to be admitted that preparing students with appropriate language abilities is not deemed the responsibility of EMI teachers or EMI content lecturers. This may lead to learners' bad academic achievements in Chinese EMI contexts because they are not well-prepared in learning academic content in English, a foreign language for most students.

3.1.1. Vocabulary

Recent research conducted in Chinese EMI classes provided evidence that shows without adequate English abilities, teachers cannot guarantee students' success in academic learning. Although, there are still a small number of researchers mainly focus on what kind of students' linguistics challenges influence their learning experience, certain difficulties have been presented in research on students' and teachers' perception of EMI. Adequate English vocabulary size is a major influential factor in EMI learning. Both subject-related vocabulary and general vocabulary are indispensable for high-quality EMI learning experience [19]. Similarly, the frequency of using vocabulary learning strategies manipulates students' learning outcomes. If students do not accumulate enough subject-related or academic words, they will hardly comprehend lecturers' talking and finish their assignments with high quality. Even, they cannot interact with other students and lecturers naturally. For example, science students learning in Hong Kong EMI programs said that the accurate choice of words using in academic assignments influenced their academic achievements [20]. Similar problems are also found in Macau where students from mainland China and students learning in mainland Chinese EMI programs [22]. They presented in interviews that understanding subject jargon in teachers' speech is quite challenging and their English vocabulary sizes influence the quality and speed of content comprehension compared with learning in their mother tongue.

3.1.2. Listening Skills

Besides vocabulary-related language issues, one major language ability that influences students' learning quality is listening [23]. Two main kinds of listening are involved in higher education classrooms for students. One is participatory listening, such as listening to a lecture, and the other is interactive listening, such as holding a conversation or debate [24]. Without efficient listening skills, learners will be far from comprehending long speech and classroom discussions. Researchers in China also view it as a serious problem after conducting empirical research. For example, Xie and Curle suggested that listening comprehension strategies are needed to support the better content acquisition of students [25]. It echoes the finding of Hu et al, who stated the great difficulties students meet while understanding contents delivered in English due to the information density in speech [22]. Understanding Chinese lecturers' speech is also challenging for foreign students, sometimes, because of unfamiliar accents [23]. Some EMI lecturers, in this case, watered down the contents in lectures and slowed the pace of teaching, which made students with competitive English abilities feel unfair when compared with those learning through their mother tongue. According to Zhang and Pladevall-Ballester, most EMI learners take part in those programs due to the opportunity to both acquire academic content and practice English skills [26]. That is to say, when the quality of learning in EMI is influenced by other students' current English proficiency, students will be demotivated.

3.1.3. Speaking and Oral Communication Strategies

In Chinese HEIs, the dominant teaching method is lectures. So does that in Chinese EMI classrooms. However, it does not mean that students are passive learners all the time. Part of their final score in EMI programs is related to the quality of doing academic presentations and whether they interact actively with lecturers and group members. Adequate speaking skills are essential to make meaningful interactions in EMI education, such as asking for further explaining technical jargon and offering arguments and critiques [23]. Researchers normally find students' high motivation to learn and engage in an EMI learning environment, whereas the influence of anxiety in using English to communicate is also confirmed [26]. That is why teachers may turn to translanguaging techniques to make a more collaborative and interactive teaching environment. However, translanguaging does not always function well. For example, the use of them may result in students' negative learning experience, especially for students who are eager to improve their English abilities in this context. Similarly, if students are from diverse language backgrounds, it is impossible to use those strategies. Considering the facts stated above, creating a harmonious environment for learners to speak out their thinking in English is a must. It cannot be achieved without teachers' assistance and encouragement.

3.2. Japanese EMI Contexts

Japanese EMI education once descended into chaos when the government first issued the Global 30 (G30) policy that promoted the fast expansion of EMI programs and courses. At that time, the interpretation of the education internationalization policy and related language policy was not consistent. The efficiency of delivering high-quality academic content in other languages or mainly English in Japanese HEIs was questioned due to the fact [28]. Students, even, started to believe that EMI programs were set only for those with privilege, such as higher social status and a substantial fortune. This is because it is these people that can prepare themselves well with high language abilities to take part in EMI programs in Japan if universities did not provide sufficient language support. Witnessing the unfairness of the first edition language policy caused, the Japanese government revised the policy of internationalized higher education and adopted the Top Global University Project (TGUP). This policy not only witnessed the progress of Japanese language education but also emphasized using different foreign languages rather than only English in higher education to welcome real internationalization. Although English is still the main foreign language to be used in classes, EMI teachers in Japanese universities are required to insist on students' language improvement and help students cope with language problems while teaching academic content. It is also the policy that makes recent researchers find investigating Japanese EMI education challenging because most previous researchers directly equal EMI education to English language education rather than how English is used as a communication tool in students' academic content acquisition. Therefore, the misuse of EMI is also a problem for researchers to collect sufficient information on how EMI influences Japanese higher education. However, while discussing students' and teachers' experience of EMI education, some permanent challenges in learning in Japanese EMI contexts have been stated.

3.2.1. Vocabulary and Reading Difficulty

A lack of enough English vocabulary can be marked as a factor interfered with students' academic content learning in Japanese EMI higher education classrooms [29]. This is the same language problem students in China confronted. However, different from findings in China, insufficient accumulation of academic or subject-related terms rather than daily activity vocabulary is emphasized more in Japanese EMI classes. The cause for this kind of difference may be the provision of a pre-sessional English for Academic Purposes (EAP) program or preparatory language support in Japanese universities to help students, before entering EMI classroom, reach the required level of language

proficiency [28]. In China, this kind of language course does not come into vogue in local universities, and yet only transnational universities can ensure the provision of language preparation classes for students. Limited academic vocabulary and subject jargon also lead to negative learning experience of EMI students. Senior students said they face a great amount of difficulty in finishing reading required materials when they found reading materials are written with jargon that they cannot easily understand through English explanations. In addition, the problem becomes severer each term when more professional knowledge needed to be learned through reading academic paper. That is to say, this language barrier to content learning is a permanent problem that both content lecturers and language supporters should work together to find an appropriate approach to deal with according to the difficulty level of reading.

3.2.2. Writing Skills

Interestingly, students in Japan stated less difficulty in English writing skills than those in Japan. As Galloway and Ruegg found, Japanese universities' English for Specific purposes (ESP) or EAP lessons provide students with great guidance on how to use English in academic writing [30]. Therefore, when they talk about students' writing problems, more emphasis is given to how to support students' understanding of plagiarism and use of critical thinking in research. Although writing in academic forms is still an obstacle, students find it useful to alleviate the stress of writing in English after learning in language support courses.

3.2.3. Speaking and Listening Skills

Similar to what has been found in China, listening is claimed to be the most essential language skill in Japanese EMI classes [31]. Most Japanese English learners are found to learn vocabulary in a decontextualized setting and not adapt to aural forms of vocabulary [32]. However, listening to English speech requires students to know phonetic forms of English vocabulary and decode sounds according to the informational contexts they were used in. Therefore, when they take part in EMI classes, following and decoding sound is tough. At the same time, a listening speech with unfamiliar accents is also a understanding barrier in their learning process. According to Galloway and Ruegg, students were generally satisfied with teachers with native accents and found it easy to follow [5]. Nevertheless, there is also research showing that students with higher language proficiency are less likely to be affected by different foreign accents if they are not too strong [31]. This is because those students are familiar with the pronunciation of most words lecturers are using. Speaking is another language difficulty discussed with listening skills in Japanese EMI classrooms. This time, because, the check of understanding or request for further explanation of lecture contents is often regarded as the result of listening problems. So, students in Japan claimed that they absolutely need courses, such as EAP or English support courses as a preparation for listening and speaking English in EMI classes. Those courses also serve the function of training techniques for negotiating meanings and expressing their learning difficulties.

4. Reasons

4.1. Inappropriate EMI Pedagogy

Teachers' explanation of terminologies is inadequate, and students even said that their teachers were reading slides rather than clarifying academic content, which makes students feel demotivated to keep learning in EMI courses [1]. It may result from teachers' lack of enough language to explain difficult terminologies. As a consequence, teacher language support should be given to those instructors in case students feel unfair and dissatisfied with EMI programs due to teachers' English proficiency.

What is more, students stated that they have less opportunity to use speaking skills due to the fact that most classrooms are lectures and teachers' talking takes most of the class time. An interactive learning environment is needed in HEIs where they can express their ideas and teachers can scaffold their learning when prompt questions are pumped into class. If the class is always silent and without opportunities for engagement, it does no doubt that learners will become unsatisfactory no matter what language is used to deliver information.

4.2. Minimum Language Requirements for Entering EMI Classrooms

Setting an appropriate language entrance requirement on students' current English abilities is a must for HEIs. It helps universities to evaluate which students can be involved in EMI programs [33]. There are two types of language tests that universities use. One is external English proficiency exams, such as Test of English as a Foreign Language (TOEFL) and International English Language Testing System (IELTS). The other is internal exams that university faculty originally design. The attitudes towards the efficiency of those language tests varied in different contexts. For example, according to Kamaşak et al., external language tests are regarded as techniques with high validity and reliability in testing students' language proficiency of learning in EMI programs in Turkey [34]. However, their efficiency in predicting students' academic English is doubted in Denmark [35]. All in all, the importance of setting appropriate language requirements should be highlighted. Japan is a good example to follow by countries, such as China, where the need for EMI courses and programs is emergent.

5. Conclusion

Language difficulties become an important factor in the satisfaction of EMI education. There is a great need to explore the specific solutions to those problems in empirical studies. Although some researchers have proved certain practice worked well in their contexts, desirable learning results have not been achieved. It is no way to form a one-fit-all EMI teaching pedagogy, but teachers and policymakers still need to take the problem into account. Two aspects that can be considered based on the discussion above. One is the adaptation of the teaching methods of lecturers who are responsible for the content teaching. The other is the need to constitute responsible and professional language support groups to give effective advice to students on the use of language strategies to improve language improvement, which, in return, will benefit their academic knowledge acquisition. In this way, content teachers can focus more on how to teach students academic content without watering down content. At the same time, students also receive guidance and suggestions on how to become a high proficiency English user.

References

- [1] Macaro, E., & Tian, L. (2020). *Developing EMI teachers through a collaborative research model. Journal of Multilingual and Multicultural Development*, 1–16.
- [2] Brown, H., & Bradford, A. (2016). *EMI, CLIL, & CBI: Differing approaches and goals. Transformation in Language Education*, 328–334.
- [3] Galloway, N., Numajiri, T., & Rees, N. (2020). *The 'internationalisation', or 'Englishisation', of higher education in East Asia. Higher Education*, 80(3), 395–414.
- [4] Zhang, M., & Pladevall-Ballester, E. (2021). *Discipline-specific language learning outcomes in EMI programs in the People's Republic of China. Language and Education*, 35(4), 357–374.
- [5] Galloway, N., & Ruegg, R. (2020). *The provision of student support on English Medium Instruction programmes in Japan and China. Journal of English for Academic Purposes*, 45, 100846.
- [6] Song, Y. (2020). *Forming critical selves through lived experiences of interculturality in an internationalizing university in China. Asia Pacific Journal of Education*, 40(3), 299–314.

- [7] Hu, G., & Li, X. (2017). Asking and answering questions in English-medium instruction classrooms: What is the cognitive and syntactic complexity level? In *English-medium instruction in Chinese universities* (pp. 184–203). Routledge.
- [8] Hu, G., & McKay, S. L. (2012). English language education in East Asia: Some recent developments. *Journal of Multilingual and Multicultural Development*, 33(4), 345–362.
- [9] Toh, G. (2020). Challenges in English-medium instruction (EMI) at a Japanese university. *World Englishes*, 39(2), 334–347.
- [10] Drljača Margić, B., & Vodopija-Krstanović, I. (2018). Language development for English-medium instruction: Teachers' perceptions, reflections and learning. *Journal of English for Academic Purposes*, 35.
- [11] Rubdy, R. (2009). Reclaiming the local in teaching EIL. *Language and Intercultural Communication*, 9(3), 156–174.
- [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.
- [13] Poole, G. (2018). Administrative impediments: How bureaucratic practices obstruct the implementation of English-taught programs in Japan. *English-Medium Instruction in Japanese Higher Education: Policy, Challenges and Outcomes*, 91–107.
- [14] Gu, M. M., & Lee, J. C.-K. (2019). "They lost internationalization in pursuit of internationalization": Students' language practices and identity construction in a cross-disciplinary EMI program in a university in China. *Higher Education*, 78, 389–405.
- [15] Qin, P. (2022). Exploring bilingual ideology and identity of EMI medical teachers and students in China's mainland. *Journal of Comparative and International Higher Education*, 13(5S).
- [16] Sato, T. (2021). Reconsidering Englishization: the Japanese government's Top Global University Project. *Asian Englishes*, 1–12.
- [17] Yuan, R., Chen, Y., & Peng, J. (2020). Understanding university teachers' beliefs and practice in using English as a medium of instruction. *Teaching in Higher Education*, 1–16.
- [18] Oxford, R. L. (2016). *Teaching and researching language learning strategies: Self-regulation in context*. Routledge.
- [19] Hanh, L. T. T. (2021). Vocabulary Learning Strategy and Vietnamese University Students' Learning Experience in English as Medium of Instruction Classrooms. *International Journal of Instruction*, 14(3), 117–132.
- [20] Pun, J. (2022). Effects of Prior English Exposure on Hong Kong Tertiary Science Students' Experiences in EMI Learning. *RELJ Journal*, 1–18.
- [21] Yu, S., Wang, Y., Jiang, L., & Wang, B. (2020). Coping with EMI (English as a medium of instruction): Mainland China students' strategies at a university in Macau. *Innovations in Education and Teaching International*, 1–11.
- [22] Hu, G., Li, L., & Lei, J. (2014). English-medium instruction at a Chinese University: Rhetoric and reality. *Language Policy*, 13(1), 21–40.
- [23] He, J. J., & Chiang, S. Y. (2016). Challenges to English-medium instruction (EMI) for international students in China: A learners' perspective. *English Today*, 32(4), 63–67.
- [24] Goh, C. C. M. (2017). Research into practice: Scaffolding learning processes to improve speaking performance. *Language Teaching*, 50(2), 247–260.
- [25] Xie, W., & Curle, S. (2022). Success in English Medium Instruction in China: significant indicators and implications. *International Journal of Bilingual Education and Bilingualism*, 25(2), 585–597.
- [26] Zhang, M., & Pladevall-Ballester, E. (2021). Discipline-specific language learning outcomes in EMI programs in the People's Republic of China. *Language and Education*, 35(4), 357–374.
- [27] Thompson, G., Takezawa, N., & Rose, H. (2022). Investigating self-beliefs and success for English medium instruction learners studying finance. *Journal of Education for Business*, 97(4), 220–227.
- [28] Ruegg, R. (2021). *Supporting EMI students outside of the classroom: Evidence from Japan*. Routledge.
- [29] Qiu, Y., Zheng, Y., & Liu, J. (2022). 'So, only relying on English is still troublesome': a critical examination of Japan's English medium instruction policy at multiple levels. *Journal of Multilingual and Multicultural Development*, 1–18.
- [30] Galloway, N., & Ruegg, R. (2020). The provision of student support on English Medium Instruction programmes in Japan and China. *Journal of English for Academic Purposes*, 45, 100846.
- [31] Aizawa, I., Rose, H., Thompson, G., & Curle, S. (2020). Beyond the threshold: Exploring English language proficiency, linguistic challenges, and academic language skills of Japanese students in an English medium instruction programme. *Language Teaching Research*, 1–25.
- [32] Uchihara, T., & Harada, T. (2018). Roles of Vocabulary Knowledge for Success in English-Medium Instruction: Self-Perceptions and Academic Outcomes of Japanese Undergraduates. *TESOL Quarterly*, 52(3), 564–587.
- [33] Sultana, S. (2014). English as a medium of instruction in Bangladesh's higher education: Empowering or disadvantaging students? *Asian EFL Journal*.

- [34] Kamaşak, R., Sahan, K., & Rose, H. (2021). *Academic language-related challenges at an English-medium university. In Journal of English for Academic Purposes* (Vol. 49). Elsevier Ltd.
- [35] Dimova, S. (2020). *English language requirements for enrolment in EMI programs in higher education: A European case. Journal of English for Academic Purposes*, 47, 100896.