This version of the book chapter has been accepted for publication, after peer review (when applicable) and is subject to Springer Nature's AM terms of use(https://www.springernature.com/gp/open-research/policies/accepted-manuscript-terms), but is not the Version of Record and does not reflect post-acceptance improvements, or any corrections. The Version of Record is available online at: https://doi.org/10.1007/978-981-16-2327-1\_23-1.

Lei, J., & Hu, G. (2022). Research on English-medium instruction in the Asia Pacific: Trends, foci, challenges, and strategies. In W. O. Lee, P. Brown, A. L. Goodwin, & A. Green (Eds.), *International handbook on education development in Asia-Pacific*. Springer Nature. <a href="https://doi.org/10.1007/978-981-16-2327-1">https://doi.org/10.1007/978-981-16-2327-1</a> 23-1



# Research on English-medium instruction in the Asia Pacific: Trends, foci, challenges, and strategies

Jun Lei, Ningbo University, Ningbo, China, <u>leijun@nbu.edu.cn</u> Guangwei Hu, The Hong Kong Polytechnic University, Hong Kong, China, guangwei.hu@polyu.edu.hk

#### **Abstract**

The Asia-Pacific region has seen an exponential growth of English-medium instruction (EMI) over the past two decades or so. In response to the rapid spread of EMI, there is increased research attention to this form of pedagogy. This chapter seeks to explore the trends and foci of research on EMI in the Asia Pacific and offer useful implications for dealing with challenges and capitalizing on opportunities in EMI. Drawing on 133 journal articles retrieved systematically from the Web of Science, it shows that the literature on EMI in the Asia-Pacific region has grown rapidly over the past decade, covering a wide range of issues and concerns, including both well-trodden ones (e.g., stakeholder perceptions of EMI, EMI practices, and EMI impacts) and emerging ones (e.g., professional development for EMI instructors, roles of English and other languages in EMI, and support systems for EMI). It identifies three salient challenges reported in the literature, namely misalignments between monolingual ideologies in EMI policies and multilingual realities in EMI practices, non-EMI/EMI transition either from high school to university contexts or in cross-border/transnational contexts, and the professional development of EMI instructors. This chapter concludes by summarising insights derived from the extant research and outlining directions for future research.

**Keywords:** English-medium instruction; professional development; roles of L1 and English; translanguaging; research trends; Asia Pacific

#### Introduction

English medium instruction (EMI) is defined as "the use of the English language to teach academic subjects (other than English itself) in countries or jurisdictions where the first language of the majority of the population is not English" (Macaro, 2018, p. 19). Over the past two decades or so, EMI has grown exponentially across the world, especially in Europe and the Asia-Pacific (Dearden, 2015; Fenton-Smith et al., 2017). The literature has suggested a multitude of forces propelling the rapid expansion of EMI, such as perceived needs and motivations to internationalise higher education (De Costa et al., 2020; Macaro et al., 2018), boost institutional competitiveness in international league tables (Piller & Cho, 2013; Song, 2019), develop students' English proficiency (Lei & Hu, 2014; Xie & Curle, 2020), enhance students' job prospects and opportunities for studying abroad (Hu et al., 2014; Rose et al., 2019), and facilitate faculty members' career development and mobility (Dafouz, 2018; Hu & Lei, 2014).

In response to the rapid growth of EMI, there is increased research attention to this form of pedagogy. For example, the Asia-Pacific region alone has seen edited volumes or monographs on EMI in mainland China (Zhao & Dixon, 2017), Japan (Toh, 2016), Taiwan (Tsou & Kao, 2017), and the whole region (Fenton-Smith et al., 2017). In addition, one meta-analysis (Peng & Xie, 2021) and several systematic reviews (Coleman, 2006; Graham & Eslami, 2019; Macaro et al., 2018; Tong et al., 2020) have been conducted on EMI research. Tong et al.'s (2020) systematic review of studies published in both English and Chinese on bilingual instruction (aka EMI) in Chinese higher education found a dearth of evidence regarding its effectiveness. Similarly, in a systematic review of 83 studies on EMI in higher education across the world, Macaro et al. (2018) also identified inadequate evidence of the expected beneficial effects of EMI on language learning and the supposed non-detrimental effects on content learning. The authors attributed these inconclusive findings to "research methodology problems both at the micro and macro level" (Macaro et al., 2018, p. 36). The review also revealed that stakeholders tended to be concerned about the introduction and implementation of EMI. However, in their meta-analysis of 36 studies on EMI in the Chinese mainland context, Peng and Xie (2021) compared differences in content and language learning between EMI and Chinese medium instruction (CMI), and found that EMI students outperformed their CMI counterparts, though the effect on content learning was statistically significant only for students from medical disciplines.

Against the backdrop of such inconsistent and even contradictory findings, this chapter seeks to explore trends in EMI research in the Asia-Pacific region and offer useful implications for dealing with challenges and capitalizing on opportunities in EMI. To identify trends in EMI research in the Asia-Pacific, we searched the Web of Science, an authoritative and comprehensive indexing database of research publications, using the query strategy of "key terms" AND "country/region". The key terms included "English medium instruction" OR "English-medium instruction" OR "EMI" OR "English as a medium of instruction" OR "English as the medium of instruction". The countries/regions included in the search were based on the Regional Groups of Member States from the United Nations (https://www.un.org/dgacm/en/content/regional-groups), with the additions of Hong Kong, Macau, Taiwan, Asia, Asia-Pacific, and Asia Pacific<sup>1</sup>. Only articles published in English were included, no time limits were set, and the search was completed in early September 2021. The initial search generated 492 hits. We first scanned the titles of these entries to check their relevance, which led to the removal of 290 entries. Then we read the abstracts and, if necessary, the full texts of the remaining 202 entries to filter out articles that do not deal with tertiary education or countries/regions in the Asia-Pacific. As a result, 133 articles were retained for subsequent analysis.

We then explored the publication trends by tallying the included articles by country/region,

\_

<sup>&</sup>lt;sup>1</sup> Hong Kong, Macau, and Taiwan were added to the search terms because their educational systems differ substantially from that of mainland China. Asia, Asia-Pacific, and Asia Pacific were included to retrieve publications that deal with the region as a whole.

year of publication, journal, type of research design, and research theme/topic, respectively. Following that, we read the full texts of the 133 articles to identify the research trends in the literature, paying particular attention to challenges reported in the literature and strategies that can be derived therein. We acknowledge that there may well be other important sources that have not been included in our analysis due to our focus on only journal articles in the Web of Science database. Nevertheless, we believe that a close reading of this rigorous body of literature could provide a glimpse into the trends in the EMI literature and offer useful implications for EMI in the Asia-Pacific region.

#### **Publication Trends**

The number of publications focusing on individual countries/regions reflect, among other things, the relative policy and research attention EMI has attracted as well as the extent to which EMI has been implemented in the higher education sector of these polities. Table 1 displays a summary of the literature by country/region. As can be seen from the table, 21 countries/regions were represented in the literature with 11 countries/regions having two or more publications. Five countries/regions had 10 or more publications with mainland China garnering the highest number of publications, followed in order by South Korea, Taiwan, Japan, and Turkey. Ten countries each had one publication. Notably, there were three articles that dealt with the Asia or Asia-Pacific region as a whole. Eight publications took a comparative approach and covered EMI in two or more countries/regions.

Table 1 Distribution of the publications by country/region

Country/Region	Number
Mainland China	37
South Korea	21
Taiwan	12
Japan	11
Turkey	10
Hong Kong	6
Bangladesh	4
Vietnam	4
United Arab Emirates	3
Thailand	2
Macau	2
Indonesia	1
Iraq	1
Kazakhstan	1
Lebanon	1
Mongolia	1
Nepal	1
Pakistan	1

Qatar	1
Saudi Arabia	1
Singapore	1
Asia or Asia Pacific	3
Multiple countries/regions	8
Total	133

Figure 1 presents the distribution of the articles by year of publication. As shown in the figure, the number of publications started to pick up in 2014 and remained below 10 articles per year till 2017. Then the number started to increase drastically in 2018, and the upward trend has continued ever since. As the data were last updated in early September, 2021, it is very likely that the number of publications in 2021 will surpass that in 2020. The sharp increases witnessed in the last four years suggest that EMI has gained considerably more traction and is likely to remain a hot educational issue in the next few years in the Asia Pacific.



Figure 1. Distribution of the publications by year of publication

Table 2 summarises the number of articles by journal. As shown in the table, the 133 articles appeared in 50 journals. Seven journals had 5 or more articles, 12 journals had 4 or more, 18 journals had 3 or more, and 27 journals had 2 or more. The remaining 23 journals each published one article on EMI. Although the articles appeared in a wide range of journals and each journal had an average of just more than 2 articles, over half of the articles (74) were published in 12 journals. In particular, *Journal of Multilingual and Multicultural Development* and *International Journal of Bilingual Education and Bilingualism* each contributed 11 articles, followed by *Higher Education* and *System* both with 8 articles. The concentration of the publications in these journals is understandable because they specialise in either bilingual/multilingual education or (language) teaching/learning in higher education. Notably, *Journal of Asia TEFL* as a regionally based journal published 6 articles on EMI in the region.

English Today and RELC Journal—another regionally based journal—each accounted for 5 articles on EMI in the Asia-Pacific region. These journals were favoured by researchers studying EMI in the region probably because they served predominantly an Asian-Pacific readership, for whom the EMI issues investigated were particularly relevant.

Table 2 Distribution of the publications by journal

No. of articles	Journal name	No. of journals
11	Journal of Multilingual and Multicultural Development;	2
	International Journal of Bilingual Education and	
	Bilingualism	
8	Higher Education; System	2
6	Journal of Asia TEFL	1
5	English Today; RELC Journal	2
4	Journal of English for Academic Purposes; Journal of	5
	Studies in International Education; Sustainability;	
	Teaching in Higher Education; TESOL Quarterly	
3	Current Issues in Language Planning; Educational	6
	Studies; Higher Education Research & Development;	
	Language Policy; Linguistics and Education; World	
	Englishes	
2	Asia Pacific Journal of Education; English for Specific	9
	Purposes; Expert Systems with Applications; IRAL;	
	Journal of Education for Teaching; Journal of	
	Language, Identity and Education; Language and	
	Intercultural Communication; Language Teaching	
	Research; Lingua	
1	Not listed here	23

Figure 2 displays the distribution of the articles by type of research design. The great majority of the articles (125 out of 133) reported empirical studies. This is an encouraging pattern because empirical research is needed to find out "how EMI impacts on language and subject learning, to what extent the optimistically envisioned goals of EMI have been achieved in the classroom, and how current EMI programs/courses can be improved and made more effective" (Hu, 2021, p. 7). As for non-empirical studies, there was one meta-analysis (Peng & Xie, 2021), three systematic reviews (Graham & Eslami, 2019; Macaro et al., 2018; Tong et al., 2020), and four conceptual/opinion pieces (Aslan, 2018; Hu, 2019; Kedzierski, 2016; Yuan, 2020). Of the empirical studies, about 46% employed qualitative designs, one-third adopted quantitative designs, and approximately one-fifth employed a mixed-methods design. The stronger presence of qualitative research was largely due to the popularity of small-scale case studies. While mixed-methods studies were in the minority, they were better equipped to combine

particularity with generality and develop more nuanced and comprehensive understanding.

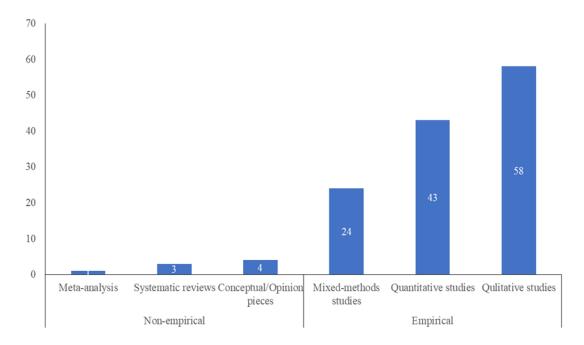


Figure 2. Distribution of the publications by type of research design

Finally, Figure 3 presents the distribution of the articles by theme/topic. Clearly, stakeholder perceptions of EMI, EMI practices, and EMI impacts received the greatest attention in the publications, each garnering 27-30 publications. EMI policies, and challenges and strategies related to EMI also received considerable attention from the researchers. Apart from these relatively well-trodden topics in the literature, several emerging topics have garnered increased attention, including professional development for EMI instructors, roles of English and other languages in EMI, and support systems for EMI. It should be noted that because some studies examined more than one topic, there are inevitable overlaps in the above categorisation. For example, although only two publications were devoted explicitly and primarily to support programmes, a sizeable number of studies that dealt principally with other topics also touched on this topic (e.g., Dai & Wu, 2021; Kim, Park, et al., 2021; Rakhshandehroo & Ivanova, 2020). In the next section, we present the research trends emerging for each of these topics.

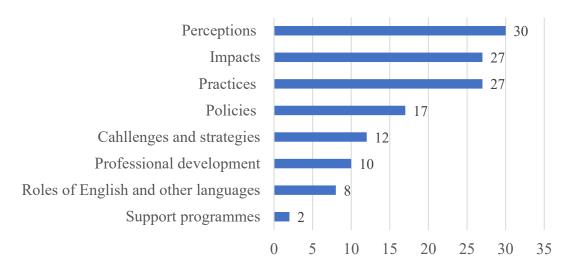


Figure 3. Distribution of the publications by theme/topic

#### Research Foci

# Research on perceptions of EMI

Research examining perceptions of EMI covered various issues, including students' attitudes towards (Graham & Eslami, 2019; Kong & Wei, 2019), motivations for (Graham & Eslami, 2019; Hengsadeekul et al., 2014; Jon et al., 2014; Kong & Wei, 2019), and satisfaction with EMI (Lee & Davis, 2020; Rakhshandehroo & Ivanova, 2020), international students' views on local non-native English speaking (NNES) lecturers (Murdoch, 2019), local students' and instructors' perceptions of their engagement with international students (Han et al., 2020), instructor perspectives on EMI (Belhiah & Elhami, 2015; Kim et al., 2018), and resistance to EMI (Selvi, 2020; Tai & Tang, 2021). One noteworthy trend in this strand of research was the increased attention to international students (e.g., Botha, 2016; Chu et al., 2018; Han et al., 2020). Murdoch (2019), for example, investigated international students' perceptions of English-medium courses taught by Korean NNES instructors at a university in South Korea, and found that although they expressed overall satisfaction with and enjoyment of the courses, the international students expressed a preference for non-Korean instructors because they felt that Korean instructors had problems understanding and answering their questions.

In a similar vein, Rakhshandehroo and Ivanova (2020) investigated international graduate students' satisfaction with EMI at two top Japanese universities. The study revealed general satisfaction with the EMI courses but dissatisfaction with the university support system, especially the monolingual and monocultural administrative infrastructure. In light of these findings, the study called for more systematic and formal support for international students in EMI programmes at Japanese universities. Furthermore, Han et al. (2020) examined local students' and instructors' perceptions of their engagement with international students at three universities in mainland China, and found that both the students and the instructors were dissatisfied with their engagement with international students. On the one hand, the students raised concerns about international students' academic abilities, which they attributed to

national or institutional enrolment policies and which, according to them, resulted in the dumbing down of the EMI courses. On the other hand, the instructors expressed concerns about international students' learning attitudes, academic progress, and participation in class. These valuable findings notwithstanding, what seems to need more attention in this line of research is a comparison of international and local students' perceptions and the distinct factors shaping their perceptions.

#### Research on EMI impacts

Research in this strand focused primarily on the effects of EMI on content learning (Alhamami, 2021; Curle et al., 2020; Lin & Lei, 2021), language learning (Abouzeid, 2021; Bowen & Nanni, 2021; Hu & Wu, 2020), and affective changes (Chou, 2018; Ding & Stapleton, 2016; Jang & Wood, 2019). Regarding language learning, researchers increasingly paid more attention to discipline-specific language proficiency in EMI (Xie & Curle, 2020) and its development (Zhang & Pladevall-Ballester, 2021). Xie and Curle (2020), for example, found disciplinespecific or content-related English proficiency to be the strongest predictor of students' academic achievement in EMI. Zhang and Pladevall-Ballester (2021) investigated the effect of EMI on English proficiency in two EMI programmes in mainland China and found significant improvements in discipline-specific proficiency but not in general English proficiency. The study indicated that higher prior English proficiency, more use of English, and more attention to language by the instructor tended to contribute to students' greater improvements in discipline-specific English proficiency. Compared with research on language gains, research on content learning in EMI was still relatively scarce. Notably, however, several studies attempted to explore EMI success, which was defined in terms of not only content learning but also other outcomes, such as long-term career advancement (Rose et al., 2020). In particular, Xie and Curle (2020) investigated academic success in EMI at a university in China with a focus on students' perceptions or understandings of success in EMI and factors influencing academic success in EMI. The study found that students associated success in EMI not only with content and language learning, but also with knowledge application and transformation, and formation of new modes of thinking. Moreover, this body of research showed that EMI success hinged not only on English proficiency, but also on academic skills (Lin & Lei, 2021), perceived teaching quality (Li, 2018), and preparatory course performance and self-efficacy (Thompson et al., 2019).

As for affective changes, the reviewed research examined students' autonomy, motivation, confidence, and identity construction. Ding and Stapleton (2016), for example, investigated how nine mainland Chinese first-year students developed their autonomy in learning and using English in their transitioning to the multilingual Hong Kong context. The study found that "the participants developed autonomy by changing their strategies for both learning and using English during their first year of study", which was "mediated by the local multilingual context" (Ding & Stapleton, 2016, p. 12). In an investigation into the role of non-native English speaking teachers (NNESTs) and native English speaking teachers (NESTs) in improving South Korean university students' motivation for English learning in the EMI context, Jang and Wood (2019)

found that the class taught by the NNEST teacher had higher levels of confidence, interest, and extrinsic motivation than that taught by the NEST teacher after one semester, though their intrinsic motivation remained the same and the motivational changes were not found to have any direct effect on the students' satisfaction with the course/class. Moving into new affective territories, Gu and Lee (2020) investigated nine students' learner identity construction in an EMI programme at a comprehensive university in mainland China, and found that the students experienced uncertainty and ambivalence in their identity construction. Also focusing on identity but drawing on the Foucauldian ethico-political axes of self-formation, Song (2020) examined master's students' understandings and practices of critical selves as well as their influencing factors at an international EMI university in mainland China. The study revealed that the students understood their selves not from an Asian/Western essentialist perspective but from a constructivist perspective that saw critical selves as emergent and shaped by students' life trajectories and the sociocultural contexts. Although much has been revealed about the impacts of EMI, there is still a need for more rigorous research on the effects of EMI on content learning and on long-term educational and professional outcomes.

# Research on EMI practices

This line of research centred primarily on classroom interaction (Duran et al., 2019; Duran & Sert, 2019; Hu & Duan, 2019; Lin, 2018; Sahan, 2020), teaching practice (Chen et al., 2020), and learning experience (Wang et al., 2018). With regard to classroom interaction, Sahan (2020) examined teacher-student interactions in EMI engineering classes at a university in Turkey, and found that teachers and students placed greater emphasis on communicative efficiency than on monolingual native speaker norms. Jacknick and Duran (2021) explored teacher follow-up turns that introduced specialised terms to teachers-in-training in an EMI university in Turkey. The study showed how the teacher follow-up turns were utilised to introduce new terminology to the teachers-in-training and to "socialize them into thinking and talking like professionals, i.e., like teachers" (p. 1). Chen et al. (2020) analysed the linguistic and pedagogical features of 20 Chinese university teachers' EMI interactions at a mainland Chinese university. The study found that the teachers' language use in EMI was characterised by Chinese influences and translanguaging practices, and that their pedagogical practices were more topic-centered than problem-centered. Notably, this body of research paid increasing attention to translanguaging in EMI (Ou & Gu, 2021; Ou et al., 2020; Song & Lin, 2020; Wang & Curdt-Christiansen, 2019). Wang and Curdt-Christiansen (2019), for example, explored the translanguaging practices of a bilingual programme at a Chinese university and identified four types of translanguaging practices, including bilingual label quest, simultaneous code-mixing, cross-language recapping, and dual-language substantiation. The study also revealed that the national and institutional policies recognized bilingual education, which in turn spurred the translanguaging practices. The findings of the study raised questions about the monolingual conceptualisation of EMI.

Research focusing on learning experience examined cross-border/transnational experiences (Ou et al., 2020; Wang et al., 2018; Yao et al., 2021) and experiences of transitioning from high school to EMI at university (Aizawa & Rose, 2020; Evans & Morrison, 2018; Li & Ruan, 2015).

As for cross-border/transnational experiences, Ou et al. (2020) zoomed in on intercultural communication among a group of multilingual students at an EMI transnational university in mainland China. Focusing on the students' repertoires, language beliefs and spatial relations in their moment-to-moment interaction, the study revealed that the students perceived and engaged in interaction as a translanguaging act and that their communicative practices and language development deviated from the monolithic and monolingual EMI policy. Regarding transition from high school to EMI at university, Aizawa and Rose (2020) addressed challenges faced by Japanese students and reported that students having attended English language classes conducted through English in Japanese-medium high schools had a greater English academic vocabulary and met fewer language-related challenges in university-level EMI than those having studied English through Japanese. Despite these insights into EMI practices, there is still a long way to go in our efforts to fully understand EMI practices and to theorise the intertwining of L1 and English in translanguaging practices, and the complex interplay between language and content learning.

### Research on EMI policies

This strand of research dealt principally with stakeholders' views on EMI policies and gaps between policy envisions and ground realities (Aizawa & Rose, 2019; Hu & Lei, 2014; Hu et al., 2014). Research taking a language policy perspective found that English and EMI were generally perceived to be beneficial to individuals' academic study and career development, institutions' reputation, ranking and revenues, and nations' economic development (Bradford, 2016; Evans & Morrison, 2018; Karim et al., 2021; Rahman & Singh, 2020). However, there were also reservations about and even resistance to EMI policies. For example, in an examination of an undergraduate EMI business programme at a university in Taiwan, Huang (2018) found that most students resisted the EMI curriculum, pedagogy, and context, which they deemed rather unhelpful. Their resistance was attributed to the "non-challenging and nonrelevant content" (p. 441) of the curriculum, the influence of the Confucian Heritage Culture on learning, and a combination of unconducive contextual factors (e.g., instructors' suboptimal English proficiency, large class sizes, and limited peer interactions). Similarly, in a questionnaire-based survey of the effects of EMI policy on undergraduate computer science programmes in Saudi Arabian public universities, Alhamami (2021) found a misalignment between faculty and student attitudes toward EMI. While the instructors held generally positive attitudes towards EMI, the students reported their preference to learn in Arabic. In a study of the implementation of EMI policies at a Japanese university, Aizawa and Rose (2019) also found gaps between envisioned policies at the meso level and enacted policies at the ground or micro level.

Notably, several studies (Hu & Lei, 2014; Hu et al., 2014; Yuan & Li, 2021; Zhang, 2018) drew on Spolsky's tripartite language policy framework to examine ideologies, practices, and management measures related to EMI and possible gaps between envisioned policies and enacted practices. For example, Hu et al. (2014) explored the implementation of EMI policy at a university in mainland China and uncovered discrepancies between language beliefs,

language practices in the classroom, and support measures. One particularly noteworthy finding is that "institutional measures intended to enhance the quality of English-medium instruction were found to function as gate-keepers of access to English and potential benefits accruing from English proficiency" (Hu et al., 2014, p. 21). Also drawing on Spolsky's framework, Zhang (2018) examined striking features of China's EMI policies and the challenges in implementing them. The study found that the EMI policies were intended to help both outbound Chinese students and inbound international students, which was characteristic of bidirectional internationalisation of higher education. The study, however, also revealed two main problems with China's EMI policies, namely the insufficiency of EMI courses/programmes and the great imbalance of inbound international and outbound Chinese students. These issues, along with other potential repercussions of EMI policies, definitely warrant closer scrutiny and further research.

### Research on EMI challenges and strategies

The reviewed research identified a multitude of challenges in EMI from both student and lecturer perspectives, including language difficulties, increased teaching and learning workload, extra time required to prepare lectures, and additional time needed for studying (He & Chiang, 2016; Hu et al., 2014; Kamasak et al., 2021). Kamaşak et al. (2021), for instance, examined the linguistic challenges faced by students at an EMI university in Turkey and showed that the students found writing and speaking most challenging among the four macro language skills and that the challenges faced by them differed in relation to their academic discipline, L1 background, and prior EMI experience. In particular, recent research also noted the challenge of not sharing L1s with international students faced by local students and instructors. He and Chiang (2016), for example, investigated 60 international students' challenges in EMI at a major university in southern China and reported that the students found their Chinese instructors' teaching styles and practices problematic, and ascribed their language difficulties to their instructors. Furthermore, there was some evidence that instructors may not be fully aware of their students' linguistic challenges or adequately equipped with EMI instructional strategies (Abouzeid, 2021; Alhamami, 2021). Abouzeid (2021), for example, examined four psychology professors' perceptions of the challenges faced by their EMI students in academic writing and the extent to which their perceptions aligned with the challenges present in students' actual written work. The professors perceived three major challenges in their Lebanese students' English academic writing: "lexico-grammatical structure and accuracy, interference of another language and a lack of specialized terminology" (Abouzeid, 2021, p. 55). While alignment was found between the first and third perceived challenges, there was no evidence of crosslinguistic interference in the written work.

Apart from frequently documented language difficulties faced by EMI students and instructors, several studies (Bradford, 2016; Leong, 2017) examined other challenges encountered in the processes of implementing EMI. Bradford (2016), for example, examined the implementation challenges faced by three Japanese higher education institutions in their adoption of EMI and proposed a typology of such challenges that consisted of linguistic, cultural, administrative and

managerial, and institutional ones. Similarly, Leong (2017) explored micro actors' efforts to implement EMI at four Japanese universities and the factors that undermined their efforts. The study identified several efforts made by the actors, including managing the English programme, designing a placement test, and dealing with top-level management, among others. The study also found that the actors' implementation efforts were primarily constrained by unavailability of qualified teachers, students' inadequate English proficiency and motivation in learning the language, and a less than desirable sociolinguistic environment for English learning. Compared with insights into challenges related to EMI, the extant research has revealed much less about strategies adopted by various stakeholders to address the challenges.

#### Research on EMI instructor professional development

The extant research explored professional development from EMI instructors' perspectives (Kim, Kweon, et al., 2021; Macaro et al., 2020; Macaro & Han, 2020), the practices and effectiveness of individual professional development programmes (Chen & Peng, 2019; Lee & Lee, 2018), and the impact of interdisciplinary collaboration on EMI instructors' professional development (Lu, 2020). As an example, Macaro and Han (2020) examined Chinese university instructors' perspectives on competencies, certification and professional development for EMI. The study found that while the instructors were generally positive about certification and professional development for EMI, few institutions embraced these ideas, let alone implemented them. The study also pointed to the importance of government and institutional involvement in implementing EMI professional development and certification. In contrast, in a study of EMI professional development for Korean professors in the science and engineering schools of three Korean universities, Kim, Kweon, et al. (2021) found generally negative attitudes towards EMI-related professional development programmes. These negative views were attributed primarily to institutional polices that prioritised research over teaching. The study also revealed that most of the 117 surveyed faculty members had not participated in any EMI-related professional development.

Lee and Lee (2018) described and evaluated an English-for-specific-purpose programme geared towards graduate students' professional and English needs in an EMI context in South Korea. The study revealed that the students faced challenges and had unmet needs in advanced academic and professional communication. The study also showed that the students found the programme helpful in addressing those needs and expected more sessions tailored to their particular needs. Similarly, Chen and Peng (2019) examined a professional development programme for EMI teachers at a mainland Chinese university. The study reported that the programme enhanced their understanding of the nature of EMI and its role in content learning, and that the trainer provided a supportive learning community through modelling, microteaching, and feedback. As a whole, the participants reported improvements in their self-efficacy. In addition, Lu (2020) examined the impact of interdisciplinary teacher collaboration on EMI teachers' professional development at a private university in Taiwan. The study found that interdisciplinary teacher collaboration not only led to content teachers' more positive attitudes toward EMI but also supported their effective use of the instructional language and

language teaching strategies.

Several studies also tried to identify the EMI competencies that professional development should aim to cultivate and enhance. The study by Macaro and Han (2020), mentioned above, proposed that professional development programmes for EMI teachers should target at least four broad types of competencies: national context competencies, internationally transferable competencies, generic language and teaching skills, and discipline-specific language and teaching skills. Similarly, Yuan (2020) drew on his teaching and research experience as an EMI teacher educator to critically analyse the emotional, pedagogical, and social barriers faced by university EMI instructors in China. Based on the analysis, he proposed an EMI teacher development framework that focused on the fostering of EMI teachers' sense of ownership of English as a lingua franca, language skills for classroom instruction, and discipline-specific pedagogical competencies in a community of practice. The proposed framework was expected "to cognitively, socially and emotionally prepare and develop EMI teachers to meet university students' complex learning needs in different subjects" (Yuan, 2020, p. 317). There is obviously a need for more research on EMI instructor professional development, especially the pre- and in-service cultivation of the requisite competencies for effective EMI.

#### Research on the roles of English and other languages in EMI

Although the use of students' first language (L1) goes against the English only tenet often assumed in EMI policies, this strand of research showed that EMI lecturers and students tended to hold positive attitudes toward L1 use in EMI because it could facilitate content teaching/learning and alleviate language difficulties faced by lecturers and students (Graham et al., 2021; Kim et al., 2018; Kim & Tatar, 2017). As an illustration, Graham et al. (2021) investigated the attitudes toward the use of Arabic in EMI held by 57 engineering students on an international branch campus in Qatar. The study found that the students held a positive attitude toward the use of Arabic and preferred to have English as a medium rather than the sole medium of instruction. However, EMI lecturers' attitudes become more complex when there are cross-border/international students in their classes as the use of L1 may exclude or alienate them. Gardner and Lau (2019), for example, investigated the roles of English perceived by Hong Kong and mainland Chinese students in their institutional experience at an Englishmedium university in Hong Kong. The study found that while both groups of students saw English as an academic lingua franca, there were diverse views regarding the role of English as a social lingua franca, showing a disconnect between academic and social lingua francas in their institutional experience and its potential repercussions on cross-border students' full integration into institutional life and their sense of social inclusivity/exclusivity. Likewise, Kim and Tatar (2017) examined nonnative-English-speaking professors' perceptions of an EMI policy and the roles of the local language in EMI at a South Korean university, and found that the local language played an important role in the professors' social interaction, instruction, and time management, which were connected to their identities as instructors and researchers situated in the local context.

Notably, several studies (e.g., Baker & Huttner, 2017; Bezborodova & Radjabzade, 2021) applied Dafouz and Smit's (2016) ROADMAPPING framework to explore the roles of English and other languages. In this framework, while RO and AD refer to Roles of English in relation to other languages and Academic Disciplines, M, A, PP, and ING refer to (language) Management, Agents, Practices and Processes, and Internationalization and Glocalization, respectively. Focusing on the RO in three EMI programmes in Thailand, Austria, and the UK, Baker and Hüttner (2017) demonstrated that while English was adopted and accepted as the dominant discipline-specific lingua franca in the classroom, multilingualism was prevalent outside the classroom in all sites. The study also revealed that participants in different contexts held different views about whether and to what extent English should be a goal of learning alongside content learning: Participants in Thailand saw English learning as an additional goal, but their counterparts in Austria considered content learning to be the sole desideratum. In addition, Bezborodova and Radjabzade (2021) inquired into the roles of English in higher education institutions in the Kyrgyz Republic, Tajikistan and Uzbekistan, finding that English played a variety of societal, institutional, pedagogical, and communicational roles in these contexts. Although the ROADMAPPING framework and related research have shed much light on the roles of L1 and English, more research and theorising are needed to better understand how L1 and English can be leveraged synergistically in EMI.

## Research on support systems for EMI

As noted above, only two articles (i.e., Chang et al., 2017; Galloway & Ruegg, 2020) focused explicitly and primarily on support systems for EMI. However, a sizeable body of the reviewed research touched on this topic, highlighting the dearth of support available (McKinley et al., 2021; Rakhshandehroo & Ivanova, 2020) and calling for more measures of assistance (Dai & Wu, 2021; Kim, Park, et al., 2021). McKinley et al. (2021) compared policymaking concerning admissions requirements, language support, and language use for EMI between two transnational universities and six other universities in mainland China. They uncovered both commonalities and differences between the transnational and local universities. The stakeholders at both transnational and local universities believed that despite the English-only policy, Chinese could be used in EMI. However, while the transnational universities provided preparatory language courses during the foundation year to help students transition to EMI, the local universities relied mostly on the national entrance exam to ensure that students had adequate English proficiency for EMI.

Of the research focusing predominantly on support systems for EMI, Chang et al. (2017) reported on the development and evaluation of an EMI language support programme, coming to the conclusion that a tailor-made language support programme could alleviate language challenges faced by students taking EMI courses in the South Korean context. In an analysis of language and academic skills support in Japanese and Chinese EMI contexts, Galloway and Ruegg (2020) found "a range of support on offer", which "varie[d] in nature, availability, duration, and content" (p. 11). EAP and content instructors were found to differ in attitudes towards the provision of support and lack cross-disciplinary collaboration therein. Furthermore,

the study also revealed "differences in attitudes, and needs, of international and domestic students" (Galloway & Ruegg, 2020, p. 12). Galloway and Ruegg (2020) also grappled with the question of whether content experts or language specialists should be put in charge of providing language support for students. These findings highlighted the necessity of providing context-specific support tailored to students' particular needs. Given that support systems for EMI have been treated only tangentially in the literature, there is a clear and urgent need to investigate them more systematically.

# **Challenges and Issues in EMI Research**

One prominent challenge documented in the literature concerns misalignments between monolingual ideologies in EMI policies and multilingual realities in EMI practices. Doubt has been cast on monolingual EMI policies, whose prescriptions both ignored and contradicted the local linguistic reality and the actual practice on the ground (Graham et al., 2021). Specifically, there were concerns about the specifications of EMI policies, particularly with regard to the use of students' mother tongue and/or translanguaging (Galloway et al., 2020). On the one hand, L1 was frequently reported to be useful in assisting and facilitating content delivery and content learning (Hu & Lei, 2014; Lei & Hu, 2014). On the other hand, the use of students' mother tongue and translanguaging would go against the English-only assumption in EMI policies. Moreover, there is also the issue of international students who do not understand home students' mother tongue. EMI should not be conceptualized as a monolingual endeavour. Research on classroom interaction tended to lend support to the use of L1 and translanguaging (Galloway et al., 2020). Therefore, the misalignment of policy and reality created a dilemma for university administrators and policy makers. As Graham et al. (2021) pointed out, while encouraging translanguaging may isolate students and hamper intercultural communication, ignoring the multilingual reality and implementing a monolingual EMI may undermine local languages and cultures, perpetuating the hegemonic power of English and Western culture.

Another salient challenge emerging from the literature relates to transitioning from non-EMI to EMI, either from high school to university contexts or in cross-border/transnational contexts. The research we have reviewed showed that although English was designated as the academic lingua franca in the EMI context, it had not only academic but also societal, institutional, pedagogical, and communicational roles (Bezborodova & Radjabzade, 2021; Gardner & Lau, 2019). In addition to difficulties with English as an academic lingua franca, EMI students, especially cross-border and international students, could also encounter challenges due to the lack or weak presence of a social lingua franca (Gardner & Lau, 2019). This disconnect may lead to the isolation and exclusion of cross-border and international students. Therefore, it raises concerns about institutional policies that promulgate English as the medium of instruction but neglect the multilingual reality and the complex roles played by English and other languages in the EMI context. Research has suggested that the use of L1 and/or translanguaging (Wang et al., 2018; Yu et al., 2020), taking some courses in L1 (Curle et al., 2020), and provision of language support (Aizawa et al., 2020) could help alleviate language difficulties faced by students.

A third acute challenge increasingly discussed in the literature had to do with the professional development of EMI instructors. The most pressing concern stemmed from the paucity of professional development programmes and the small number of EMI instructors having received any professional development. Macaro et al. (2020) also observed that to make professional development successful, it would be imperative to have a clear understanding of EMI teaching competences and to incentivise EMI instructors to undertake professional development (perhaps through certification or other types of official recognition). Researchers (e.g., Macaro et al., 2020; Yuan, 2020) have attempted to conceptualise EMI instructional competences. Yuan (2020), for example, proposed a framework aimed at fostering ownership of English as a global language, developing effective classroom language in EMI classrooms, developing discipline-specific pedagogical competence in EMI teaching, and creating a community of practice focused on EMI teaching.

### **Conclusion**

This chapter began with an observation of the growing presence of EMI in the Asia Pacific and the rest of the world, and the accompanying surge of EMI research. Analysis of the publication trends indicates that research on EMI in the Asia Pacific has grown exponentially over the last five years or so and that it has focused on both well-trodden and emerging issues and concerns. In particular, of the well-trodden issues, stakeholder perceptions of EMI, EMI practices, and EMI impacts have garnered the greatest research attention, followed by EMI policies, and challenges and strategies related to EMI. Issues that have received increasing attention in the literature include professional development for EMI instructors, roles of English and other languages in EMI, and support systems for EMI.

Several insights can be derived from the critical reading and analysis of the literature. To begin with, while the extant research foci reveal the continued research attention to EMI, the emerging research foci point to the continuing evolvement of both EMI practice and research. In addition, the extant research reviewed in this chapter has challenged a monolithic view of English as the academic lingua franca and recognised its multitude of roles in the Asia Pacific contexts. Collectively, it has pointed to the need to acknowledge the multilingual reality and called for a reconceptualisation of EMI policies and practices. Moreover, the reviewed research has underscored the need to formalize and strengthen tailored support for both students and faculty members, including the development of language support programmes and the offering of professional development programme for faculty members. In particular, more support should be provided to assist students' transition from non-EMI in high schools to EMI in universities. Finally, the reviewed research has also revealed that we are just beginning to understand what EMI teaching competencies are prerequisites for effective EMI in the diverse Asia Pacific contexts.

These insights notwithstanding, there are still issues that warrant further research. First, as

discussed above, misalignments between monolingual ideologies in EMI policies and multilingual realities in EMI practices have been noted as a challenge in many EMI contexts. This raises the questions of what roles students' first languages may play in EMI classrooms and how to theorise the relationship between first languages and English. Relatedly, this would be even more complex in programmes that adopt languages other than or along with English as a medium of instruction. Second, regarding the switch from non-EMI to EMI, it would be imperative to investigate factors that may facilitate or inhibit learners' (and lecturers') transition as well as factors that may affect interculturality in EMI contexts that involve cross-border and international students. Finally, as for the professional development of EMI lecturers, we should continue to explore how EMI teaching competence can be more effectively fostered and what can be done to better support EMI instructors.

# References

- Abouzeid, R. (2021). Aligning perceptions with reality: Lebanese EMI instructor perceptions of students' writing proficiency. *English for Specific Purposes*, *63*, 45-58. <a href="https://doi.org/10.1016/j.esp.2021.03.001">https://doi.org/10.1016/j.esp.2021.03.001</a>
- Aizawa, I., & Rose, H. (2019). An analysis of Japan's English as medium of instruction initiatives within higher education: the gap between meso-level policy and micro-level practice. *Higher Education*, 77(6), 1125-1142. <a href="https://doi.org/10.1007/s10734-018-0323-5">https://doi.org/10.1007/s10734-018-0323-5</a>
- Aizawa, I., & Rose, H. (2020). High school to university transitional challenges in English Medium Instruction in Japan. *System*, *95*. https://doi.org/10.1016/j.system.2020.102390
- Alhamami, M. (2021). English as a medium of instruction (EMI) in computing undergraduate programs. *Education and Information Technologies*. <a href="https://doi.org/10.1007/s10639-021-10637-6">https://doi.org/10.1007/s10639-021-10637-6</a>
- Aslan, M. (2018). The debate on English-Medium Instruction and globalisation in the Turkish context: A sociopolitical perspective. *Journal of Multilingual and Multicultural Development*, 39(7), 602-616. <a href="https://doi.org/10.1080/01434632.2017.1417413">https://doi.org/10.1080/01434632.2017.1417413</a>
- Baker, W., & Huttner, J. (2017). English and more: A multisite study of roles and conceptualisations of language in English-medium multilingual universities from Europe to Asia. *Journal of Multilingual and Multicultural Development, 38*(6), 501-516. <a href="https://doi.org/10.1080/01434632.2016.1207183">https://doi.org/10.1080/01434632.2016.1207183</a>
- Belhiah, H., & Elhami, M. (2015). English as a medium of instruction in the Gulf: When students and teachers speak. *Language Policy*, *14*(1), 3-23. <a href="https://doi.org/10.1007/s10993-014-9336-9">https://doi.org/10.1007/s10993-014-9336-9</a>
- Bezborodova, A., & Radjabzade, S. (2021). English in higher education in the Kyrgyz Republic, Tajikistan, and Uzbekistan. *World Englishes*. <a href="https://doi.org/10.1111/weng.12556">https://doi.org/10.1111/weng.12556</a>
- Botha, W. (2016). English and international students in China today: A sociolinguistic study of English-medium degree programs at a major Chinese university. *English Today*,

- 32(1), 41-47. https://doi.org/10.1017/s0266078415000449
- Bowen, N. E. J. A., & Nanni, A. (2021). Piracy, playing the system, or poor policies? Perspectives on plagiarism in Thailand. *Journal of English for Academic Purposes*, 51. <a href="https://doi.org/10.1016/j.jeap.2021.100992">https://doi.org/10.1016/j.jeap.2021.100992</a>
- 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. https://doi.org/10.1177/1028315316647165
- Chang, J.-Y., Kim, W., & Lee, H. (2017). A language support program for English-Medium Instruction courses: Its development and evaluation in an EFL setting. *International Journal of Bilingual Education and Bilingualism*, 20(5), 510-528. https://doi.org/10.1080/13670050.2015.1080658
- Chen, H., Han, J., & Wright, D. (2020). An investigation of lecturers' teaching through English medium of instruction-A case of higher education in China. *Sustainability*, 12(10). <a href="https://doi.org/10.3390/su12104046">https://doi.org/10.3390/su12104046</a>
- Chen, Y., & Peng, J. (2019). Continuing professional development of EMI teachers: a Chinese case study. *Journal of Education for Teaching*, 45(2), 219-222. https://doi.org/10.1080/02607476.2018.1548177
- Chou, M.-H. (2018). Speaking Anxiety and Strategy Use for Learning English as a Foreign Language in Full and Partial English-Medium Instruction Contexts. *TESOL Quarterly*, 52(3), 611-633. https://doi.org/10.1002/tesq.455
- Chu, H.-N. R., Lee, W. S., & Obrien, P. W. (2018). Student satisfaction in an undergraduate international business EMI program: A case in southern Taiwan. *Journal of Studies in International Education*, 22(3), 198-209. <a href="https://doi.org/10.1177/1028315317748525">https://doi.org/10.1177/1028315317748525</a>
- Coleman, J. A. (2006). English-medium teaching in European higher education. *Language Teaching*, 39, 1-14.
- Curle, S., Yuksel, D., Soruc, A., & Altay, M. (2020). Predictors of English Medium Instruction academic success: English proficiency versus first language medium. *System*, 95. <a href="https://doi.org/10.1016/j.system.2020.102378">https://doi.org/10.1016/j.system.2020.102378</a>
- Dafouz, E. (2018). English-medium instruction and teacher education programmes in higher education: ideological forces and imagined identities at work. *International Journal of Bilingual Education and Bilingualism*, 21(5), 540-552. <a href="https://doi.org/10.1080/13670050.2018.1487926">https://doi.org/10.1080/13670050.2018.1487926</a>
- Dafouz, E., & Smit, U. (2016). Towards a dynamic conceptual framework for English-medium education in multilingual university settings. *Applied Linguistics*, *37*(3), 397-415. <a href="https://doi.org/10.1093/applin/amu034">https://doi.org/10.1093/applin/amu034</a>
- Dai, Y., & Wu, Z. (2021). 'You are missing a note': English-Medium Instruction in music master classes. *English Today, 37*(1), 58-64. https://doi.org/10.1017/s0266078419000427
- De Costa, P. I., Green-Eneix, C. A., & Li, W. (2020). Problematizing EMI language policy in a transnational world: China's entry into the global higher education market. *English Today*, 1-8. <a href="https://doi.org/10.1017/S026607842000005X">https://doi.org/10.1017/S026607842000005X</a>
- Dearden, J. (2015). English as a medium of instruction: A growing global phenomenon.

- Ding, F., & Stapleton, P. (2016). Walking like a toddler: Students' autonomy development in English during cross-border transitions. *System*, *59*, 12-28. <a href="https://doi.org/10.1016/j.system.2016.04.003">https://doi.org/10.1016/j.system.2016.04.003</a>
- Duran, D., Kurhila, S., & Sert, O. (2019). Word search sequences in teacher-student interaction in an English as medium of instruction context. *International Journal of Bilingual Education and Bilingualism*. https://doi.org/10.1080/13670050.2019.1703896
- Duran, D., & Sert, O. (2019). Preference organization in English as a Medium of Instruction classrooms in a Turkish higher education setting. *Linguistics and Education*, 49, 72-85. https://doi.org/10.1016/j.linged.2018.12.006
- Evans, S., & Morrison, B. (2018). Adjusting to higher education in Hong Kong: the influence of school medium of instruction. *International Journal of Bilingual Education and Bilingualism*, 21(8), 1016-1029. <a href="https://doi.org/10.1080/13670050.2016.1228600">https://doi.org/10.1080/13670050.2016.1228600</a>
- Fenton-Smith, B., Humphries, P., & Walkinshaw, I. (2017). English medium instruction in higher education in Asia Pacific: From policy to pedagogy. Springer.
- 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. <a href="https://doi.org/10.1016/j.jeap.2020.100846">https://doi.org/10.1016/j.jeap.2020.100846</a>
- Gardner, D., & Lau, K. (2019). One international university, two perspectives: The role of English as a lingua franca as perceived by Mainland and Hong Kong Chinese students. *Compare: A Journal of Comparative and International Education*, 49(2), 192-210. https://doi.org/10.1080/03057925.2017.1392846
- Graham, K. M., & Eslami, Z. R. (2019). Attitudes toward EMI in East Asia and the Gulf: A systematic review. *Language Problems & Language Planning*, 43(1), 8-31. https://doi.org/10.1075/lplp.00030.gra
- Graham, K. M., Eslami, Z. R., & Hillman, S. (2021). From English as the medium to English as a medium: Perspectives of EMI students in Qatar. *System*, *99*. https://doi.org/10.1016/j.system.2021.102508
- Gu, M. M., & Lee, J. C.-K. (2020). They lost internationalization in pursuit of internationalization": Students' language practices and identity construction in a crossdisciplinary EMI program in a university in China *Higher Education*, 79(5), 941-941. <a href="https://doi.org/10.1007/s10734-019-00444-x">https://doi.org/10.1007/s10734-019-00444-x</a>
- Han, Y., Li, W., Bao, M., & Cao, X. (2020). An Investigation of the Experiences of Working with Multilingual International Students among Local Students and Faculty Members in Chinese Universities. *Sustainability*, 12(16). <a href="https://doi.org/10.3390/su12166419">https://doi.org/10.3390/su12166419</a>
- He, J.-J., & Chiang, S.-Y. (2016). Challenges to English-medium instruction (EMI) for international students in China: A learners' perspective: English-medium education aims to accommodate international students into Chinese universities, but how well is it working? *English Today*, 32(4), 63-67. <a href="https://doi.org/10.1017/s0266078416000390">https://doi.org/10.1017/s0266078416000390</a>
- Hengsadeekul, C., Koul, R., & Kaewkuekool, S. (2014). Motivational orientation and preference for English-medium programs in Thailand. *International Journal of Educational Research*, 66, 35-44. <a href="https://doi.org/10.1016/j.ijer.2014.02.001">https://doi.org/10.1016/j.ijer.2014.02.001</a>

- Hu, G. (2019). English-Medium Instruction in Higher Education: Lessons from China. Journal of Asia TEFL, 16(1), 1-11. <Go to ISI>://KJD:ART002456994
- Hu, G. (2021). English as a medium of instruction in Chinese higher education: Looking back and looking forward. *Applied Linguistics Review*. <a href="https://doi.org/doi:10.1515/applirev-2021-0182">https://doi.org/doi:10.1515/applirev-2021-0182</a>
- Hu, G., & Duan, Y. (2019). Questioning and responding in the classroom: a cross-disciplinary study of the effects of instructional mediums in academic subjects at a Chinese university. *International Journal of Bilingual Education and Bilingualism*, 22(3), 303-321. <a href="https://doi.org/10.1080/13670050.2018.1493084">https://doi.org/10.1080/13670050.2018.1493084</a>
- Hu, G., & Lei, J. (2014). English-medium instruction in Chinese higher education: A case study [journal article]. *Higher Education*, 67(5), 551-567. https://doi.org/10.1007/s10734-013-9661-5
- Hu, G., Li, L., & Lei, J. (2014). English-medium instruction at a Chinese University: Rhetoric and reality. *Language Policy*, 13(1), 21-40. <a href="https://doi.org/10.1007/s10993-013-9298-3">https://doi.org/10.1007/s10993-013-9298-3</a>
- Hu, J., & Wu, P. (2020). Understanding English language learning in tertiary English-medium instruction contexts in China. *System*, 93. <a href="https://doi.org/10.1016/j.system.2020.102305">https://doi.org/10.1016/j.system.2020.102305</a>
- Huang, Y.-P. (2018). Learner Resistance to English-medium instruction practices: A qualitative case study. *Teaching in Higher Education*, *23*(4), 435-449. https://doi.org/10.1080/13562517.2017.1421629
- Jacknick, C. M., & Duran, D. (2021). Transforming student contributions into subject-specific expression. *System*, 98. <a href="https://doi.org/10.1016/j.system.2021.102485">https://doi.org/10.1016/j.system.2021.102485</a>
- Jang, H., & Wood, J. (2019). Native vs non-native English speaking teachers An analysis of business schools in the tertiary education sector. *Journal of Asia TEFL*, 16(3), 944-957. <Go to ISI>://KJD:ART002513582
- Jon, J.-E., Lee, J. J., & Byun, K. (2014). The emergence of a regional hub: comparing international student choices and experiences in South Korea. *Higher Education*, 67(5), 691-710. https://doi.org/10.1007/s10734-013-9674-0
- Kamasak, R., Sahan, K., & Rose, H. (2021). Academic language-related challenges at an English-medium university. *Journal of English for Academic Purposes, 49*. https://doi.org/10.1016/j.jeap.2020.100945
- Karim, A., Kabilan, M. K., Ahmed, Z., Reshmin, L., & Rahman, M. M. (2021). The medium of instruction in Bangladeshi higher education institutions: Bangla, English, or Both? Journal of Language Identity and Education. <a href="https://doi.org/10.1080/15348458.2020.1871353">https://doi.org/10.1080/15348458.2020.1871353</a>
- Kedzierski, M. (2016). English as a medium of instruction in East Asia's higher education sector: A critical realist Cultural Political Economy analysis of underlying logics. *Comparative Education*, *52*(3), 375-391. https://doi.org/10.1080/03050068.2016.1185269
- Kim, E. G., Kweon, S.-O., Lee, J.-A., & Park, S. (2021). Professional development for science and engineering professors offering English-medium instruction. *Language*

- *Teaching Research*. https://doi.org/10.1177/13621688211020915
- Kim, E. G., Park, S., & Baldwin, M. (2021). Toward successful implementation of introductory integrated content and language classes for EFL science and engineering students. TESOL Quarterly, 55(1), 219-247. <a href="https://doi.org/10.1002/tesq.594">https://doi.org/10.1002/tesq.594</a>
- Kim, J., Kim, E. G., & Kweon, S.-O. (2018). Challenges in implementing English-medium instruction: Perspectives of Humanities and Social Sciences professors teaching engineering students. *English for Specific Purposes*, 51, 111-123. https://doi.org/10.1016/j.esp.2018.03.005
- Kim, J., & Tatar, B. (2017). Nonnative English-Speaking Professors' Experiences of English-Medium Instruction and Their Perceived Roles of the Local Language. *Journal of Language Identity and Education*, 16(3), 157-171. https://doi.org/10.1080/15348458.2017.1295811
- Kong, M., & Wei, R. (2019). EFL learner's attitudes toward English-medium instruction in China: The influence of sociobiographical variables. *Linguistics and Education*, *52*, 44-51. <a href="https://doi.org/10.1016/j.linged.2019.03.005">https://doi.org/10.1016/j.linged.2019.03.005</a>
- Lee, K., & Lee, H. (2018). An EAP Professional Development Program for Graduate Students in an English-Medium Instruction Context. *TESOL Quarterly*, *52*(4), 1097-1107. <a href="https://doi.org/10.1002/tesq.447">https://doi.org/10.1002/tesq.447</a>
- Lee, Y.-J., & Davis, R. O. (2020). University ELLs' perceptions, evaluations, and satisfaction with EMI courses in Korea: Focusing on Communicative Language Teaching (CLT) and the Grammar-Translation Method (GTM). *Journal of Asia TEFL*, *17*(3), 1068-1076. <Go to ISI>://KJD:ART002633633
- Lei, J., & Hu, G. (2014). Is English-medium instruction effective in improving Chinese undergraduate students' English competence? *International Review of Applied Linguistics in Language Teaching*, *52*, 99-126.
- Leong, P. N. G. C. (2017). English-medium instruction in Japanese universities: policy implementation and constraints. *Current Issues in Language Planning*, *18*(1), 57-67. https://doi.org/10.1080/14664208.2016.1204053
- Li, C., & Ruan, Z. (2015). Changes in beliefs about language learning among Chinese EAP learners in an EMI context in Mainland China: A socio-cultural perspective. *System*, 55, 43-52. https://doi.org/10.1016/j.system.2015.08.010
- Li, M. (2018). The effectiveness of a bilingual education program at a Chinese university: a case study of social science majors. *International Journal of Bilingual Education and Bilingualism*, 21(8), 897-912. https://doi.org/10.1080/13670050.2016.1231164
- Lin, S. (2018). To speak or not to speak in the new Taiwanese university: Class participation and identity construction in linguistically and culturally diverse graduate classrooms. *Language and Intercultural Communication*, 18(2), 184-203. <a href="https://doi.org/10.1080/14708477.2017.1337778">https://doi.org/10.1080/14708477.2017.1337778</a>
- Lin, T., & Lei, J. (2021). English-medium instruction and content learning in higher education: Effects of medium of instruction, English proficiency, and academic ability. *Sage Open, 11*(4), 21582440211061533. <a href="https://doi.org/10.1177/21582440211061533">https://doi.org/10.1177/21582440211061533</a>

- Lu, Y.-H. (2020). A case study of EMI teachers' professional development: The impact of interdisciplinary teacher collaboration. *RELC Journal*. <a href="https://doi.org/10.1177/0033688220950888">https://doi.org/10.1177/0033688220950888</a>
- Macaro, E. (2018). English Medium Instruction: Content and language in policy and practice. Oxford University Press.
- Macaro, E., Akincioglu, M., & Han, S. (2020). English medium instruction in higher education: Teacher perspectives on professional development and certification. *International Journal of Applied Linguistics*, 30(1), 144-157. <a href="https://doi.org/10.1111/ijal.12272">https://doi.org/10.1111/ijal.12272</a>
- Macaro, E., Curle, S., Pun, J., An, J., & Dearden, J. (2018). A systematic review of English medium instruction in higher education. *Language Teaching*, 51(1), 36-76. https://doi.org/10.1017/s0261444817000350
- Macaro, E., & Han, S. (2020). English medium instruction in China's higher education: Teachers' perspectives of competencies, certification and professional development. *Journal of Multilingual and Multicultural Development, 41*(3), 219-231. https://doi.org/10.1080/01434632.2019.1611838
- McKinley, J., Rose, H., & Zhou, S. (2021). Transnational universities and English Medium Instruction in China: How admissions, language support and language use differ in Chinese universities. *RELC Journal*, *52*(2), 236-252. https://doi.org/10.1177/00336882211020032
- Murdoch, Y. D. (2019). International Students' Views of English-only Classes by Korean English-speaking Instructors at University in Korea. *Journal of Education & Culture*, 25(4), 813-834. <Go to ISI>://KJD:ART002495709
- Ou, W. A., & Gu, M. M. (2021). Competence beyond language: Translanguaging and spatial repertoire in teacher-student interaction in a music classroom in an international Chinese University. *International Journal of Bilingual Education and Bilingualism*. <a href="https://doi.org/10.1080/13670050.2021.1949261">https://doi.org/10.1080/13670050.2021.1949261</a>
- Ou, W. A., Gu, M. M., & Hult, F. M. (2020). Translanguaging for intercultural communication in international higher education: Transcending English as a lingua franca. *International Journal of Multilingualism*. <a href="https://doi.org/10.1080/14790718.2020.1856113">https://doi.org/10.1080/14790718.2020.1856113</a>
- Peng, J.-E., & Xie, X. (2021). English-Medium Instruction as a pedagogical strategy for the sustainable development of EFL learners in the Chinese context: A meta-analysis of its effectiveness. *Sustainability*, 13(10). https://doi.org/10.3390/su13105637
- Piller, I., & Cho, J. (2013). Neoliberalism as language policy. *Language in Society, 42*, 23-44. https://doi.org/doi:10.1017/S0047404512000887
- Rahman, M. M., & Singh, M. K. M. (2020). Language ideology of English-medium instruction in higher education: A case study from Bangladesh. *English Today*, *36*(4), 40-46. <a href="https://doi.org/10.1017/s0266078419000294">https://doi.org/10.1017/s0266078419000294</a>
- Rakhshandehroo, M., & Ivanova, P. (2020). International student satisfaction at Englishmedium graduate programs in Japan. *Higher Education*, 79(1), 39-54. https://doi.org/10.1007/s10734-019-00395-3

- Rose, H., Curle, S., Aizawa, I., & Thompson, G. (2020). What drives success in English medium taught courses? The interplay between language proficiency, academic skills, and motivation. *Studies in Higher Education*, 45(11), 2149-2161. https://doi.org/10.1080/03075079.2019.1590690
- Rose, H., McKinley, J., Xu, X., & Zhou, S. (2019). *Investigating policy and implementation of English-medium instruction in higher education institutions in China*.
- Sahan, K. (2020). ELF interactions in English-medium engineering classrooms. *ELT Journal*, 74(4), 418-427. <a href="https://doi.org/10.1093/elt/ccaa033">https://doi.org/10.1093/elt/ccaa033</a>
- Selvi, A. F. (2020). Resisting English medium instruction through digital grassroots activism. *Journal of Multilingual and Multicultural Development*.

  <a href="https://doi.org/10.1080/01434632.2020.1724120">https://doi.org/10.1080/01434632.2020.1724120</a>
- Song, Y. (2019). English language ideologies and students' perception of international English-Medium-Instruction (EMI) Master's programmes: A Chinese case study. *English Today, 35*(3), 22-28. <a href="https://doi.org/Pii">https://doi.org/Pii</a> s0266078418000408
- 10.1017/s0266078418000408
- 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. <a href="https://doi.org/10.1080/02188791.2020.1717437">https://doi.org/10.1080/02188791.2020.1717437</a>
- Song, Y., & Lin, A. M. Y. (2020). Translingual practices at a Shanghai university. *World Englishes*, 39(2), 249-262. <a href="https://doi.org/10.1111/weng.12458">https://doi.org/10.1111/weng.12458</a>
- Tai, T.-E., & Tang, C. W. (2021). The role of graduate students' learning strategies in reducing their English medium instruction avoidance: The mediation effect of language anxiety. *Asia Pacific Journal of Education*, 41(2), 368-384. https://doi.org/10.1080/02188791.2020.1777937
- Thompson, G., Aizawa, I., Curle, S., & Rose, H. (2019). Exploring the role of self-efficacy beliefs and learner success in English medium instruction. *International Journal of Bilingual Education and Bilingualism*. https://doi.org/10.1080/13670050.2019.1651819
- Toh, G. (2016). English as medium of instruction in Japanese higher education: Presumption, mirage or bluff? . Palgrave Macmillan.
- Tong, F., Wang, Z., Min, Y., & Tang, S. (2020). A systematic literature synthesis of 19 years of bilingual education in Chinese higher education: Where does the academic discourse stand? *Sage Open, 10*(2). <a href="https://doi.org/10.1177/2158244020926510">https://doi.org/10.1177/2158244020926510</a>
- Tsou, W., & Kao, S. (2017). English as a medium of instruction in higher education: Implementations and classroom practices in Taiwan. Springer.
- Wang, W., & Curdt-Christiansen, X. L. (2019). Translanguaging in a Chinese-English bilingual education programme: a university-classroom ethnography. *International Journal of Bilingual Education and Bilingualism*, 22(3), 322-337. https://doi.org/10.1080/13670050.2018.1526254
- Wang, Y., Yu, S., & Shao, Y. (2018). The experiences of Chinese mainland students with English-medium instruction in a Macau University. *Educational Studies*, 44(3), 357-360. <a href="https://doi.org/10.1080/03055698.2017.1373635">https://doi.org/10.1080/03055698.2017.1373635</a>

- Xie, W., & Curle, S. (2020). Success in English Medium Instruction in China: significant indicators and implications. *International Journal of Bilingual Education and Bilingualism*, 1-13. https://doi.org/10.1080/13670050.2019.1703898
- Yao, C. W., Collins, C., Bush, T., Briscoe, K. L., & Dang, N. L. T. (2021). English as a 'double barrier': English Medium Instruction and student learning at Vietnamese transnational universities. *Higher Education Research & Development*. https://doi.org/10.1080/07294360.2021.1896485
- Yuan, R. (2020). Promoting EMI teacher development in EFL higher education contexts: A teacher educator's reflections. *RELC Journal*, *51*(2), 309-317. https://doi.org/10.1177/0033688219878886
- Yuan, Z.-m., & Li, C.-n. (2021). Investigating English-medium instruction for international students in China. *Journal of Multilingual and Multicultural Development*. https://doi.org/10.1080/01434632.2021.1965614
- 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), 357-375. https://doi.org/10.1080/09500782.2021.1895827
- Zhang, Z. (2018). English-medium instruction policies in China: Internationalisation of higher education. *Journal of Multilingual and Multicultural Development*, *39*(6), 542-555. <a href="https://doi.org/10.1080/01434632.2017.1404070">https://doi.org/10.1080/01434632.2017.1404070</a>
- Zhao, J., & Dixon, L. Q. (Eds.). (2017). English-medium instruction in Chinese universities: Perspectives, discourse and evaluation. Routledge.