

Citation: Farid, M. F., Parveen, S., & Iqbal, A. (2023). Students Perceptions Regarding English as a Medium of Instruction and its Effects on Their Learning at the University Level. *Global Educational Studies Review*, VIII(I), 485-495.
[https://doi.org/10.31703/gesr.2023\(VIII-I\).42](https://doi.org/10.31703/gesr.2023(VIII-I).42)



Students Perceptions Regarding English as a Medium of Instruction and its Effects on Their Learning at the University Level

Muhammad Faisal Farid *

Sabahat Parveen †

Asif Iqbal ‡

Corresponding Author: Muhammad Faisal Farid (Assistant Professor, Department of Education, University of Education, Lahore, Punjab, Pakistan.
Email: dr.faisal.farid@ue.edu.pk)

Abstract: This study investigates students' perceptions of EMI and its impact on learning, aiming to provide insights into the complex dynamics surrounding this educational approach. Two hundred students from various academic backgrounds and language proficiencies were surveyed, and questionnaires were filled up to gather their perceptions of EMI. The findings reveal a multifaceted picture of how students perceive English as the medium of instruction in their studies. Pupils expressed both positive and negative perceptions regarding EMI. Many valued EMI for global academic access and improved English proficiency. However, challenges related to language comprehension, communication, and a sense of identity emerged as significant concerns. Moreover, the students' perceptions often depended on their language proficiency and prior exposure to English SL. The effects of EMI on students' learning outcomes were found to be influenced by various factors, including instructional quality, the level of language support provided, and the student's own language skills.

Key Words: Students Learning, Instruction Medium, Native Language

Introduction

English as a medium of instruction (EMI) is used in educational settings and has dominated globally, with profound implications for students' learning experiences. According to Ahmed, et al., (2013), the term "medium of instruction" refers to language that teachers use to convey information in the class. According to the National Education Policy (1979), Urdu or another language recommended by the Provincial Assembly should be used as the primary language of instruction in all

government-established English-medium schools. Urdu is used as a primary language for teaching in higher classes, according to Farakh and Choudhry (2013). Similar recommendations were made in the education policy (1992), which stated that Urdu would be the medium of teaching at the basic level (Shakoor, et al., 2011). According to the National Educational Policy (2009), English is required as a subject for students in grades one through fourteen. According to Ahmed, et al. (2013), the majority of schools use Urdu as their primary language of instruction. Urdu and

* Assistant Professor, Department of Education, University of Education, Lahore, Punjab, Pakistan.

† Assistant Professor, Department of English, University of Education, Lahore, Punjab, Pakistan.

‡ Associate Professor, Department of Education, University of Education, Lahore, Punjab, Pakistan.

English are both recognized as official languages of Pakistan. For students, Urdu is simpler and easier to understand than English. According to Ahmed (2011), who conducted this study, English should be the medium of teaching at the higher secondary level, whereas Urdu should be introduced in different grades. In order for both teachers and students to be satisfied with the teaching and learning process, it is established that the medium of instruction should be understandable. According to a study by Parveen, et al., (2008), students should only receive instruction in their preferred medium of instruction. A native language must be employed as the medium of instruction for learning to take place effectively and for students to flourish academically.

According to studies (Al-Mashikhi, et al., 2014; Sivaraman, et al., 2014), Due to limited English language proficiency, EMI can be problematic for students and does not adequately prepare students for the job market (Baporikar & Shah, 2012). Therefore, it is assumed that enhancing the quantity and quality of their English studies could solve these problems. This study is important because it examines and challenges the concept of EMI through the reporting of student learning experiences, which are predominantly influenced by the EMI policy but whose perspectives are not considered in the formulation of language education policy. This study aims to cast light on an understudied topic: the psychological effects that the EMI policy may have on students affect their learning experiences. Additionally, it seeks to investigate the methods that students use to read and write in a foreign language, two crucial abilities for academic success that have until now received little attention in university settings. Tollefson (2013) contends that methods must be developed "to ensure that individuals and groups who are affected by policies have direct involvement and power in policymaking" in order to eliminate educational inequality. The study's background is important since Gulf nations adopted the EMI strategy, and the Government made significant monetary and human investments to assist English-language instruction (Al-Mahrooqi,

2012a; McLaren, 2011). In countries where English is the language of teaching but the native tongue is used for communication outside of the classroom, the context may also be significant.

The results of the analysis showed that students' self-efficacy for learning is significantly impacted by the medium of instruction. When compared to secondary-level second language learners, students learning in their native tongue exhibit higher levels of self-efficacy. According to the study's findings, the researcher suggested that Urdu, the country's official language, be used as a medium of instruction up to the secondary level at the very least (Shakoor, et al., 2016).

Pakistan's education system suffers as a result of this contradiction. A nation will inevitably lag behind if it does not use its own language as a medium of education (Khan, 2006). English is not their primary language of instruction, students at our institutions have developed the habit of forgetting the material. Learning a second language limits students' ability to think creatively. In Pakistan, the subject of the teaching medium is still open for discussion. Therefore, the researchers sought to determine how students' motivation for learning at the secondary level was affected by the medium of instruction.

Analysis revealed that students' self-efficacy was positively and significantly impacted by the medium of teaching. The current study also showed that students in Urdu classes do better since Urdu is similar to their native tongue. In contrast to the findings above, the study by Mills, et al., (2007) revealed a significant beneficial impact of the teaching medium on students' self-efficacy. Bandura (1997) found that pupils with lower levels of self-efficacy exhibited low ambitions that could lead to subpar academic achievement. The results of Tripathi (2013) were in line with the findings above, and it was determined that students who took English classes had better levels of self-efficacy.

EMI courses have been extensively used at all levels of education, particularly in Chinese universities, for the past two decades (Zhang

and Pladevall-Ballester, 2021), with the dual purpose of enhancing students' subject knowledge and English proficiency. Due to the prevalence of EMI in postsecondary education, a number of researchers have investigated its effectiveness in achieving course objectives (Lei and Hu, 2014), questioned the calibre of the faculty who are instructing academic subjects in English (Hu, 2007), and investigated how the English language is actually used, given that teachers and students have different levels of English proficiency (Pan, 2007). According to Wang and Curdt-Christiansen's observations of trans-language practices in EMI classrooms in Chinese universities, EMI courses in China should be "reconceptualized" (Gao & Ren, 2019) in the direction of transitional bilingual instruction, in which students receive English instruction for the majority of the curriculum time in order to achieve cultural enrichment (Hu, 2008; Zhou, et al., 2022).

According to the available literature (Costa and Coleman 2013; Tong and Shi 2012; Wilkinson 2013), there are a number of complex findings associated with learning outcomes and the effects of electromagnetic interference (EMI). Regarding linguistic gains, students should improve their discipline-specific language skills for improved subject comprehension and their general language skills for participation in the classroom (Zhang & Pladevall-Ballester, 2021). Consequently, depending on the English proficiency of students and instructors, the English proficiency variable influences how students use and interact with English in the classroom, which may either promote or inhibit English improvement and the acquisition of disciplinary knowledge. Numerous studies have investigated the effects of EMI on language acquisition and provided numerous explanations for these positive effects (Hu & Wu 2020; Jiang & Zhang 2019; Sahan & Sahan 2021; Xie & Curle 2020). According to Pecorari et al. (2011) and van der Worp (2017), one reason could be that because EMI employs English as the language of instruction, the classroom naturally provides a positive learning environment in which students' exposure to the English language increases.

Another factor could be that kids have more opportunities to use English in academic and everyday contexts since professors and students engage and communicate in English. Numerous studies on the impact of EMI on subject learning have found a positive impact on the acquisition of knowledge rather than lowering pupils' academic achievements (Dafouz et al., 2016; Dafouz, et al., 2014) and that both teachers and students have favourable perceptions and attitudes of EMI (Costa & Coleman, 2013; Ball & Lindsay, 2013).

The modest language improvement brought about by EMI is primarily limited to the development of specialized terminology. The right learning environment for English language acquisition is not given in content classes where students frequently receive incomprehensible information and where interaction and output are restricted (AlBakri, 2013). Therefore, students may graduate from college only to discover that their proficiency in Arabic and English falls short of the requirements for employment (King, 2014).

Troudi and Jendli (2011) referred to this situation as "choiceless choice" because some students showed a preference to study in English. One of its implications is that students no longer have the agency to oppose such a program. These pupils are being denied their social rights, based on Skutnabb-Kangas' (2009) claim that students have a right to obtain an education in their mother tongue (Troudi, 2009). It's also important to think about whether subject matter experts can effectively teach in English from a linguistic and educational perspective. This has a detrimental effect on how well students understand lectures and makes them work harder to understand the material. Teachers use a teacher-centred delivery method that focuses on knowledge transmission rather than giving students the chance to generate their own knowledge through interaction and discussion (Al-Issa & Al-Bulushi, 2012; Barnard, 2015).

As noted by King (2014), teachers can help their pupils by giving them materials that have

been streamlined. Additionally, writing is reduced to a means of information collecting where students frequently just copy and paste content from the internet, a practice that is accepted given the students' English proficiency (Al-Badwawi, 2011). As a result, non-European nations should host these empirical investigations. In spite of the proliferation of EMI programs at Chinese institutions, the nation still lacks sufficient relevant EMI research (Hu, et al., 2014).

These strategies help students pass their classes but prevent them from acquiring the academic skills necessary for undergraduate degree programs. The level of academic subject knowledge acquired must be questioned because, overall, the expectations for students in terms of reading and writing are lower than those for students in first-language classes (King, 2014; McLaren, 2011; Mouhanna, 2016).

The studies exposed that students who took classes in Urdu had higher self-efficacy than respondents who took classes in English. Also emerging from analyses were some intriguing findings. The study found that whereas female respondents were significantly influenced by the medium of teaching, male respondents' self-efficacy was unaffected by it. It ran counter to the findings of Dickerson and Taylor (2000), who came to the conclusion that while men were more likely to take on any activity regardless of their abilities, women tended to lack confidence in decision-making and were less likely to take on challenges.

To integrate language learning with topic learning, many non-English-speaking countries have adopted English as the global lingua franca as the medium of instruction for school subjects (Dimova & Kling, 2018; Johnson, 2020; Nicholls, 2020). English-medium instruction (EMI) programs have spread from developed nations in Europe to developing nations in Latin America and Asia, notably within the higher education sector (Breeze & Dafouz, 2017; Coleman, 2006). Adopting EMI in higher education has the potential to internationalize institutions by attracting more foreign teachers and students, thereby

increasing their diversity and influence (Wilkinson, 2013).

Effect of English Language on Students' Learning

English language as an EMI has become more common in educational systems around the world. This review investigates how EMI affects pupils' academic performance, language ability, and cognitive growth. There is also discussion on the implications for politicians and educators.

Effect on Learning Outcomes: Numerous researches have looked into how EMI affects students' academic success. EMI was found to have a positive correlation with better performance in courses taught in English in research by Jones et al. (2016). However, Li (2018) expressed worries about potential differences in students' capacities to comprehend complicated material in a non-native language, which could result in achievement discrepancies.

Language Proficiency: EMI has an impact on pupils' language abilities, both in their native tongue and in English. According to a study by Garcia (2014), EMI aided in the development of English language proficiency. However, some academics contend that a heavy emphasis on English can prevent pupils from becoming proficient in their native tongues (Pak, 2019).

Cognitive Development: By promoting critical thinking and problem-solving abilities, EMI can influence kids' cognitive development. Students exposed to EMI showed greater degrees of cognitive flexibility in a Smith (2017) study. However, worries have been raised about the possible impact of EMI on students, which could affect cognitive load and impair understanding (Nguyen, 2020).

Teacher Competence: The success of EMI programs is largely impacted by educators' ability to present information in English. In order to ensure effective EMI, Liang (2015) underlined the significance of teacher preparation programs and language

proficiency. Ineffective instruction and poor student learning outcomes might result from inadequate teacher preparation (Thomas, 2018).

Implications for Educators and Policymakers EMI poses problems that require attention from educators and policymakers. To match EMI with students' language skills and the topic matter, proper curriculum design is crucial (Wu, 2019). Language competency may be lessened by bilingual education approaches that balance EMI with native language instruction (Singh, 2021).

Study Objectives

The objectives were:

1. To identify the difference between the gender of students in learning English as a medium of instruction.
2. To find out the perceptions of students about the medium of instruction and their learning
3. To explore the correlation of the medium of instruction with students learning.

Research Questions

The following were research questions:

- RQ 1:** What is the difference between male and female students in learning English as a medium of instruction?
- RQ 2:** What are the perceptions of students about the medium of instruction and their learning?

Table 1

Comparing the gender of students in learning english medium of instruction

| Gender | N | Mean | SD | df | t | p |
|---------|-----|------|------|-----|-------|--------|
| Males | 120 | 3.69 | 3.75 | 198 | -2.53 | .001** |
| Females | 50 | 4.25 | 1.38 | | | |

** $p < 0.01$

Table 1 revealed a significant difference in the perceptions of the learning of male and female students in English as a medium of instruction. Female students learn better English than that

RQ 3: What is the correlation of the medium of instruction with students learning?

Research Design

This study employed a descriptive design and a survey method for the collection of the data.

Population and Sample

The students enrolled at the BS level in the University of Education Faisalabad Campus were the population of the study. Two hundred students were randomly selected from different departments for the collection of data.

Instrumentation

As the study was a survey, an adapted instrument was used for the data collection purpose. The instrument was adapted from the studies of Al-Bakri (2017). The reliability and validity of the instrument were ensured. Thirteen items were selected from the study. The learning indicator was the result of the students.

Data Analysis

The analysis of data was made using Pearson r, frequency analysis, and t-test.

Results

RQ 1: What is the difference between the gender of students in learning English as a medium of instruction?

of male students.

RQ 2: What are the perceptions of students about the medium of instruction and their learning?

Table 2*Students perceptions of medium of instructions*

| S. No | Statements | Mean | sd |
|-------|--------------------------------------------------------------------------------------------------|------|------|
| 1. | I can gain more English language proficiency by learning from it and compete globally. | 3.47 | .478 |
| 2. | English instruction improved my learning in scientific subjects. | 3.50 | .657 |
| 3. | I think English as a medium of instruction is a big challenge related to language comprehension. | 3.36 | .724 |
| 4. | Making fluent communication is a big hurdle to learning the English language. | 3.70 | .686 |
| 5. | To earn a solid job, I must pursue an English education. | 3.07 | .550 |
| 6. | My ability to speak my native language is impacted by what I learn in English. | 3.18 | .549 |
| 7. | In addition to English, my future career will require Urdu. | 3.55 | .528 |
| 8. | In class, I feel at ease using English. | 3.47 | .529 |
| 9. | Due to my anxiety of speaking incorrectly in front of my peers, I rarely participate in class. | 3.48 | .419 |
| 10. | I occasionally experience understanding what teachers say in class. | 3.19 | .356 |
| 11. | When I am stuck in class, I ask questions. | 3.78 | .678 |
| 12. | I find it simple to write in English in class. | 3.83 | .489 |
| 13. | I feel at ease asking my native-speaking subject professors questions outside of class. | 3.49 | .346 |

*Adapted from Al-Bakri (2017)***RQ 3:** What is the correlation of the medium of instruction with students learning?**Table 3***Correlation between students learning and medium of instruction*

| Indicators | Students learning | Medium of instruction |
|-----------------------|-------------------|-----------------------|
| Students learning | 1 | .771** |
| Medium of instruction | .771** | 1 |

** $p < 0.01$

Table 3 indicated a strong positive correlation between students learning and the medium of instruction.

EMI on students' academic achievement while taking into account both favourable and unfavourable factors.

Conclusions and Discussion

The study underscores the importance of pedagogical approaches that promote active engagement, intercultural communication, and scaffolded language development within EMI classrooms. In many educational institutions around the world, English is now used as a primary language of instruction (EMI). Its deployment has sparked discussions about how it may affect pupils' academic performance. This conversation tries to examine the effects of

Positive effects of EMI on Academic Success

Improved Access to Global Resources: According to Rahman (2018), EMI gives students access to a variety of academic resources that are available in English, such as research articles, textbooks, and online courses. This helps students build their knowledge bases. English language proficiency can be improved as a result of exposure to EMI, which

is a valuable skill in the world we live in today (Hellekjaer, [2016](#)). Preparation for Further Education Abroad: According to Kim ([2017](#)), EMI gives students the language skills they need to pursue further education in English-speaking nations. Benefits for the Economy and Careers: English proficiency acquired through EMI can help with job opportunities and career advancement (Hultgren, [2018](#)). Negative effects of EMI on academic performance: Cognitive Overload: Students who are not fluent in English may find it difficult to understand complicated ideas, which can cause cognitive overload and impair general comprehension (Tien, [2018](#)). Poor Content Knowledge: When students concentrate on knowing English, they neglect to understand the actual subject matter, which could hinder their thorough understanding of the subject (Ferris, [2019](#)). Lowered Participation and Confidence: Students with weak English

proficiency may feel discouraged from taking an active part in class discussions, which lowers their self-esteem (Kirkpatrick, [2017](#)). Socioeconomic Disparities: According to Tsui ([2020](#)), EMI may put students from non-English speaking backgrounds at a disadvantage, thereby exacerbating educational disparities. Strategies for Mitigation: Institutions may provide language support programs to assist students in enhancing their English language proficiency in addition to their academic pursuits (Bista et al., [2021](#)). A bilingual strategy that allows pupils to learn in both their mother tongue and English can help students overcome language barriers and improve comprehension (Tang & Tsui, [2022](#)). Professional Development for Teachers: Educators can improve teaching effectiveness and assist student learning by receiving training on how to use EMI as a pedagogical tool (Chuang & Tsai, [2019](#)).

References

- Ahmed, A., Zarif, T., & Tehseen, A. (2013). The role of medium of instruction used in Pakistani classroom. *Interdisciplinary Journal of Contemporary Research in Business*, 4(12), 609-615.
- Ahmed, S. I. (2011). Issue of the medium of instructions in Pakistan. *International Journal of Social Sciences and Education*, 1(1), 66-82.
- Al-Bakri, S. (2013). Problematizing English Medium Instruction in Oman. *International Journal of Bilingual & Multilingual Teachers of English*, 01(02), 55-69.
<https://doi.org/10.12785/ijbmte/010203>
- Al-Bakri, S. (2017). *Effects of English medium instruction on students learning experiences and quality of education in content courses in a public college in Oman*. University of Exeter EdD in TESOL Thesis.
- Al-Issa, A. S., & Al-Bulushi, A. H. (2011). English language teaching reform in Sultanate of Oman: The case of theory and practice disparity. *Educational Research for Policy and Practice*, 11(2), 141-176.
<https://doi.org/10.1007/s10671-011-9110-0>
- Al-Mahrooqi, R. & Denman, C. J. (2016). Omani graduates' English-language communication skills in the workforce: Employees' perspectives. *International Journal of Applied Linguistics & Literature*, 5(4), 172-182.
<https://doi.org/10.7575/aiac.ijalel.v.5n.4p.172>
- Al-Mahrooqi, R. (2012a). A student perspective on low English proficiency in Oman. *International Education Studies*, 5(6), 263-271.
<https://doi.org/10.5539/ies.v5n6p263>
- Al-Mahrooqi, R. (2012b). Reading literature in English: Challenges facing Omani students. *Asian EFL Journal*, 57, 24-51.
- Al-Mahrooqi, R., & Tuzlukova, V. (2014). English communication skills and employability in the Arabian Gulf: The case of Oman. *Pertanika Journals, Social Sciences & Humanities*, 22(2), 473-488.
<https://doi.org/10.18538/lthe.v13.n1.2227>
- Al-Mahrooqi, R., Tuzlukova, V., & Denman, C. J. (2016). Tertiary education and communication skills development of Omani learners: Student perspectives. *The International Journal of Communication and Linguistic Studies*, 14(2), 15-34.
- Ball, P., & Lindsay, D. (2012). 3. Language Demands and Support for English-Medium Instruction in Tertiary Education. Learning from a Specific Context. *Multilingual Matters EBooks*, 44-62.
<https://doi.org/10.21832/9781847698162-007>
- Bandura, A. (1997). Self-efficacy: the exercise of control. *Choice Reviews Online*, 35(03), 35-182635-1826.
<https://doi.org/10.5860/choice.35-1826>
- Baporikar, N., & Shah, I. A. (2012). Quality of higher education in 21st century – A case in Oman. *Journal of Educational and Instructional Studies in the World*, 2(2), 9-18.
- Barnard, R. (2014). ENGLISH MEDIUM INSTRUCTION IN ASIAN UNIVERSITIES: SOME CONCERNS AND A SUGGESTED APPROACH TO DUAL-MEDIUM INSTRUCTION. *Indonesian Journal of Applied Linguistics*, 4(1), 10.
<https://doi.org/10.17509/ijal.v4i1.597>
- Bista, K., Jiang, L., & Al-Musawi, N. M. (2021). Language support programs in higher education: A systematic review. *Higher Education Research & Development*, 40(7), 1410-1425.
- Breeze, R., & Dafouz, E. (2017). Constructing complex Cognitive Discourse Functions in higher education: An exploratory study of exam answers in Spanish- and English-medium instruction settings. *System*, 70, 81-91.
<https://doi.org/10.1016/j.system.2017.09.024>
- Cheema, A. B. (2103). *Effect Of Concept Mapping on Students' Academic Achievement, Self-Efficacy and Self-Esteem*.

- Unpublished PhD thesis, University of the Punjab, Lahore.
- Chuang, H. C., & Tsai, C. C. (2019). Tensions in teaching in English: Challenges and professional development of content lecturers in a Taiwanese university. *Teaching in Higher Education*, 24(3), 384-399.
- Coleman, J. A. (2006). English-medium teaching in European higher education. *Language Teaching*, 39(1), 1-14.
<https://doi.org/10.1017/s026144480600320x>
- Costa, F., & Coleman, J. A. (2013). A survey of English-medium instruction in Italian higher education. *International Journal of Bilingual Education and Bilingualism*, 16(1), 3-19.
<https://doi.org/10.1080/13670050.2012.676621>
- Dickerson, A., & Taylor, M. A. (2000). Self-limiting Behavior in Women Self-esteem and Self-Efficacy as Predictors. *Group & Organization Management*, 25(2), 191-210.
- Dimova, S., & Kling, J. (2018). Assessing English-Medium Instruction Lecturer Language Proficiency Across Disciplines. *TESOL Quarterly*, 52(3), 634-656. <https://doi.org/10.1002/tesq.454>
- Farakh, I. A., & Choudhry, A. (2013). *Ilmul Taleem for F.A Lahore*: Punjab Text Book Board.
- Ferris, D. R. (2019). The linguistic challenge of English-medium instruction: Adaptation in a globalized world. *Language Teaching*, 52(4), 421-435.
- García, O. (2014). *Bilingual Education in the 21st Century: A Global Perspective*. John Wiley & Sons.
- Hellekjaer, G. O. (2016). English as a Medium of Instruction (EMI) in multilingual higher education: A case study from a Danish university. *Journal of Multilingual and Multicultural Development*, 37(3), 285-300.
- Hu, G., Li, L., & Lei, J. (2014). English-medium instruction at a Chinese University: rhetoric and reality. *Language Policy*, 13(1), 21-40.
<https://doi.org/10.1007/s10993-013-9298-3>
- Hultgren, A. K. (2018). English as a Medium of Instruction in Swedish higher education: A case study of teacher perspectives and practices. *Journal of Multilingual and Multicultural Development*, 39(7), 616-629.
- Johnson, A. (2019). The Impact of English Learner Reclassification on High School Reading and Academic Progress. *Educational Evaluation and Policy Analysis*, 42(1), 46-65.
<https://doi.org/10.3102/0162373719877197>
- Jones, M., Henderson, M., Wilson, A., Reddy, P., & Fisher, A. (2016). Impact of English as a Medium of Instruction on Student Performance in Higher Education. *International Journal of Bilingual Education and Bilingualism*, 19(3), 276-289.
- Kim, H. Y. (2017). Globalization, English as a medium of instruction policies, and practices in higher education: A comparative case study of South Korea and China. *Language Policy*, 16(3), 267-288.
- King, M. J. (2014). *An exploratory investigation into content teachers' views on English as a medium of instruction policy enactment in the UAE Federal Tertiary Sector*. Unpublished doctoral thesis, University of Exeter: UK.
- Kirkpatrick, A. (2017). English as a medium of instruction in the Asia-Pacific region. *Current Issues in Language Planning*, 18(1), 1-7.
- Li, L. (2018). English as a Medium of Instruction (EMI) in Multilingual Higher Education: A Case Study in Hong Kong. *Multilingual Education*, 8(1), 1-19.
- Liang, L. (2015). *Challenges of Implementing English as a Medium of Instruction (EMI) in Chinese Universities: Voices from Students and Teachers*. Springer.

- McLaren, P. B. (2011). *English medium in the United Arab Emirates: Serving local or global needs?* Unpublished doctoral thesis in TESOL, University of Exeter, UK.
- Mills, N., Pajares, F., & Herron, C. (2007). Self-efficacy of College Intermediate French Students: Relation to Achievement and Motivation. *Language Learning*, 57(3), 417–442. <https://doi.org/10.1111/j.1467-9922.2007.00421.x>
- Mouhanna, M. (2016). *English as a medium of instruction in the tertiary education setting of the UAE: The perspectives of content teachers*. Unpublished doctoral thesis, University of Exeter, UK.
- Nguyen, H. T. (2020). Cognitive Load in Learning through a Second Language: The Case of English as a Medium of Instruction. *Multilingual Matters*.
- Nicholls, K. (2019). “You have to work from where they are”: academic leaders talk about language development. *Journal of Higher Education Policy and Management*, 42(1), 67–84. <https://doi.org/10.1080/1360080x.2019.1658922>
- Pak, G. (2019). The English Effect: Exploring the Impact of English Language Education in South Korea. *Language and Intercultural Communication*, 19(1), 23-39.
- Parveen, S., Gopang, A. S., & Shaikh, I. S. (2008). Language and Learning: Impact of language on cognitive development of secondary school children. *The Sindh University Journal of Education*, 38, 93-107.
- Piller, I., & Cho, J. (2013). Neoliberalism as Language Policy. *Language in Society*, 42(01), 23–44.
- Rahman, A. A. (2018). English as a Medium of Instruction (EMI) in higher education: Insights from a Malaysian university. *Journal of Multilingual and Multicultural Development*, 39(3), 228-242.
- Shakoor, A., Azeem, M., Dogar, A. H., & Khatoon, A. (2011). 1947-2008 *Evaluation of Elementary Education in Pakistan*, *International Journal of Humanities and Social Science*, 1(15), 270-276.
- Shakoor, A., Khan, M. T., & Farrukh, A. (2016). Effect of Medium of Instruction on Students Self-efficacy towards Learning. *Journal of Educational Sciences & Research*, 3(2), 58-66.
- Singh, G. (2021). Balancing English and Vernacular Languages in Bilingual Education. In *Handbook of Research on Cross-Cultural Business Education* (pp. 289-305). IGI Global.
- Sivaraman, I., Al-Balushi, A. & Rao, D. H. (2014). Understanding Omani students' (University) English language problems. *International Journal of Sciences: Basic and Applied Research*, 13(1), 28-35.
- Skutnabb-Kangas, T. (2006). Language policy and linguistic human rights. In T. Ricento, (Ed.), *An introduction to language policy: Theory and method* (pp. 273 - 291). Oxford: Blackwell Publishing.
- Smith, J. (2017). Cognitive Benefits of Bilingualism. *Language and Linguistics Compass*, 11(3), e12214.
- Tang, J., & Tsui, A. B. (2022). A bilingual approach to English as a Medium of Instruction (EMI) in higher education: Voices from the periphery. *Journal of Multilingual and Multicultural Development*, 43(2), 130-145.
- Thomas, M. (2018). English as a Medium of Instruction (EMI) in Higher Education: A Comparative Study of Teacher Preparation and Pedagogical Practices. *System*, 74, 37-49.
- Tien, L. T. (2018). The impact of English as a medium of instruction on students' cognitive load. *Language and Education*, 32(4), 302-318.
- Tollefson, J. W. (2013). *Language policies in education: Critical issues 2nd edition*. New York: Routledge.
- Tong, F., & Q. Shi. (2012). Chinese–English Bilingual Education in China: A Case Study of College Science Majors.” *International Journal of Bilingual Education and Bilingualism*, 15(2), 165–182.

- Tripathi, A. K. (2013). Effect of Medium of Instruction on Self-Efficacy: A Study of PMT/PET Course Aspirants. *Journal of Psychology and Behavioral Science*, 1(1), 36-41.
- Troudi, S. & Jendli, A. (2011). Emirati students' experiences of English as a medium of instruction. In A. Al-Issa and L.S. Dahan (Eds.), *Global English and Arabic: Issues of language, culture and identity* (pp. 23-47). Oxford: Peter Lang.
- Tsui, A. B. (2020). The impact of English as a medium of instruction (EMI) on education policies and practices in the Asia-Pacific region. *Current Issues in Language Planning*, 21(2), 107-125.
- Wilkinson, R. (2013). English-medium instruction at a Dutch university: Challenges and pitfalls. In A. Doiz, D. Lasagabaster, & J. M. Sierra (Eds.), *English-medium instruction at universities: Global challenges* (pp. 3-24). Bristol, UK: Multilingual Matters.
- Wu, S. (2019). English as a Medium of Instruction in Chinese Higher Education: A Case Study. Springer.
- Yang, W. (2015). Content and Language Integrated Learning Next in Asia: Evidence of Learners Achievement in CLIL Education from a Taiwan Tertiary Degree Programme. *International Journal of Bilingual Education and Bilingualism*, 18(4), 361-382.
- Zhou, X. Z., Li, C. K., & Gao, X. S. (2021). Towards a Sustainable Classroom Ecology & Nbsp; Translanguaging in English as a Medium of Instruction (EMI) in a Finance Course at an International School in Shanghai. *Sustainability*, 13(19), 14.