

WHAT MAKES AN EFFECTIVE LEARNER-CENTERED EMI CLASSROOM IN HIGHER EDUCATION? A QUALITATIVE SYSTEMATIC EXAMINATION OF STUDENTS' PERCEPTIONS USING THEMATIC SYNTHESIS APPROACH

M. Ismailov, Y. Yamamoto

University of Tsukuba (JAPAN)

Abstract

Learner-centered pedagogy remains insufficiently researched in connection with the English medium instruction (EMI) and internationalizing higher education. By focusing on primary qualitative studies, this research has used a systematic synthesis method to thematically explore university students' perspectives on the obstacles for implementing learner-centered EMI pedagogy in higher education. The CASP and COREQ protocols were rigorously and independently used by researchers to appraise and synthesize empirical articles, which met the inclusion criteria. The findings are based on insights gathered from over 1,700 participants in 20 countries and jurisdictions in which English was not the first language for the majority of populations. The synthesis yielded more than forty descriptive themes stratified into six large analytical domains, such as meta/linguistic, instructional, meta/cognitive, socio-cultural, affective, and institutional obstacles. The findings suggest that students in different parts of the world face quite similar obstacles in their EMI courses, in that many students associate poor quality of learning with their own and lecturers' inadequate English, and with excessive use of teacher-centered pedagogy that fosters limited classroom interaction.

Keywords: English medium instruction, learner-centered pedagogy, systematic thematic synthesis, higher education, student perspectives

1 INTRODUCTION

The English medium instruction (EMI) is known as 'the use of the English language to teach academic subjects (other than English itself) in countries or jurisdictions in which the majority of the population's first language is not English' ([1]). EMI is believed to be a 'growing global phenomenon' ([2]) as well as 'the most significant trend in educational internationalization' ([3]) 'that is developing at such a remarkable speed that is often beyond the control of policymakers and educational researchers' ([1]). Among all the key stakeholders of EMI in higher education (HE), including lecturers, administrators, and students, it is the latter whose perspectives and experiences have been extensively researched with their findings informing professional development programmes, pedagogical interventions, and institutional planning ([4], [5], [6]). Considering that learner-centered pedagogy is well established within HE research ([7], [8], [9]), however, to date, it has not been thoroughly addressed by EMI scholars. Researchers exploring EMI learners' classroom experiences have focused on specific pedagogical interventions within specific geographic, disciplinary or institutional contexts ([10], [11]), rather than taking a comprehensive approach to exploring what makes EMI classroom learner-centered.

Along with teacher-oriented EMI studies, learner-focused research has been dominated by large-scale quantitative data ([1]). While quantitative data provide numerically more accurate insights into certain variables and relationships within EMI, such models often omit micro factors that may be statistically insignificant, but contextually important. Qualitative studies, on the other hand, can help lecturers, researchers, and administrators to identify what learner-centered pedagogy means to students, and a considerable number of such studies has indeed been conducted. These studies are often not given deserved attention partly because each has been conducted in a specific setting with a specific sample and specific research focus. To gain a more comprehensive view of learner-centered EMI pedagogy, in this study our aim is to combine the results of multiple qualitative studies into a synthesis that offers a

range of meanings, experiences, and opinions of student participants across EMI contexts. The depths, scope and rigor of our thematic synthesis compared to a single study could also increase the potential to influence EMI policy and inform pedagogical practice ([12]).

2 METHODOLOGY

The study has adopted the ENTREQ framework (Enhancing Transparency in Reporting the Synthesis of Qualitative Research) ([13]). The framework helps researchers to report the stages most commonly associated with searching and selecting qualitative research, quality appraisal, and methods for synthesizing qualitative findings. Comprehensive searches were carried out in the Web of Science's Core Collection, which included Social Sciences Citation Index (SSCI), Arts & Humanities Citation Index (AHCI), Emerging Sources Citation Index (ESCI), Conference Proceedings Citation Index (CPCI), Book Citation Index (BCI), as well as in Scopus, ERIC, and Google Scholar databases. Given the systematic scope of the study, researchers have additionally conducted searches in the ProQuest Dissertations and Theses database that indexes abstracts and provides full-text access to dissertations and theses.

Seven criteria were used to guide the literature search, literature selection and quality appraisal. Two authors independently screened the titles and abstracts, removed those that did not meet the inclusion criteria, and assessed full-text versions of selected studies for eligibility. The comprehensiveness of reporting of each primary qualitative study was assessed in two stages. Independent reviewers used the CASP Qualitative Studies Checklist ([14]), a set of ten items designed to be answered with 'yes'/'can't tell'/'no' when critically assessing the comprehensiveness of each article. Selected studies were subjected to systematic thematic synthesis developed by Thomas and Harden, 2008 ([15]) based on the methods and principles from the broader qualitative primary research.

3 RESULTS

The included 40 studies included over 1,700 participants from 20 countries and jurisdictions. The geographic distribution of all participants in included studies is shown in Figure 1.

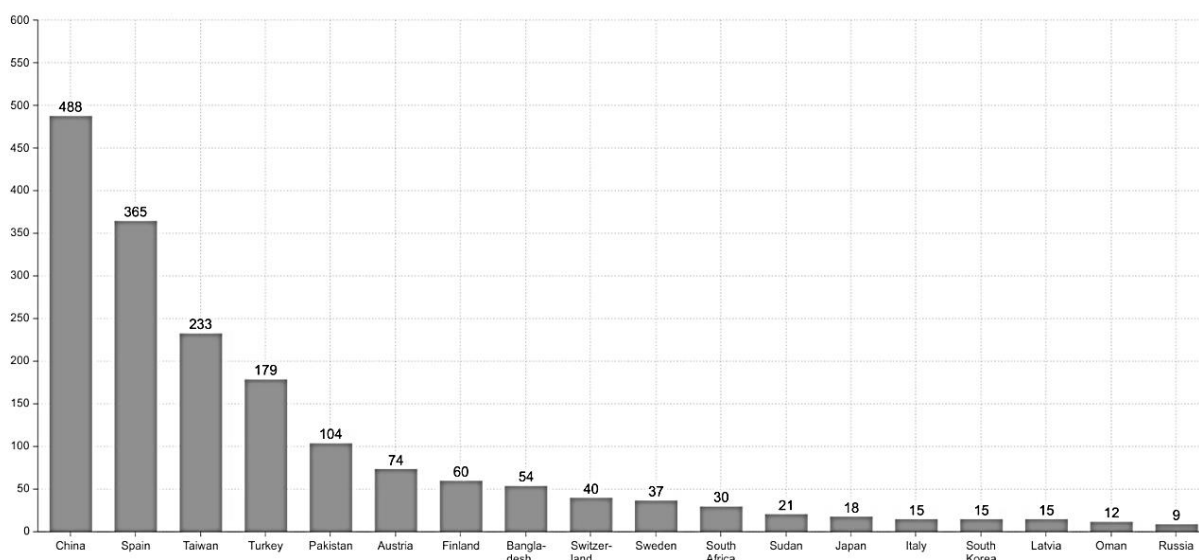


Figure 1. Geographic representation of participants in 40 studies

The six main analytical domains related to the issues and obstacles faced by students during their content learning with EMI were identified. These included meta/linguistic (reported by 35 studies), instructional (21 studies), socio-cultural (21 studies), meta/cognitive (19 studies), affective (16 studies), and institutional issues (8 studies).

3.1. Meta/linguistic issues

First, we explored the themes related to the students' attitudes toward content learning through EMI. Students referred to the practicality of EMI for some content disciplines in at least 10 studies. Among them some students expressed concerns and negative feelings ([16], [17], [18], [19]), while in other studies, they voiced mixed or positive views regarding the practical utility of EMI for content studying ([20], [21], [22], [23], [24], [25]). Also, students seem to have divergent perceptions of English in content classrooms, especially when it comes to comparisons among international and home students ([26], [27], [28], [19], [29]). We also examined a group of themes related to students' and lecturer's English proficiency, strategies used, and their effects on learning. For both home and international students in at least 12 studies concerns stemmed from adapting to bilingual academic environment in which students had students' low English proficiency. Students believed that their inadequate English was one of the leading causes of poor content comprehension ([30], [31], [16], [22], [32]).

The participants in 10 studies believed that the lecturers' low English proficiency was another major hurdle for content comprehension ([20], [22], [33], [25]), and it prevented course instruction 'in a deeper way', and jeopardized class facilitation and engagement ([22], [33]). Another related theme pointed to lecturers' non-standard language functions. Students referred to their inability to understand lectures due to lecturers' English pronunciation, intonation, accent, or dialect ([20], [28], [34], [35], [36]) which 'created difficulty in comprehension and caused the loss of concentration after 15 minutes of listening' ([28]). About 12 studies have systematically addressed extensive code-switching which refers to the alternation between languages in a specific communicative episode in an EMI classroom, like an oral presentation or responding to lecturer's question ([37]). Finally, we explored themes related to specific problems in an EMI classroom that exposed students' problems and necessitated student-centered interventions. Students in nearly half of the studies had encountered problems with speaking and oral presentation in English which affected their learning in various ways. The data specifically highlighted problems related to the lack of skills to 'speak in English in class' ([38], [30], [18], [22]), participation in discussions ([38], [30], [20], [27], [39]), answering questions in English ([40], [22]), pronunciation and peers' reactions ([18]), 'finding the right word' ([20]) and memorizing the slides ([35]), 'producing absurd sentences' ([22]), switching to L1 when unable to express it in English ([27]). At least 11 studies have systematically reported instances of students facing problems with EMI lecture comprehension. Namely, students experienced difficulty when prioritizing listening and/or taking notes at the same time ([38], [22]), with lecturer's speech rate being too fast ([38], [28]), in addition to learning and revising content that required more time, prolonged concentration, and additional energy compared with studying courses in students' native language ([40], [20], [35], [39]).

3.2. Instructional issues

This domain included themes related to the students' views of content lecturers' competencies and instructional strategies used in the EMI classroom. Data extracts from 21 studies (53%) have been synthesized into 6 themes. The most prevalent theme within the domain is related to students' frustration with 'monological' ([33], [36]), non-interactive lecturing that negatively affected students' concentration, motivation and learning in an EMI classroom ([40], [20], [21], [41], [16], [22], [33], [32], [34]). Along with lecturing style, students were also concerned with the assessment issues when attending EMI content subjects (10 studies). In some cases, students felt 'stressful' that subject learning through EMI 'might have an influence on their final marks because they have difficulties to express themselves in English' ([20], [16]) and some suggested that tests and exams should be flexible to allow the use of students' L1 ([30], [16]). Students also felt that because a typical EMI course brings together students from all kinds of linguistic, cultural and educational backgrounds, attending to students' diverse needs and abilities when teaching content courses would significantly enhance the learning outcomes ([40], [41], [22], [33], [32], [39]). In addition, students in five studies mentioned lecturers' speaking rate as a double obstacle for lecture comprehension ([38], [42], [40], [22], [28]) reported as 'keeping up with the teacher and the topic'. The lack of lecturer's clarification and corrective feedback was another problem face by students in five studies ([43], [17], [42], [28], [44]).

3.3. Socio-cultural issues

One of the major recurring themes in this domain were the challenges of communication among home and international students. Though this and other following themes may not be directly related to EMI pedagogy, they do however significantly impact EMI lecturers' pedagogic repertoires when implementing interactive assignments. Especially, communication breakdowns between these two groups were explained by poor or non-standard spoken English ([45], [31], [22]). Another critical issue that students brought forward to express their frustration when studying in culturally mixed groups was multiple and/or unfamiliar accents ([45], [46], [22], [32], [47], [24]). Another theme that further highlights

the importance socio-cultural factors was linked to home/international students' divergent attitudes toward class participation ([33], [26], [27], [47], [34]). Finally, one of the important recurring themes within the socio-cultural domain was out-of-class learning reported in at least 8 studies ([43], [17], [42], [20], [41], [32], [35], [48]). An important aspect of it related to learner autonomy, i.e. the challenges of adapting to what students referred to as 'independent learning culture' at English-medium universities ([32]).

3.4. Meta/cognitive issues

Given the complexity of studying content subjects in L2 students in at least 11 studies (28%) have pointed to the problem of processing and comprehension of difficult content. Some students suggested that the concepts were 'too overwhelming and difficult' not only for students to learn ([41]), but even for lecturers to teach ([20]). One of the factors that further complicated the processing of new/difficult concepts was students' poor background knowledge or schema building ([38], [40], [20], [49]) especially in the fields of STEM, psychology ([38], [40]), and various research methods. Another hurdle related to this cognitive domain and reported by students was the lecturers' extensive use of technical language (reported in 7 studies) that were not necessarily English vocabulary. Finally, one emerging theme that negatively affected students' engagement, especially during seminars and discussions, was students' poor rhetorical and critical thinking skills ([49], [32], [44]). Students pointed to the lack of prior training for critical and content discussion (e.g., 'grasping and reflecting on author's reasoning and proposing alternative methods/perspectives') during lectures, presentations, team projects, and when writing essays [49].

3.5. Affective issues

This domain included themes related to students' social-emotional and motivational responses toward EMI. Data from 16 studies (40%) have been synthesized and grouped into 10 descriptive themes. Students in at least 6 studies reported their lack of confidence when taking the EMI courses ([43], [40], [41], [16], [22], [39]). Although many themes in this domain were closely intertwined, some themes, such as fear of losing face ([43], [18], [16], [22], [27]) were even strongly linked to one another. This theme covered situations when students were to interact with native English-speaking lecturers ([43], [22]) or present/speak in front of the class ([22], [27]) as well as with problems of pronunciation ([18]) and perceived overall ability 'to get through' the course ([16]). Fear of losing face in the context of communication among students with poor English and their native English-speaking lecturers seemed to negatively affect the building of teacher-student rapport ([43], [46]). Students expressed their frustration ([46], [41], [16], [22], [27], [32]) when they had to follow local cultural norms and refrain from disagreeing with faculty ([46]) or were required to attend courses with poor relevance to their academic majors ([41], [27]), as well as with poor comprehension of content knowledge in English and when collaborating with students ([32]) with lower English proficiency ([16]), and the lectures being too 'teacher-centered' ([32]).

3.6. Institutional issues

This domain included themes related to university-wide policies and conditions affecting students' learning in EMI classrooms. Compared to the previous five domains, the institutional needs were less evident in students' responses. Eight studies (20%) in total have referred to these needs, which were then synthesized and grouped into 3 themes. Somewhat implicitly students mention ineffective curriculum designs and planning in their universities ([41], [27], [39], [36]) that affected the ways how EMI classes were conducted, and classroom experiences were affected. Some students stressed that compulsory EMI courses did not take into consideration students' content needs and language levels increasing students' disengagement ([41], [27]). Another theme focused on inadequate self-access support ([50], [20], [48], [39]), i.e. the access to facilities and programmes organized by home institutions to help students improve their academic English skills.

4 CONCLUSIONS

The synthesis has confirmed findings of numerous individual studies that many students believe in the usefulness of their EMI experiences to gain new content knowledge, enhance their English language skills, improve chances of future employment and career growth. But the key barriers for their participation could be categorized into six large domains which include teacher-centered pedagogical approaches, lecturers' lack of language awareness, as well students own unpreparedness to effectively participate in EMI courses, among many other factors. The findings of this synthesis are consistent with

previous studies that highlighted the critical role of language and academic skills from both students' and lecturers' perspectives ([4], [6], [5]) as well as the need for dialogical, interactive and multimodal pedagogical approaches in the EMI implementation in higher education ([1], [50], [51], [52]). In addition, evidence exists suggesting that lecturer-student and student-student interactions in the EMI context indeed transcend linguistic and metacognitive territories ([53], [54], [55], [56]), and may be closely linked to other realms, such as socio-cultural and affective ([57], [58], [59], [60], [61], [62], [63]).

The key strength of this research is the extensive primary qualitative literature search, and it is the first study known to the authors employing systematic thematic synthesis methodology to examine students' views and experiences toward EMI. The review process was transparent, systematic, and included empirical studies from a variety of academic subjects and geographies. Also, rigorous article eligibility criteria allowed for a stronger internal validity. We thoroughly followed the ENTREQ, CASP, PRISMA, and COREQ protocols in conducting this synthesis. However, since in this synthesis we did not attempt to stratify our findings using various EMI models and typologies (such as different purposes of EMI, diverse curriculum models, EMI introduction and access models, etc.) ([64], [1]), the findings of this study may not be readily applied to a specific EMI context. As such, future review studies in specific and unique contexts may be warranted. Additionally, while the overall findings from this synthesis were based on insights gathered from a large sample of 1,772 university and college students in 18 countries of the world, the findings from several quantitative articles included in this review were limited by small sample sizes ([31], [33], [27], [47]).

ACKNOWLEDGEMENTS

The research was supported by the JSPS Grant-in-Aid for Scientific Research (Category C) #21K00701. The authors also wish to thank the Nippon Foundation and the NipCA Project at the University of Tsukuba for sponsoring the authors' participation in the ICERI2021 International Virtual Conference. In addition, the authors would like to thank professors Thomas K.F. Chiu, Julie Dearden and Rustam Shadiev for their comments on the earlier versions of this paper.

REFERENCES

- [1] E. Macaro, *English Medium Instruction. Content and language in policy and practice*, Oxford: Oxford University Press, 2018.
- [2] J. Dearden, *English as a medium of instruction – a growing global phenomenon*, London: British Council, 2015. Retrieved from <https://ora.ox.ac.uk/objects/uuid:4f72cdf8-b2eb-4d41-a785-4a283bf6caaa>
- [3] J. Chapple, "Teaching in English Is Not Necessarily the Teaching of English," *IES*, Vol. 8, No. 3, 2015. <https://doi.org/10.5539/ies.v8n3p1>.
- [4] E. Macaro, S. Curle, J. Pun, J. An, J. Dearden, "A Systematic Review of English Medium Instruction in Higher Education," *Lang. Teach.*, Vol. 51, No. 1, pp. 36–76, 2017. <https://doi.org/10.1017/s0261444817000350>.
- [5] S. Curle, D. Yuksel, A. Soruç, M. Altay, "Predictors of English Medium Instruction Academic Success: English Proficiency versus First Language Medium," *System*, Vol. 95, No. 102378, 2020. <https://doi.org/10.1016/j.system.2020.102378>.
- [6] H. Rose, S. Curle, I. Aizawa, G. Thompson, "What Drives Success in English Medium Taught Courses? The Interplay between Language Proficiency, Academic Skills, and Motivation," *Studies in Higher Education*, Vol. 45, No. 11, pp. 2149–2161, 2019. <https://doi.org/10.1080/03075079.2019.1590690>.
- [7] A. W. Chickering, Z.F. Gamson, "Seven Principles for Good Practice in Undergraduate Education," *The Wingspread Journal*, Vol. 9, pp. 1–10, 1987.
- [8] M. Weimer, *Learner-centered teaching: Five key changes to practice*, USA: Jossey-Bass, 2002.
- [9] M. D. Merrill, "First Principles of Instruction," *ETR&D*, Vol. 50, No. 3, pp. 43–59, 2002. <https://doi.org/10.1007/bf02505024>.
- [10] L. Li, "Student Perceptions of the Teaching of Principles of Management Using English-Medium Instruction," *Journal of Education for Business*, Vol. 95, No. 2, pp. 115–120, 2019. <https://doi.org/10.1080/08832323.2019.1604484>.

- [11] E. Macaro, L. Tian, L. Chu, "First and Second Language Use in English Medium Instruction Contexts. *Language Teaching Research*," Vol. 24, No. 3, pp. 382–402, 2018. <https://doi.org/10.1177/1362168818783231>.
- [12] Á. Rocha, M.J.A. Gonçalves, A.F. da Silva, S. Teixeira, R. Silva, "Leadership Challenges in the Context of University 4.0. A Thematic Synthesis Literature Review," *Comput Math Organ Theory* 2021. <https://doi.org/10.1007/s10588-021-09325-0>
- [13] A. Tong, K. Flemming, E. McInnes, S. Oliver, J. Craig, "Enhancing Transparency in Reporting the Synthesis of Qualitative Research: ENTREQ," *BMC Med Res Methodol*, Vol. 12, No. 1, 2012. <https://doi.org/10.1186/1471-2288-12-181>
- [14] Critical Appraisal Skills Programme. CASP Qualitative Studies Checklist. 2018 [online] Retrieved from https://casp-uk.b-cdn.net/wp-content/uploads/2018/03/CASP-Qualitative-Checklist-2018_fillable_form.pdf.
- [15] J. Thomas, A. Harden, "Methods for the Thematic Synthesis of Qualitative Research in Systematic Reviews," *BMC Med Res Methodol*, Vol. 8, No. 1, 2008. <https://doi.org/10.1186/1471-2288-8-45>
- [16] M. S. Salaberri-Ramiro, M. del M. Sánchez-Pérez, "Motivations of Higher Education Students to Enroll in Bilingual Courses," *Porta Linguarum: International Journal of Didactics of Foreign Languages*, Vol. 3, pp. 61–74, 2018. DOI: 10.30827/Digibug.54161
- [17] H. I. Holi Ali, "Omani Students' Coping Strategies in an English Medium Engineering Programme." *AWEJ*, Vol. 11, No. 2, pp. 361–382, 2020. <https://doi.org/10.24093/awej/vol11no2.25>
- [18] A. Doiz, D. Lasagabaster, "Teachers' and Students' Second Language Motivational Self System in English-Medium Instruction: A Qualitative Approach," *TESOL Q*, Vol. 52, No. 3, pp. 657–679, 2018. <https://doi.org/10.1002/tesq.452>
- [19] A. Doiz, D. Lasagabaster, J. Sierra, "Globalisation, Internationalisation, Multilingualism and Linguistic Strains in Higher Education." *Studies in Higher Education*, Vol. 38, No. 9, pp. 1407–1421, 2013. <https://doi.org/10.1080/03075079.2011.642349>
- [20] L. Rowland, N. Murray, "Finding Their Feet: Lecturers' and Students' Perceptions of English as a Medium of Instruction in a Recently-Implemented Master's Programme at an Italian University," *Journal of Multilingual and Multicultural Development*, Vol. 41, No. 3, pp. 232–245, 2019. <https://doi.org/10.1080/01434632.2019.1614186>
- [21] W. Wang, X.L. Curdt-Christiansen, "Translanguaging in a Chinese–English Bilingual Education Programme: A University-Classroom Ethnography," *International Journal of Bilingual Education and Bilingualism*, Vol. 22, No. 3, pp. 322–337, 2018. <https://doi.org/10.1080/13670050.2018.1526254>
- [22] A. Soruç, C. Griffiths, "English as a Medium of Instruction: Students' Strategies," *ELT Journal*, Vol. 72, No. 1, pp. 38–48, 2017. <https://doi.org/10.1093/elt/ccx017>
- [23] A. Henry, A. Goddard, Bicultural or Hybrid? "The Second Language Identities of Students on an English-Mediated University Program in Sweden," *Journal of Language, Identity & Education*, Vol. 14, No. 4, pp. 255–274, 2015. <https://doi.org/10.1080/15348458.2015.1070596>
- [24] K. K. Pitkänen, R. Siddall, T. Lehtonen, "The Linguistic Landscape of International Students in English-Medium Master's Programmes at the University of Helsinki: Student Perceptions on the Use of English and Plurilingualism," *Language Learning in Higher Education*, Vol. 2, No. 2, 2013. <https://doi.org/10.1515/cercles-2012-0023>
- [25] D. Tatzl, "English-Medium Masters' Programmes at an Austrian University of Applied Sciences: Attitudes, Experiences and Challenges," *Journal of English for Academic Purposes*, Vol. 10, No. 4, pp. 252–270, 2011. <https://doi.org/10.1016/j.jeap.2011.08.003>
- [26] S. Lin, "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*, Vol. 18, No. 2, pp. 184–203, 2017. <https://doi.org/10.1080/14708477.2017.1337778>
- [27] C. C. M. Sung, "Understanding Classroom Participation and Identity Negotiation: An Undergraduate Student's L2 Learning Experiences in an English-Medium University in Hong

- Kong," *Applied Linguistics Review*, Vol. 8, No. 4, pp. 375–399, 2017. <https://doi.org/10.1515/applirev-2016-1026>.
- [28] V. Malavska, "Problems Students Encounter with Note-Taking in English-Medium Instruction," *Baltic Journal of English Language, Literature and Culture*, Vol. 7, pp. 121–138, 2017.
- [29] M. O. Hamid, I. Jahan, M. M. Islam, "Medium of Instruction Policies and Language Practices, Ideologies and Institutional Divides: Voices of Teachers and Students in a Private University in Bangladesh," *Current Issues in Language Planning*, Vol. 14, No. 1, pp. 144–163, 2013. <https://doi.org/10.1080/14664208.2013.771417>
- [30] M. Fareed, A. Ashraf, Sh. Mushtaque, "Medium of Instruction in Education: Perceptions of Teachers and Students from Pakistani School, College and University," *FWU Journal of Social Sciences*, Vol. 13, No. 3, pp. 134–143, 2019.
- [31] M. Kuteeva, "Revisiting the 'E' in EMI: Students' Perceptions of Standard English, Lingua Franca and Translingual Practices," *International Journal of Bilingual Education and Bilingualism*, Vol. 23, No. 3, pp. 287–300, 2019. <https://doi.org/10.1080/13670050.2019.1637395>
- [32] B. Yu, E. Wright, "Academic Adaptation amid Internationalisation: The Challenges for Local, Mainland Chinese, and International Students at Hong Kong's Universities," *Tertiary Education and Management*, Vol. 23, No. 4, pp. 347–360, 2017. <https://doi.org/10.1080/13583883.2017.1356365>
- [33] Y.-P. Huang, "Learner Resistance to English-Medium Instruction Practices: A Qualitative Case Study," *Teaching in Higher Education*, Vol. 23, No. 4, pp. 435–449, 2018. <https://doi.org/10.1080/13562517.2017.1421629>
- [34] J.-J. He, S.-Y. Chiang, "Challenges to English-Medium Instruction (EMI) for International Students in China: A Learners' Perspective," *English Today*, 32 (4), pp. 63–67, 2016. <https://doi.org/10.1017/s0266078416000390>
- [35] F. Ding, P. Stapleton, "Walking like a Toddler: Students' Autonomy Development in English during Cross-Border Transitions," *System*, Vol. 59, pp. 12–28, 2016. <https://doi.org/10.1016/j.system.2016.04.003>
- [36] P. Studer, "Coping with English: Students' Perceptions of Their Teachers' Linguistic Competence in Undergraduate Science Teaching," *International Journal of Applied Linguistics*, Vol. 25, No. 2, pp. 183–201, 2014. <https://doi.org/10.1111/ijal.12062>
- [37] B. Goodman, S. Tastanbek, "Making the Shift From a Codeswitching to a Translanguaging Lens in English Language Teacher Education," *TESOL J*, Vol. 55, No. 1, pp. 29–53, 2020. <https://doi.org/10.1002/tesq.571>
- [38] A. Alhassan, N. A. Ali, H. I. H. Ali, "EFL Students' Challenges in English-Medium Business Programmes: Perspectives from Students and Content Teachers," *Cogent Education*, Vol. 8, No. 1, pp. 1888671, 2021. <https://doi.org/10.1080/2331186x.2021.1888671>
- [39] E. Sibomana, "“We Know What to Say, We Know What to Write, but We Don't Know How”: The Challenges of Becoming Academically Literate in a New Linguistic and Socio-Cultural Space," *Education as Change*, Vol. 20, No. 2, pp. 17159/1947-9417/2016/747, 2016. <https://doi.org/10.17159/1947-9417/2016/747>
- [40] T.-L. Hua, "Understanding the Learning Challenges of English-Medium Instruction Learners and Ways to Facilitate Their Learning: A Case Study of Taiwan Psychology Students' Perspectives," *Latin American Journal of Content & Language Integrated Learning*, Vol. 12, No. 2, pp. 321–340, 2020. <https://doi.org/10.5294/lacil.2019.12.2.6>
- [41] S. Chalapati, R. Leung, N. Chalapati, "Exploring Factors Affecting First-Year Students' Learning Experiences: A Case Study of a Private University in Taiwan," *SUCCESS*, Vol. 9, No. 4, pp. 25–39, 2018. <https://doi.org/10.5204/ssj.v9i4.651>
- [42] M. Yeung, "The Use of English As a Medium of Instruction in Higher Education in Post-Colonial Hong Kong - Perceived Realities And Issues," *Taiwan Journal of TESOL*, Vol. 17, No. 2, pp. 39–64, 2020. DOI: 10.30397/TJTESOL.202010_17(2).0002
- [43] S. Yu, Y. Wang, L. Jiang, B. Wang, "Coping with EMI (English as a Medium of Instruction): Mainland China Students' Strategies at a University in Macau," *Innovations in Education and*

Teaching International, Vol. 58, No. 4, pp. 462–472, 2021.
<https://doi.org/10.1080/14703297.2020.1784248>

- [44] S. Yeon, “Globalization in the Classroom: A Qualitative Study on Teaching and Learning in English-Medium Courses at a University in South Korea” (Unpublished PhD Dissertation), USA: University of Washington, 2018. Retrieved from https://digital.lib.washington.edu/researchworks/bitstream/handle/1773/42925/Yeon_washington_0250E_19015.pdf?sequence=1
- [45] S.-W. Lan, “Intercultural Interaction in English: Taiwanese University Students’ Investment and Resistance in Culturally Mixed Groups,” *SAGE Open*, Vol. 10, No. 3, 215824402094186, 2020. <https://doi.org/10.1177/2158244020941863>
- [46] Y. Han, W. Li, M. Bao, X. Cao, “An Investigation of the Experiences of Working with Multilingual International Students among Local Students and Faculty Members in Chinese Universities,” *Sustainability*, Vol. 12, No. 16, 6419, 2020. <https://doi.org/10.3390/su12166419>
- [47] N. Hino, “The Significance of EMI for the Learning of EIL in Higher Education: Four Cases from Japan,” In Editors: B. Fenton-Smith, P. Humphreys, I. Walkinshaw (Eds.), *English Medium Instruction in Higher Education in Asia-Pacific*, UK: Springer International Publishing, pp 115–131, 2017. https://doi.org/10.1007/978-3-319-51976-0_7
- [48] M. Somniso, M. Cekiso, B. Tshotsho, M. Lydy, “Exploring the Coping Strategies Employed by Congolese Students in a South African University,” *International Journal of Educational Sciences*, Vol. 12, No. 3, pp. 212–218, 2016. <https://doi.org/10.1080/09751122.2016.11890428>
- [49] Y. Song, “Forming Critical Selves through Lived Experiences of Interculturality in an Internationalizing University in China,” *Asia Pacific Journal of Education*, Vol. 40, No. 3, pp. 299–314, 2020. <https://doi.org/10.1080/02188791.2020.1717437>
- [50] E. Macaro, L. Tian, “Developing EMI Teachers through a Collaborative Research Model”, *Journal of Multilingual and Multicultural Development*, Vol. 0, No. 0, pp. 1–16, 2020. <https://doi.org/10.1080/01434632.2020.1862131>
- [51] T. Morell, “Multimodal Competence and Effective Interactive Lecturing,” *System*, Vol. 77, pp. 70–79, 2018. <https://doi.org/10.1016/j.system.2017.12.006>
- [52] M. Ismailov, Y. Ono, “Assignment Design and Its Effects on Japanese College Freshmen’s Motivation in L2 Emergency Online Courses: A Qualitative Study,” *Asia-Pacific Edu Res*, Vol. 30, No. 3, pp. 263–278, 2021. <https://doi.org/10.1007/s40299-021-00569-7>
- [53] B. Goodman, D. Montgomery, ““Now I Always Try to Stick to the Point”: Socialization to and from Genre Knowledge in an English-Medium University in Kazakhstan,” *Journal of English for Academic Purposes*, Vol. 48, 100913, 2020. <https://doi.org/10.1016/j.jeap.2020.100913>
- [54] M. Ismailov, J. Laurier, “We Are in “the Breakout Room.” Now What? An e-Portfolio Study of Virtual Team Processes Involving Undergraduate Online Learners,” *E-Learning and Digital Media*, 204275302110397, 2021. <https://doi.org/10.1177/20427530211039710>
- [55] M. Ismailov, “Conceptualizing an Inquiry-Based Lingua-Cultural Learning through Telecollaborative Exchanges,” *F1000Research*, Vol. 10, No. 677, 2021. <https://doi.org/10.12688/f1000research.55128.2>
- [56] M. Ismailov, “Designing motivating online assignments and telecollaborative tasks in the time of a pandemic: evidence from a post-course survey study in Japan,” In E. Langran E and L. Archambault (eds.) *Culture in the Communication Age. Proceedings of Society for Information Technology Conference (SITE)*, pp. 600–609, 2021. <https://doi.org/10.6084/m9.figshare.14390888.v1>
- [57] G. Chell, M. Mikkilä-Erdmann, T. Iiskala, A. Dillon, “A comparative study of academic literacy in English medium instruction programs in UAE and Finland,” *Issues in Educational Research*, Vol. 31, No. 1, pp. 56-75, 2021.
- [58] C. J. Denman, R. Al-Mahrooqi, “English Medium Instruction, Arabic and Identity in Oman’s Higher Education Institutions: Teacher and Student Attitudes,” *English Teaching and Learning*, Vol. 43, No. 3, pp. 317–335, 2019. <https://doi.org/10.1007/s42321-019-00032-3>

- [59] C. Li, Z. Ruan, "Changes in Beliefs about Language Learning among Chinese EAP Learners in an EMI Context in Mainland China: A Socio-Cultural Perspective," *System*, Vol. 55, pp. 43–52, 2015. <https://doi.org/10.1016/j.system.2015.08.010>
- [60] T. K. F. Chiu, "Digital support for student engagement in blended Learning based on Self-determination Theory," *Computers in Human Behavior*, Vol. 124, 106909, 2021. <http://dx.doi.org/10.1016/j.chb.2021.106909>
- [61] T. K. F. Chiu, "Student engagement in K-12 online learning amid COVID-19: A qualitative approach from a self-determination theory perspective," *Interactive Learning Environments*, 2021. <http://dx.doi.org/10.1080/10494820.2021.1926289>
- [62] T. K. F. Chiu, "Applying the Self-determination Theory (SDT) to explain student engagement in online learning during the COVID-19 pandemic. *Journal of Research on Technology in Education*," Vol. 4, pp. 1-17, 2021. <http://dx.doi.org/10.1080/15391523.2021.1891998>
- [63] T. K. F. Chiu, T. K. F. Hew, "Asynchronous online discussion forum in MOOCs: Does openness matter for peer learning and performance?" *Australasian Journal of Educational Technology*, Vol. 34, No. 4, pp. 16-28, 2018. <https://doi.org/10.14742/ajet.3240>
- [64] J. C. Richards, J. A. Pun, "Typology of English-Medium Instruction," *RELC Journal*, 003368822096858, 2021. <https://doi.org/10.1177/0033688220968584>