**Appendix 2**: **Systematic Map of 83 English Medium Instruction Studies in Higher Education.**

(all papers are written in English unless otherwise stated)

| **Author & Year** | **Publication Type** | **Country**  | **Population or Sample description** | **Sample size** | **Terminology used to describe programme** | **Main/relevant research questions, topic(or ‘focus’)** | **Research Design & instrument used** | **Key Findings** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Aguilar, M & Munoz, C. 2014 | Journal Article | Spain  | Engineering students  | 205 students | Content and Language Integrated Learning (CLIL) | Examined learners’ gains in listening and grammar skills after a CLIL course in English for a semester: were students’ listening and grammar skills affected similarly? did participants’ proficiency level play a role? | QUANT - Pre-Post-test design | Paired-sampled t-tests: difference between the mean scores in the pre-and post-listening test was significant but not for grammar tests. Students distributed into three groups based on pre-test scores - repeated measures ANOVA: less proficient students obtained higher gains in listening and grammar skills than more proficient students. |
| Aguilar, M & Rodriguez, R. 2012 | Journal Article | Spain | Engineering students | 193 students | Content and Language Integrated Learning (CLIL) | To find out how both lecturers and students perceived their experience of CLIL | MIXED. QUAL - Interviews (lecturers). QUANT - Questionnaire (students) | Lecturers mostly interested in improving English spoken fluency - did not feel quality of teaching had been sacrificed. No language learning element was in assessment. Reluctant to receive CLIL training. Students had a positive experience. Self-perceived gain in specialist vocabulary (#1) improved listening and speaking skills (#2) |
| Airey, J. 2011 | Journal Article | Sweden | University lecturers | 18 lecturers. 2 universities | EL, parallel-language education | Document the experiences of Swedish university lecturers when they change from teaching in their first language to teaching in English. | QUAL - Intervention  | Lecturers were aware of their limitations when teaching in English - may have been due to inexperience of teaching through English |
| Airey, J. 2012 | Journal Article | Sweden | Physics lecturers | 10 lecturers. 4 universities | Content and Language Integrated Learning (CLIL) | Linguistic attitudes of lecturers. Language learning expectations from students. | QUAL - Interviews | Main theme: none of the lecturers saw themselves as teachers of disciplinary Swedish or English |
| Al-Mashikhi, E., Al-Mahrooqi, R., Denman, C.J. 2014 | Journal Article | Sultanate of Oman | Under-graduate College of Science students - Public University | 60 students | English Medium of Instruction (EMI) | Investigates science students’ attitudes towards using English as a medium of instruction (EMI) | QUANT - Questionnaire | A large number of participants accepted that English is the global language of science and technology. More than half stated a preference for Arabic-MOI. BUT participants did not show negative attitudes towards EMI itself: both instrumental and integrative motives for their engagement with the English language.  |
| Ali, N. R. 2013 | Journal Article | Malaysia | One Malaysian university | 1 university | English Medium of Instruction (EMI) | How one university has responded to the push for the implementation of EMI | QUAL- document analysis and interviews - case study | Policies interpreted in variety of ways by staff |
| Basibek, N., Dolmaci, M., Cengiz, B. C., Bur, B., Dilek, Y., & Kara, B. 2014 | Journal Article | Turkey | Lecturers (professors, associate professors, assistant professors, and assistants) - engineering faculties | 63 - 2 universities, 'partial EMI' | English Medium of Instruction (EMI) | Views of lecturers of whether EMI is a requisite and benignant in terms of instructional goals | QUANT - Survey. | Lecturers were equally positive and negative about EMI and TMI – attitudes are mixed. Averages appear to cluster around 'Neutral'. Lecturers supported EMI but agreed that lecturing in Turkish allows them to explore content in more depth. |
| Belhiah, H. & Elhami, M. 2015 | Journal Article |  United Arab Emirates | Students and Teachers |  500 students. 100 teachers. 6 universities in Abu Dhabi, Dubai, Al Ain, Sharjah, Ajman, and Ras Al Khaimah | English Medium of Instruction (EMI) | Students' and teachers' views of using English to teach subject matter. | MIXED - QUANT survey. QUAL - structured interviews | Much to be desired. Students struggling to learn the subject matter due to their low-proficiency in English. |
| Bjorkman, B. 2008 | Journal Article | Sweden | Engineering students | 1 technical university | English as a Lingua Franca (ELF) | Investigates authentic & high-stakes speech events. To find out what kind of divergence from standard morphosyntactic forms of English if any leads to disturbance, i.e. breakdown, in ELF speech. | QUAL - Recordings of student group work lectures and presentations | Students seem to have developed certain common procedures to communicate effectively. ELF is effective in this context |
| Bolton, K., & Kuteeva, M. 2012 | Journal Article | Sweden | Stockholm University | 668 staff and 4524 students | English as a Lingua Franca (ELF) | The use of English for academic purposes. Students’ and teachers’ attitudes to English as a medium of instruction | QUANT - Large scale survey | English usage: complex patterns related to specific discipline studied, the level of instruction (undergraduate versus Master's) and the receptive versus productive use of English. In the sciences: English is a pragmatic reality for both teachers and students. Humanities and Social Sciences: English is used as an additional or auxiliary language in parallel with Swedish. |
| Bozdogan, D., Karlidag, B. 2013 | Journal Article | Turkey | A State University | 15 students (7 male 8 female)  | Content and Language Integrated Learning (CLIL) | Explores the CLIL practice reflections by reporting the views of students | QUAL - semi-structured interviews | English has a great advantage but jargon difficult to understand. Course curricular simpler than in L1. Felt their skills regressed during PYP year. |
| Braga Riera, J., & Maiz Arevalo, C. 2013 | Journal Article | Spain | Physics and Engineering lecturers | 8 lecturers | Content and Language Integrated Learning (CLIL) | The role of CLIL lecturers as translators. To prove how translation has a say in the quality and performance of lectures in the CLIL teaching context | QUAL - lectures recorded, transcribed & analysed, questionnaire  | Translation does indeed play a pivotal role in the linguistic quality of lectures, with those phases in which translation applies resulting in lower levels of L1 interference. |
| Brenn-White, M. & Van Rest, E. 2012 | Briefing paper | Europe | English taught university programmes in Europe (Masters level) | 960 public and private universities from across Europe  | English Taught Programme (ETP) | Examine the growth of English-taught master’s programs in Europe, including the total number of programs offered by country and academic discipline, their duration, and data on prospective students | QUANT - examination of statistics obtained from MastersPortal.eu, an online directory and comprehensive source of information about postgraduate degree programs in Europe.  | Dramatic growth in the number of English-taught master’s programs offered in non-English-speaking Europe over the last five years. The Netherlands, Germany, Sweden, France, and Spain are (in ranked order) the countries with both the largest numbers of such programs and the largest number of institutions offering them.  |
| Brown, P.S. 2013 | Journal Article | Japan | First year medical university students | 13 -15 students - 4 classes | Content and Language Integrated Learning (CLIL) | Teaching Vocabulary Learning Strategies (VLS) in order to shed light on the medical English CLIL course design and implementation, and the potential benefits of integrating VLS instruction such as helping students tackle the challenges of learning medical English.  | QUANT - Intervention - Longitudinal (3 years) | Level-appropriate materials and teaching approaches to support learners' language development and understanding of medical content should be used. Teachers should continually develop their professional knowledge and skills. There should be collaboration between language and content teachers. |
| Bryan, N. & Habte-Gabr, E. 2008 | Journal Article | Colombia  | Two geography courses taught in English | 15 to 29 students from all faculties at the university. | English Content-Based Instruction (CBI) | Conduct a survey of learning strategies. | QUANT - survey on learning strategies. | There exists a need for instruction to be focused on fostering autonomous learning, given the heterogeneity of learning styles.  |
| Byun, K., Chu, H., Kim, M., Park, I., Kim, S., & Jung, J. 2011 | Journal Article | South Korea | Korean University. Professors and students | Ten professors and 12 students took part in the first round, in December 2005, while 7 students took part in the second round | English Medium of Instruction (EMI) | Critically examined the effectiveness of English medium instruction (EMI) policy. | QUANT - survey; QUAL - interview | EMI policy produced positive outcomes in terms of overall satisfaction level with EMI and its overall effectiveness in improving students’ English proficiency. Compulsory enforcement without regard for students’/instructors’ language proficiency, the lack of a support system and appropriate instructors to conduct EMI classes, and the unilateral implementation of EMI across academic disciplines have brought about a number of side effects. |
| Chapple, J. 2015 | Journal Article | Japan | Japanese and International students | Two, second-tier universities. 89 Ss. | English Medium of Instruction (EMI) | Shed light on attitudes, ascertain issues & limitations and problems involved with EMI classes | QUAL - opened-ended survey.  | 89 St asked to give 3 reasons for choosing EMI 190 responses 74 /190 (38.9%) responses = improve English ability 34% Japanese students dropped out of class. 55/76 Japanese found level of English in EMI class too difficult. Int. sts found class not challenging enough. Only 6 out of 28 international students interacted regularly with Japanese students. Teachers use 80% English in class No institutional support i.e. extra time or payment for EMI teachers. Had to scale assessments in favour of Japanese  |
| Cho, D.W. 2012 | Journal Article | Korea | Science and Engineering university - EMI since 2010 | 41 faculty members. 439 undergraduate students 403 graduate students. Interviews: 7 professors. 10 undergraduate students 8 graduate students.  | English Medium of Instruction (EMI) | Investigate the perceptions of the implementation of EMI and the effects of EMI on content teaching and learning outcomes | QUANT- Questionnaire and structured interviews.  | EMI policy implemented in an EFL context proved to be ineffective and unsuitable in delivering course content due to the limited English proficiency of professors and students. Professors and students also demonstrate strong opposition to the policy because it was imposed unilaterally by the university without their support and consensus.  |
| Choi, S.J. 2013 | Journal Article | Korea | Professors | 9 professors | English Medium of Instruction (EMI) | Examines the ways the national English-medium instruction (EMI) policy is experienced in college classrooms | QUAL - in-depth interviews | Mixed feelings about their experiences of teaching English-medium classes. Positive: encourages participation. Negative: focus on improving Ss English. Ambivalent: frustration with the need to spend much time preparing, while thinking positively of EMI as an opportunity for career advancement. Challenging: EMI requires new teaching approaches and techniques distinct from those used in Korean lectures. Ss proficiency is a problem. |
| Costa, F. & Coleman J. A. 2013 | Journal Article | Italy | Italian universities | 50% of Italian universities | English Taught Programmes (ETPs) | To find out organisational factors (including the number of ETPs, reasons for adoption and difficulties in implementation) and pedagogical factors (including recruitment and teachers’ competencies) of ETPs in Italian higher education. | QUANT - Questionnaire | Heterogeneous picture: ETPs expanding but still not universal. Analysis is according to university type (public/private) and location, as divisions between wealthy, industrialised North the Centre and the less developed South are reflected in the profile and status of universities in each geographical zone. All institutions focus more on content than language. |
| Dafouz, E. Núñez, B. & Sancho, C. 2007 | Journal Article | Spain | University lectures by non-native speakers | 26 students and 3 lecturers  | Content and Language Integrated Learning (CLIL) | CLIL discursive features and teacher student positioning. Explores the use of two relevant areas of stance: (i) pronominal forms, and their discursive functions; and (ii) modal verbs occurring within verbal clusters that accompany pronouns. | QUANT -analysis of these two linguistic devices in terms of number of occurrences and frequency in lectures.  | The inclusive WE is the most frequent pronominal form, functioning as a solidarity mechanism- helping to establish common ground. Functions assigned to the two most recurrent modal verbs, CAN and HAVE TO, are found to minimise also the speaker’s authority while inserted within a problem-solving framework and guiding the steps of scientific reasoning. |
| Dafouz, E., Camacho, M., & Urquia, E. 2014 | Journal Article | Spain | Business Administration under-graduates | 106 from accounting; 115 from finance; 95 from History | English-medium & Spanish-as-first-language | Compare studying Business Administration in Spanish L1 and in EMI | QUANT - Questionnaire on students linguistic background, demographic data; students’ final grades (coursework and final exams)  | Both cohorts obtain similar results. But History yields higher results than accounting and finance  |
| Dearden, J. 2015 | Report (British Council) | Global | British Council staff in 55 countries to act as ‘informed respondents’ for the countries in which they were resident.  | 55 staff members | English Medium of Instruction (EMI) | Provide an initial picture of the rapidly growing global phenomenon of English medium instruction (EMI). Map the size, shape and future trends of EMI worldwide. | QUAL - open-ended questionnaire. | Rapid expansion of EMI provision. Official governmental backing for EMI but with exceptions. Attitudes are ‘equivocal’ or ‘controversial’ rather than being ‘against’ its introduction and/or continued use. Concerns over the potentially socially divisive nature of EMI.  |
| Doiz, A. Lasagabaster, D. & Sierra, J. 2013 | Journal Article | Spain | Different members of the Basque community | 6 international students, 4 local students 10 academics, 6 admin staff and 1 vice rector | English Medium of Instruction (EMI) | How the university community deals with the main issues surrounding the university’s multilingual policy and practices | QUAL - discussion groups. | Different members of Basque community have different concerns. |
| Doiz, A. Lasagabaster, D. & Sierra, J. 2011 | Journal Article | Spain | Teaching staff | 5 teachers (2 Pharmacy, 2 Arts, 1 engineering) | English Medium of Instruction (EMI) | Opinions of teaching staff involved in English-medium instruction at a multilingual Spanish university - from pedagogical ecology-of-language and personal viewpoints. | QUAL - group discussions. | The lecturers believe that the multilingual programme is a breakthrough with some very positive consequences. But there are issues that in their opinion need to be solved in order to improve the programme. (1) The effect English has had on official information provided by the university; and (2) the linguistic strains that arise as a result of introducing a foreign language in a bilingual university and how this affects the ecology of languages. |
| Escobar Urmeneta, C. 2013 | Journal Article | Spain | A student teacher | 1 pre-service CLIL teacher in a Master's programme, aiming to achieve teacher empowerment through cycles of collaborative teaching and shared reflection | Content and Language Integrated Learning (CLIL) | To determine the usefulness and validity of a model of a pre-service CLIL teacher education programme | QUAL - an ethnographic study explores fragments of videotaped CLIL science lessons in English/L3 and other multimodal data (student-teacher's journal, academic reports and instructor's field notes) collected  | The analysis traces the student-teacher's progress both in the practical handling of the specific challenges of the CLIL lessons; It shows how teaching practice and reflection shape and fuel each other.  |
| Evans, S. & Morrison, B. 2011 | Journal Article | Hong Kong | First-year university students | 3000 survey + 28 in-depth. ‘Portraits’ of three students from different societal, educational and disciplinary backgrounds. | English-medium higher education | Examines the language-related challenges first-year students face adjusting to the demands of English-medium HE. Tracked university careers of students. | Longitudinal over 3 years. QUANT - survey. QUAL - in-depth, semi-structured interviews | Students experience 4 problems during the crucial first year at university: understanding technical vocabulary, comprehending lectures, achieving an appropriate academic style and meeting institutional and disciplinary requirements.  |
| Evans, S. & Morrison, B. 2011 | Journal Article | Hong Kong | English-medium institution. Under-graduate students. | 3000 students for survey and 28 students for the semi-structured interview over their university career.  | English-medium higher education. | Uncover patterns of in-class and out-of-class language use and identify challenges that undergraduates experience when listening to and speaking English for academic purposes | QUAL- Longitudinal interviews (2000-2010); QUAL - interviews about experience.; QUANT-survey. | The gap between policy and practice has closed noticeably in the past decade in consequence of the increasing internationalisation of the student body and institutional initiatives to enforce the medium-of-instruction policy. Students have little need or desire to speak English outside the classroom, apart from situations in which international students or non-Cantonese-speaking students from mainland China are present |
| Francomacaro, M. R. 2011 | PhD thesis | Italy | Students and lecturers at Faculty of Engineering  | LECTURERS: QUAL - 4 lecturers Two lectures for each lecturer 8 lectures in total Age ranges between 30 and 65 QUANT n=23 STUDENTS: QUANT n= 55 Majority male Postgraduate | English Medium of Instruction (EMI) | Students and lecturers attitudes to EMI, how lecturers deliver content, students language proficiency and lecturing behaviour and comprehension of lecture  | QUAL - ethnographicinterviews, questionnaire, observation of lectures | Lecturers have no language certification, interest in new learning environment, students, male post grads with basic English study through EMI for career opportunities |
| Gao, X. 2008 | Journal Article | Hong Kong | Mainland Chinese students | 22 interviewed; 6 followed longitudinally Phase 1 – 22 students Phase 2 – 6 students Phase 3 – 15 students  | English Medium of Instruction (EMI) | Students' learning experiences. Explores the dynamic nature of their language learning motivation prior to and after their arrival in Hong Kong. | Longitudinal. QUAL - [ethnographic]; interviews; conversations; observations [??] field notes; email correspondence  |  Identified "context-mediated" and "self-determined" elements in participants' motivational discourses. "Context-mediated" motivational discourses shaped by the contextual conditions on the Chinese mainland and in Hong Kong, including the roles of English, academic competition and medium of instruction. Through extended socialization some se "context-mediated" motivational discourses became internalized and transformed into "self-determined" in later stages  |
| Guarda, M. & Helm, F. 2015 | Journal Article | Italy | Italian EMI lecturers | 53 lecturers | English Medium of Instruction (EMI) | Explores how a shift in the language of teaching and learning can lead university lecturers of a range of disciplines to reflect on and innovate their teaching approaches  | MIXED: - interviews. Questionnaire - thematic analysis | Professional development to support lecturers should be designed to address not only language needs but also to offer space for reflection on practice and to raise awareness of the ‘inherent multilingualism’ of higher education |
| Hamid, M O., Jahan, I. & Islam, M. M. 2013 | Journal Article | Bangla-desh | Teachers and students in HE | 17 academics and 37 undergraduate students representing all six academic departments including Business, Agriculture, Engineering and Economics | English Medium of Instruction (EMI) | Investigate teachers' and students' language practices and ideologies that potentially reproduce divisive MOI policies for different sectors of education - to illustrate how national MOI policies provide a framework for actors in the micro-context to construct identities for languages and institutions by means of "othering" | QUAL - interviews. | Through their language practices and beliefs, students and teachers construct hierarchies of languages and institutions, using the rules of self- and other-representation and thereby perpetuating the macro-level divide. |
| Hellekjaer, G.O. 2010 | Journal Article | Norway and Germany | Norwegian and German university students. | 3 Norwegian Unis. 3 German Unis. 364 Norwegian and 47 German student respondents | English-medium higher education | Investigates whether the use of a foreign language for instruction has a negative impact on teaching and learning. Comparing student lecture comprehension in English and the first language (L1). | QUANT - self-assessment scores for lecture comprehension in English and the L1 | The difference between English and L1 scores was not substantial, a considerable number of students still had difficulties understanding the English-Medium lectures. Same issues in L1 as in EMI. |
| Helm, F. & Guarda, M. 2016 | Journal Article | Northern Italy | University lecturers | 115 lecturers | English Medium of Instruction (EMI) | Competences and concerns of university lecturers using English to teach: strengths and weaknesses In English - concerns and evaluations of experience teaching through English | QUANT - survey | Needs of lecturers involved in EMI are identified, (which relate to methodology as well as language issues). The implications of this for European Language Centres intending to support EMI at their universities are discussed in the conclusions.  |
| Hengsadeekul, C., Koul, R. & Kaewkuekool, S. 2014 | Journal Article | Thailand | Under-graduate students enrolled in nine different academic programs | Thailand (N = 2252, males = 31.2% and females = 68.8%). | English-medium programs | Examined the relationship between various measures of motivational orientation toward English language learning and students' preference for English-medium graduate programs. | QUANT - scores on motivation instrument | Mean values in the motivational scales show that instrumental goals occupy the first rank across academic programs but integrative goals were also positive and more significant in association with the idea of undertaking English-medium graduate program, especially for females. Levels of English language classroom anxiety and perceived social support from parents, peers, and teachers were significant to the discrimination between student groups who would prefer to study in English or in Thai. |
| Hu, G., & Lei, J. 2014 | Journal Article | China | EMI Business Administration program under-graduates | 64 EM students and 72 CM students from one major university in South China, majoring in Business Administration. Both EM and CM students include a roughly equal number of 2nd year and 3rd year students.  | English Medium of Instruction (EMI) | National & Institutional: policies, practice, language management  | QUAL - case study  | Lack of institutional support for teachers, misalignment between policy intentions and practices in classroom. Concerns about quality and consequences of EMI in Chinese HE  |
| Hudson, P. 2009 | Journal Article | Malaysia | Malaysian preservice teacher finishing their 1st year of B.Ed. | 51 Malaysian preservice teachers (university students training to be primary school teachers) from a Malaysian institute. | English Medium of Instruction (EMI) | What language is needed to teach Science; what proficiency of trainees | QUANT: questionnaire | Vocab, grammar and pronunciation most important for teaching Science; significant increase in trainee proficiency over course |
| Hultgren, A.K. 2014 | Journal Article | Denmark | Danish universities | 8 universities | English Medium of Instruction (EMI) | To what extent current organizational changes automatically engender Englishization, or whether one can take place without the other | QUANT - recently compiled statistics derived from a variety of government and national sources (How much English is used in: teaching, academic publishing and, as a proxy, the proportion of international students and new appointees) | There is evidence of a mild correlation (lower rank university - less English is used). Exceptions: Englishization is better explained by taking into account local and contextual factors than by grand narratives. |
| Inbar-Lourie. O. & Donista-Schmidt, S. 2012[[1]](#endnote-1) | Book Chapter | Israel | Students studying a B.Ed.  | 200 students | English Medium of Instruction (EMI) | What are students attitudes and motivations towards EMI? What variables predict their willingness to study such courses? | QUANT - self-report questionnaire. (study 1) | Students' strongest motivation for taking EMI courses was to improve their English language skills. 39% did not want to register for a course in English (due to fear of not understanding the content) and did not support compulsory EMI courses. Variables such as Hebrew as a safety net, Self-Assessed English ability, and Extra credit for EMI courses were some of the predictors of willingness to study through English. |
| Inbar-Lourie. O. & Donista-Schmidt, S. 2012 | Book Chapter | Israel | Students studying a B.Ed.  | 22 students  | English Medium of Instruction (EMI) | What are the attitudes of students who chose to study a course in English? What motivated them to choose this course? | QUANT - self-report questionnaire (different to study 1) | Students wanted to improve their English and interact with English speakers - but very few registered for English courses. Students reported choosing EMI courses because they were curious. Students were interested in taking more EMI courses - but during the Summer, not during the academic year. Students rated courses taught by NS higher than those taught by NNS.  |
| Islam, M. M. 2013 | Journal Article | Bangla-desh | Students and teachers | 17 academics and 37under-graduate students representing all six academic departments | English Medium of Instruction (EMI) | Critically examines the language practice and implementation of EMI policy  | QUAL - interview data | Through their language practices and beliefs students and teachers constructed their perception towards the accomplishment of EMI policy, educational choice and effectiveness of EMI policy. |
| Ismail, W.R. et al. 2011 | Journal Article | Malaysia | EMI students in teaching and learning of Science and Mathematics in Higher Learning Institutions in Malaysia  | 291 undergraduate students (science & technology+ education) | English Medium of Instruction (EMI) | Study students’ inclination towards English language in EMI | QUANT- questionnaire about students’ inclination (ANOVA, t-test, post-hoc) | Students had an inclination towards EMI in the teaching and learning of Science and Mathematics. Indian students, Malay and Chinese have greater inclination EMI. |
| Iyobe, B. & Li, .J. 2013 | Journal Article | Japan | University professors and students | Economics course (Chinese Finance) – Japanese university 4 students – all male – 3rd year – approx. 20yrs old Subjects studying: Economics, international relations, East Asian studies 1 professor Optional EMI course  | Content and Language Integrated Learning (CLIL) | Used the basic CLIL principles to reflect on an EMI course to determine if the economics professor unconsciously applied any CLIL theories in the design and facilitation of the course even without the awareness of CLIL pedagogical principles, per se. | MIXED: QUANT - student surveys. QUAL - class observation - reflective discussions | Clear areas where the theoretical beliefs and practices of the economics professor coincided closely with CLIL principles. Cognition and culture of CLIL were seen as challenging |
| Jawhar, S. 2012 | PhD thesis | Saudi Arabia | University students and professors | 4 subject specific classrooms. n=? | English Medium of Instruction (EMI) | Focuses on the interaction inside CLIL classrooms using a micro-analytic account of turn-taking practices, repair and preference organization - examines the use of the short response tokens "yes", "yeah" and "no" | MIXED: QUANT - corpus linguistics; QUAL - conversation analysis | Some interactional functions that are exclusive: Students - a response to other-initiated repair and a response to a request to display epistemic access to information. Teachers - giving positive/negative evaluation and allocating a next speaker's turn. Demonstrating the relationship between interaction and pedagogical focus (Seedhouse 2004) and confirm the teacher’s predetermined institutional role. |
| Jensen, C. &Thøgerson, J. 2011 | Journal Article | Denmark | Teaching staff at Denmark's largest university | 1,131 university lecturers filled out the survey – either fully or partially  | English Medium of Instruction (EMI) | Attitudes towards EMI | QUANT - Survey | Attitude may not form a simple one-dimensional dichotomy. Younger lecturers and lecturers with a higher teaching load in English are more positive towards the increase in English medium instruction. |
| Joe, Y., & Lee, H.-K. 2013 | Journal Article | Korea | Medical students | 61 medical students first and second year  | English Medium of Instruction (EMI) and English as a Foreign Language (EFL) | Comprehension and satisfaction of lectures | QUANT - pre- and post-tests, survey  | Students want L1 summaries of main points and remedial English courses. |
| Kang, S. & Park, H. 2005 | Journal Article | Korea | Engineering students  | 366 students  | English Medium of Instruction (EMI) | Investigates the effectiveness of EMI in improving students' English skills as well as content area knowledge | QUANT - web-based survey | 1)both English and Korean are being used; Korean - discussions and small group activities, English - lectures and presentations, 2) focus on language form is very rare - possibly due to the message-oriented nature of the courses; no feedback on grammatical errors 3) students' English proficiency is correlated with performance. High proficiency learners face less difficulty in understanding lectures and textbooks, & more positive opinions about the effect of EMI courses, feel less anxious and favor expanding them. |
| Karakaş, A. 2015 | Journal Article | Turkey | Under-graduate students  | 351. 3 Turkish universities, 3 programmes. | English Medium of Instruction (EMI) | Perceptions towards English in terms of the language ideology framework  | MIXED - QUANT - survey. QUAL - semi-structured interviews. | Strong tendency to view their English use as having the characteristics of dominant native varieties of English. High percentage of students’ acceptance of the distinctiveness of their English without referring to any standard variety. Students’ orientations to English are formed by two dominant language ideologies: standard English ideology and native speaker English ideology. |
| Khan, H. I. 2013 | PhD thesis | Pakistan | University staff and students | 2 universities. | English Medium of Instruction (EMI) | Examines the perceptions of university staff and postgraduate students to explore the relation between policy and practice  | MIXED: QUANT (survey);QUAL (focus group interview)  | A number of practices that indicate a pragmatic approach to implementation of the English medium policy. Both Ss and profs prefer Urdu MOI. Ss find material too hard. |
| Kiliçkaya, F. 2000 | Journal Article | Turkey | Instructors of non-language subjects | 100 instructors | English Medium of Instruction (EMI) | Attitudes of non-language instructors to EMI | QUANT - survey | Prefer Turkish MOI - can provide better student learning. Concerned about resources in Turkish, English proficiency of Ss, Ss participation in EMI class. |
| Kim, E. G. & Shin, A. 2014 | Journal Article | Korea | Korean graduate engineering students and faculty | 48 full-time professors from 13 Departments; 116(70.3%) graduate students—96 masters students and 19 doctoral students | English Medium of Instruction (EMI) | Research questions: Should English communication education be offered at the graduate level in Korean engineering schools? How could English communication education be improved for Korean graduate engineering students?  | MIXED: QUANT - survey QUAL - document analysis. | Students' English fluency is critical for the success of using English as a medium of instruction |
| Kim, J., Tatar, B., & Choi, J. 2014 | Journal Article | Korea | Korean and international students |  249 Korean 61 international students from non-English speaking countries answered questionnaire. Interviews with 23 Korean and 9 international students  | English Medium of Instruction (EMI) | Perceptions of effect of English proficiency on achievement and confidence | MIXED: QUANT - questionnaire and QUAL - interviews  | The two groups showed significant differences in understanding the role of ELF in an EMI classroom. The international participants in this study, although they are nonnative speakers of English, perceived themselves as having higher ownership of English than their Korean classmates in the EMI classes. Korean participants in this study seemed to be in significant need for Korean for successful learning in an EMI classroom. Their need of Korean use is also significantly interrelated with their awareness of linguistic competence of English, which indicates that the Korean students understood English used in classroom interaction as EFL, rather than ELF.  |
| Kim, A., Son, Y. D., & Sohn, S. Y. 2009 | Journal Article | Korea | University students. | 110 university students in Korea, who have taken EMI courses before | English Medium of Instruction (EMI) | To use the Structural Equation Model (SME) to understand the causal relationship among potential factors on engineering student’s satisfaction on the EMI. develop Customer Satisfaction Index (CSI) to estimate the student’s satisfaction about EMI, based on the proposed SEM | QUANT - survey | Five factors (capacity of professor, students acquisitive instinct, improvement of English skills, effort made during the EMI lecture and suitability) have direct effect on the students satisfaction. In addition, other two factors (students acquisitive instinct and capacity of professor) have indirect effect on students satisfaction. female students͛ satisfaction is higher than man's satisfaction. Freshmen has the highest satisfaction. Students majoring in liberal arts have a higher level of satisfaction than students in the science departments. Students who were taught by only English have the highest CSI. |
| Kırkgöz, Y. 2009 | Journal Article | Turkey | University students and lecturers | 15 lecturers and 220 students  | English Medium of Instruction (EMI) | Identify students’ academic needs, their perception of difficulties in meeting those needs, and the extent of the relevance of the students’ previous language instruction in meeting their academic needs. | MIXED - QUANT - survey & QUAL - semi-structured interviews | Skills-based English for Academic Purposes (EAP) curriculum remains inadequate in preparing students effectively for the academic requirements |
| Kırkgöz, Y. 2005 | Journal Article | Turkey | University students | 203 undergraduate students  | English-medium education | Identify the primary sources of motivation underlying students’ decision for selecting an English-medium education, students’ assessment of their English language skills, and their perceptions of difficulties they may have studying through the medium of English | MIXED: QUANT – survey – inferential statistics QUAL – purely descriptive  | Students prioritized a mix of integrative and instrumental motivations, and had a fairly positive self-assessment of their English. Problems included: feeling of being distanced from their native language and culture  |
| Klaassen, R.G. & De Graaff, E. 2001 | Journal Article | Nether-lands | Non-native teaching staff  | 9? - participants in the final training workshop | English Medium of Instruction (EMI) | The effect of training (training which supports teaching staff in the implementation of EMI) on the teaching staff  |  QUAL - workshop | Lecturers who were in the first phase of the innovation benefited most from the workshop. Although the second group benefited less, their delayed reaction showed the advantage of intervention at the beginning of the innovation process. The result of the last group counters the thought that this type of professional development for English–medium instruction should take place in a more advanced phase of the innovation. |
| Lasagabaster, D. 2015 | Journal Article | Spain | Under-graduate students | 495 undergraduates enrolled in 21 different degrees | English Medium of Instruction (EMI) | Examines two variables (gender and English proficiency) and their effect on students’ attitudes towards EMI | QUANT - survey | No gender effect, impact of the degree of English proficiency was statistically significant. The students’ attitudes were highly mediated by two interrelated factors : the low level of English proficiency attained by a large number of undergraduates before entering university, and their fear of content learning being negatively affected by instruction through a foreign language. |
| Lee, G. J. 2014 | Journal Article | Korea | University students | 10 profs in focus group discussion Only classes of 5 profs (7 classes) who conducted the survey with their students are included. 194 students – the MAIN sample of this study.  | English Medium of Instruction (EMI) | Explores and investigates factors contributing to verbal participation and the achievement of desired learning outcomes in English medium instruction (EMI) classes in a Korean higher education institution.  | MIXED: purely descriptive Case study is a sub-set of a larger research project . QUANT - surveys, QUAL- focus group interviews, peer observations of students and professors of selected EMI classes. | Differences in teaching styles and learning activities significantly affect levels of verbal participation in EMI classes. 6% indicated that they were able to understand more than 80% of the lecture, 21% felt that they were able to understand more than 70 % of the lecture. 54% understood less than 60% of the EMI lecture 32% satisfied with their comprehension of group discussion 16% actually interested in the subject  |
| Lei, J, & Guangwei, H. 2014 | Journal Article | China | Chinese under-graduate students in an English-medium and a parallel Chinese-medium program | 136 sophomores and juniors | English Medium of Instruction (EMI) | Investigates whether EMI has an impact on Chinese under-graduates' English proficiency and affect in English learning and use. | MIXED: QUANT - (a) scores on two national standardized English proficiency tests; (b) English-related affect as measured by three scales adapted from Gardner's (2004) Attitude/Motivation Test Battery; (c) perceptions of EMI in Chinese tertiary education: survey developed by the Chinese MOE(2006) ; QUAL - interviews with 10 focal students from the EMI- and CMI-medium programs. | No statistically significant effect of MOI on English proficiency or affect in English learning and use. extent of satisfaction with EMI, perceived necessity for EMI, and perceived increases in study burden had statistically significant effects on the outcome measures. prior English proficiency was the strongest predictor of subsequent English proficiency and English-related affect. |
| Lin, L.H.F. & Morrison, B. 2010 | Journal Article | Hong Kong | Hong Kong students | 762 students | English Medium of Instruction (EMI) | The impact of the medium of instruction in Hong Kong secondary schools on tertiary students' vocabulary | QUANT - vocab tests | Change in language policy at secondary (to CMI) had negative effect on vocab |
| Lueg, K. & Lueg, R. 2015 | Journal Article | Denmark | Danish students who had chosen either L1 (Danish) or EMI courses | 616 Danish students who had chosen either L1 (Danish) or EMI courses  | English Medium of Instruction (EMI) | Why Do Students Choose English as a Medium of Instruction? A Bourdieusian Perspective on the Study Strategies of Non-Native English Speakers | QUANT - survey | The Cohen's f2s indicate small size effects for BARRIERS, JOBADVANTAGE and PRESSpeers. BACKGROUND, ENGLISH and JOBNEED exhibit medium-sized effects and constitute the main predictors of students’ EMI choices. While having excellent English skills and recognizing their importance for highly qualified labor seem to be obvious determinants of choosing EMI, the medium-sized effect of BACKGROUND uncovers and highlights the hidden mechanisms of power in the field through habitus and cultural capital. The result shows students from higher social strata are much more likely to choose EMI.  |
| Macaro, E. Akinciouglu, M. , & Dearden, J. 2016 | Journal Article | Turkey | University lecturers teaching through English. First year students studying through EMI who had completed the PYP | 4 universities - 9 pairs of EMI and content lecturers | English Medium of Instruction (EMI) | 1) How does collaboration in planning evolve between a PYP teacher and an EMI teacher? 2) What factors make collaboration successful or less successful? | QUAL - Intervention - Collaborative Planning Tool (CPT) - pre- and post- intervention interviews | Findings on the whole suggest that collaboration of this sort can be highly beneficial |
| Maiz-Arevalo, C. & Dominguez-Romero, E. 2013 | Journal Article | Spain | HE students | 41 undergraduate students of Economics and Business Administration.  | Content and Language Integrated Learning (CLIL) | Analyze students' response to pro-CLIL implementation in the degrees offered by the Economics and Business Administration school at the Universidad Complutense de Madrid.  | QUANT- Questionnaire | Students’ responses showed that the two language skills improvement were listening and speaking. For learning strategies, translation and asking the teacher were the two most favoured ones. Motivation was higher whereas participation remained the same or even increased. |
| McMullen, M.G. 2014 | Journal Article | Saudi Arabia | Students enrolled in similar preparatory year English programs in Saudi Arabia | 3 universities, 184 male students and 295 female students. | English preparatory year | Investigates the effects of gender and geographical location on the perceptions of Saudi university students regarding the value of preparatory English programs and their attributes. | QUANT - survey. | Encouraging results from this study suggest that Saudi university students do realize the value of a preparatory year English program. In most cases, they share common perceptions about which attributes are needed to insure the success of any such program. In some cases, there are significant differences based on gender and geographical location. |
| Napoli J. & Sourisseau, J. 2013[[2]](#endnote-2) | Report  | France | French (nationals) students Toulouse | 15 students  | Content and Language Integrated Learning (CLIL) | How much of the program is devoted to teaching disciplinary content in L2, how to recruit teachers and students; impact on mobility | QUANT - Questionnaire | Some French students found that lack of English proficiency a bar to enrolling on EMI courses |
| Pessoa, S. M., Ryan, T. & Kaufer, D. 2014 | Journal Article | Qatar | University students | 86 students. 23 were interviewed  | English Medium of Instruction (EMI) | Study of literacy development - document the challenges and development of multilingual students' literacy skills in their transition to college | MIXED: QUAL -Longitudinal, interviews. QUANT - corpus analysis of students' writing | INTERVIEW DATA: students faced challenges during the first semester in terms of reading comprehension difficulties stemming from limited vocabulary knowledge, background knowledge, and reading stamina. described difficulties understanding the genre expectations and style of English academic writing. students developed their academic reading and writing as their understanding of college writing expectations and their use of learning strategies and resources increase. WRITING DATA: academic writing developed. |
| Rogier, D. 2012 | PhD thesis | United Arab Emirates  | Students and university content professors STUDENTS: final year of study of a four-year under-graduate degree PROFS: in their final year of study of a four-year under-graduate degree. Female Emirati under-graduate students between the ages of 22 and 35 who were in their fourth year of study in a federal university in the United Arab Emirates at the time of data collection | Not made clear | English Medium of Instruction (EMI) | Effect of EMI on Lang proficiency | MIXED: QUANT - test retest after 4 years IELTS and QUAL - interviews +questionnaires for student and teacher perceptions of language ability | Significant IELTS score gain in all 4 skills tested by IELTS, most gain in speaking, followed by reading, writing and then listening |
| Sancho Guinda, C. 2010 | Journal Article | Spain | Lecturers in engineering & students | 20 students and Two corpora. | Content and Language Integrated Learning (CLIL) | To determine the incidence of mind-mapping in the note-taking habits of engineering students. To explore the textual choices of engineering instructors and their repercussions on the application of conceptual maps in note-taking  | MIXED - QUAL - recordings of lectures, QUANT - questionnaire | Influence of lecturing style on note quality and evidences several lecturing deficiencies at the rhetorical level that may hamper the practice of conceptual mapping.  |
| Studer, P. 2015 | Journal Article | Austria | University students | 5 lecturers and (roughly?) 40 students | English Medium of Instruction (EMI) | How undergraduate students negotiate linguistic competence of their university lecturers following the switch of the classroom medium of instruction from German to English. | QUAL - discussing 2 Science lectures with students  | Successful implementation of English-medium instruction crucially depends on the lecturers' ability to negotiate communicative-didactic rather than linguistic competence. |
| Suliman, W. A., & Tadros, A. 2011 | Journal Article | Saudi Arabia | Trainee nurses | 70 trainees | English Medium of Instruction (EMI) | Strategies used by nursing students in coping with EMI. | QUANT - questionnaire + free responses (QUAL) | Positive reappraisal, ‘planful’ problem-solving, self-controlling, and seeking social support decreased significantly; ‘confrontive’ coping and distancing have increased significantly from time; nursing students utilized a variety of strategies, which changed over time. |
| Sultana, S. 2014 | Journal Article | Bangla-desh | 1st year university students in universities in Bangladesh | 115 students | English Medium of Instruction (EMI) | The effect of EMI: examined the academic discourse and socialisation experiences of students | MIXED: QUANT - survey. QUAL - interviews.  | Language of instruction led some Ss to perceive themselves as being deficient. They felt systematically excluded from classroom discussions and activities. English severely impeded their possibilities of learning and the development of identity & exacerbated inequalities between students. |
| Tarnopolski, O. B. & Goodman, B. A. 2014 | Journal Article | Eastern Ukraine | Students and teachers in university | 24 third-year students taking international economics in English; nine second-year philology students in their English practice (EFL) classes; and; 25 undergraduate students in international management (EMI); plus observation and recording of 52 EMI classes and 50 EFL classes | English Medium of Instruction (EMI) | Examined the degree to which EMI allows for the use of Ukrainian (the state language) or Russian (the predominantly spoken language) in large cities in eastern Ukraine | MIXED: Longitudinal - 9 months. QUANT - Audio and video recording of classroom language. QUAL - Ethnographic notes. Semi-structured interviews. Informal conversation | Multiple pedagogical purposes for using the predominant native language (L1), Russian. Teachers and students consider the use of the L1 in the classroom to be a natural function of the need for comprehension. Ukrainian appeared in a limited form, but in ways that indexed its position as a national language. Attitudes towards Ukrainian also supported the ideology of Ukrainian's position as a state language. |
| Tatzl, D., & Messnarz, B. 2013  | Journal Article | Austria | Students: Freshman to Senior level | 96 students - 4 year groups. | English Medium of Instruction (EMI) | Investigates the influence of English as the examination language on the solution of physics and science problems by non-native speakers in tertiary engineering education | QUANT - test experiment (Half of each test group were given a set of 12 physics problems described in German, the other half received the same set of problems described in English) | Written undergraduate English-medium engineering tests and examinations may not require additional examination time or language-specific aids for students who have reached university-entrance proficiency in English as a foreign language. |
| Thøgersen, J., & Airey, J. 2011  | Journal Article | Denmark | One university lecturer | 1 lecturer | English Medium of Instruction (EMI) | Investigates the consequences of L2 use in university lectures  | MIXED: QUANT - parallel lectures held by the same experienced lecturer in Danish (L1) and English (L2). QUAL - content analysis of parallel extracts from the same data set | PART 1 - the lecturer takes 22% longer to present the same content in L2 compared to L1, and that the lecturer speaks 23% more slowly in L2 than in L1. PART 2 - when teaching in English the lecturer uses a higher degree of repetition and adopts a more formal and con- condensed style as compared to the rhetorical style in L1.  |
| Trent J. 2008 | Journal Article | Hong Kong | Under-graduates | 4 first year economics & Finance students; 2 English teachers; 6 EMI teachers | English Medium of Instruction (EMI) | Investigate the oral participation of one group of foreign language learners within their English for academic purposes (EAP) classroom at an EMI university  | QUAL - interviews, classroom observations, audiovisual recordings of classroom interaction, and documentary analysis,  | Successful integration of language and content teaching includes an appreciation of the institutional forces that constrain and enable learners' oral investment, how learners deploy a variety of knowledge, skills and understandings in support of this investment, and the degree of freedom learners enjoy in shaping the processes and products of their investments.  |
| Unterberger, B. 2012 | Journal Article | Austria | All universities offering business degrees in Austria | 4 EMPs. Expert interviews with programme directors (n = 5) For the case study: English-taught programmes at Vienna University of Economics and Business (WU).  | English-medium Programme (EMP) | Status quo survey of the spread of EMPs across Austrian business faculties - case study: Vienna University of Economics and Business (WU). | MIXED: QUANT - survey. QUAL - case study | No English-taught BA programmes, 30% were implemented at peak of Bologna reform, no uniform admission policy. Lack of awareness of ESP in EMI as only 11% of courses could be classified as ESP. A third of all courses explicitly state language learning aims in their course descriptions. |
| Vinke, A.A. 1995 | PhD thesis | Nether-lands | Lecturers teaching engineering in English in universities in the Netherlands | 131 lecturers | English Medium of Instruction (EMI) | Examine the effect of adopting EMI | QUANT - measurements of content outcomes and proficiency. | Participants with higher proficiency performed better. |
| Vu, N.T.T. & Burns, A. 2014 | Journal Article | Vietnam | A new EMI under-graduate program in Vietnam.  | 16 lecturers ( 5 language lecturers, 9 content lecturers)  | English Medium of Instruction (EMI) | What challenges face stakeholders in the implementation of EMI  | Longitudinal (two-year project). QUAL only although part of larger study; semi-structured interviews, Purely descriptive  | Lecturers were challenged by: their own language abilities, students’ language competence and learning styles, pedagogical issues, and resource availability |
| Werther, C. Denver, L.Jensen, C &Mees, I.M. 2014 | Journal Article | Denmark | Lecturers and students at CBS University | 33 lecturers (17 interviewed - 5 were weakest in English). 1800 students | English Medium of Instruction (EMI) | Not all university lecturers feel they have the appropriate academic English proficiency to meet the standard required to teach through English. This study sheds light on the challenges faced by a selection of these lecturers | MIXED: QUANT - surveys. QUAL - interviews. Audio recordings | Insights gained from the interviews address issues such as attitudes to EMI policy, experience with EMI teaching, student evaluations and support |
| West, R. et al. 2015 | Report (British Council) | Turkey | Lecturers and students in 25 Turkish universities | various | various as EMI is only part of report | Examines the state of English in HE in Turkey and looks at EMI and PYP provision | QUAL- descriptive/RBV (Research-Based View) | EMI Teachers' competence is good; students competence is very low; poor quality PYP programmes |
| Wu, W.S. 2006 | Journal Article | Taiwan | Taiwanese university students. | 28 students Applied Mathematics (Advanced Engineering Mathematics) 7 Applied Mathematics (Theory of Vibration) 4 Mechanical Engineering 9 Technology Management 8  | English Medium of Instruction (EMI) | Investigate students’ attitudes towards EMI. | QUANT - survey  | Most students, even those who confessed that they did not have a good command of English, thought that EMI was a helpful language policy. most students were aware that learning English by using it in the classroom was one of the most effective ways to improve their English. |
| Yang, W. 2015 | Journal Article | Taiwan | Students - after 2 years of study - before industrial placement | 29 students for the tests, survey 3 CLIL teachers for interviews  | Content and Language Integrated Learning (CLIL) | English proficiency and content knowledge | QUANT-test | Entry-level language proficiency can affect initial content achievements but this effect is not sustained as students language proficiency continued to improve |
| Yeh, C.C. 2014 | Journal Article | Taiwan | Taiwanese university students | 476 students from 25 EMI courses at six universities in Taiwan | English Medium of Instruction (EMI) | Investigate student learning in EMI courses. Probed their learning experiences and general attitudes towards EMI courses.  | QUANT - survey | Positive towards EMI. The instructor exerted an important influence on students' course selection, while seeking English improvement was the second highest-rated reason for enrolling in EMI courses. Students generally reported their learning in EMI courses as satisfactory, though some of them attributed their learning difficulties to their own insufficient English competence. students generally agreed with its broadly touted benefits, such as boosting English ability, facilitating students' employability and further studies, and enhancing the competitive edge of Taiwan |

1. The authors confirm that this study and then next one were different studies reported in the same book chapter [↑](#endnote-ref-1)
2. N.B. this paper is written in French [↑](#endnote-ref-2)