

# TAEC LITERATURE DATABASE REPORT

The report is part of a project is co-funded by the Erasmus+ programme of the European Union.



## 1. The *TAEC Literature Database*

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As part of the project *Transnational Alignment of English Competences for University Lecturers (TAEC)*, funded by the ERASMUS+ programme, the ***TAEC Literature Database*** was developed to collect information about the research on EMI produced within the five partner countries: Denmark, The Netherlands, Spain, Italy and Croatia. The database covers a period between 1999<sup>1</sup> and 2018 and comprises 205 resources, from book chapters to research articles, from edited books to institutional documents. Each resource is annotated according to a range of categories, including language and date of publication, research aims and foci, methods, approaches, participants, setting, and main results.

The database was designed to provide the project with robust knowledge foundations, creating a reliable tool for comparative analysis. In this respect, the ***TAEC Literature Database*** represents a unique resource that allows users to go beyond local or national concerns and investigate how EMI has evolved in countries at different implementation stages and how scholarly inquiry has progressed over a period of 20 years.

The database was intended to become a sustainable and open access resource for use outside the project too. Thanks to the adoption of detailed annotation guidelines, external contributors will be able to input information about additional settings, thus enriching our knowledge of theories, practices and current developments. Such knowledge is indispensable to move forward in EMI research and improve practices.

## 2. Collecting studies

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The ***TAEC Literature Database*** collects resources on a broad range of topics, from stakeholder attitudes to lecturer language use. These resources were gathered through a systematic process of literature search, which had as a starting point a shared definition of EMI:

English-medium instruction is characterised by four main features: 1. English is the language used for instructional purposes; 2. English is not itself the subject being taught; 3. Language development is not a primary intended outcome; 4. For most participants in the setting, English is a second language. (Pecorari & Malmström, 2018: 499)

Based on the above definition, relevant publications were searched for. Specific guidelines were established to ensure coverage and comparability:

1. Academic databases (i.e. ERIC, Scopus, ISI – Web of Science, MLA International Bibliography and JSTOR) were searched using the following string with Boolean operators: [country/region] AND “EMI” OR “English-medium” OR “English taught” OR “ICLHE” OR “CLIL”. The labels CLIL and ICLHE were included because what is EMI according to the above definition may also be referred to by means of those acronyms in some studies.

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<sup>1</sup> One study, however, dates back to 1993.

2. The archives of selected journals publishing EMI research were also consulted (see Appendix 1, “List of journals”).
3. Google Scholar Citation was used to find publications by selected authors.
4. Any other relevant study or document not retrieved through the previous steps was added.

Since the goal was to devise a tool for the comparative analysis of research on EMI in the partner countries, studies by foreign scholars on the partner contexts were included, but those by local researchers on contexts other than the TAEC countries were excluded. Other criteria for inclusion regarded the type of publication (i.e. research article, book chapter, edited book, monograph, introduction/epilogue, chapter in proceeding, conference paper, PhD thesis, encyclopaedia entry, institutional report, handbook) and the participants involved (i.e. lecturers, students and other stakeholders at tertiary level).

When possible, the publications included in the database were stored in electronic format in a folder on a secure drive created for the project. This allowed project members to retrieve and read relevant papers when carrying out the comparative analysis (see Section 5).

### 3. Annotating the database

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The **TAEC Literature Database** comes as a spreadsheet file. It required compilers to classify studies according to 21 categories, each about a different aspect to be reported on. The categories can be gathered into five macro groups.

1. **Study credentials:** this group includes information about the surname and name of the author(s), the year of publication, the language of the contribution and the full reference in APA style.
2. **Focus and aims:** the categories in this group have to do with what the study is about and comprise the area of interest (e.g. attitudes, policy), the foci (to be specified in the case of multiple areas of interest), and the research questions/aims.
3. **Research approaches and methods:** here compilers annotated the study in terms of the perspective (i.e. empirical or conceptual), the type of research (i.e. qualitative, quantitative, or mixed), the methods (e.g. survey, case study, etc.), the data collection procedures (e.g. observation, interview, questionnaire, etc.) and methodological specifications (i.e. any useful detail to better understand the study).
4. **Contextual information:** this group provides information about the disciplinary domains, the participants and the academic institutions involved in the study. In addition, information about the country hosting the higher education institution in question was included as well as the TAEC partner country that contributed the study.
5. **Main results and points:** in this cell, compilers provided a brief overview of the major findings obtained and/or conclusions reached in the study.

Some of the above categories are open fields, meaning that compilers typed the information they deemed relevant. For instance, the “Research questions/aims” cell was filled in summarizing information found in the specific study. On the other hand, some categories required the choice of a

specific descriptor, or label, from a drop-down list. For example, the category “Area of interest” required choosing among fixed labels such as “attitudes”, “policy” and “language use”.

Appendix 2, “Standardised labels”, provides the complete list of categories and labels with a brief description. It should be pointed out that the categories and labels were initially created top-down, based on the aspect that the project members thought would be important to code. However, they were gradually fine-tuned through a bottom-up process of editing and integration based on what was actually found in the literature.

## 4. Validating the annotation

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In order to verify that the labels were used consistently, four coders annotated 10% of the entries again and the agreement rate with the existing annotation was calculated. In particular, the focus was on the 11 categories (mostly closed ones) which could be inconsistent with the guidelines, i.e. "type of publication", "area of interest", "foci", "perspective", "type of research", "method", "data collection", "disciplinary domains", "discipline", "country", "TAEC partner". The agreement rate between each coder’s revised annotation and the database’s original one was on average 90%, suggesting a high degree of reliability in the use of the descriptive labels. The results broken down by coder are reported in Table 1.

**Table 1. Agreement rate with the database by coder**

	<b>Coder 1</b>	<b>Coder 2</b>	<b>Coder 3</b>	<b>Coder 4</b>
<b>Number of labels not needing revision /total number of labels to validate</b>	181/198	178/198	178/198	173/198
<b>Agreement rate</b>	91.41%	89.89%	89.89%	87.37%

The remaining categories (e.g. Name and Surname of authors, full reference in APA style) were revised as well, paying attention to formatting irregularities and to issues of clarity. This process provided us with input for the overall homogenization of the database.

## 5. Analysing the Database

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Given the multiplicity of categories and the richness of the information contained, the database lends itself to a variety of queries. For the purposes of the TAEC project, the following aspects were focused upon in the comparative analysis:

1. **The development of EMI research over time:** how existing research may be placed on a timeline by topic;
2. The **methodologies** used to investigate EMI over time, across settings and by topic;
3. The main **attitudes, opinions** and **beliefs** related to EMI in the different partner countries;
4. Research on **EMI policies** in the countries of the project;
5. Research on **language use:** goals, methods, results, implications;
6. Research on **intercultural communication:** methods, participants, main results;
7. Research on **identity:** methods, participants, issues, implications;
8. Research on **training:** methods, issues, implications;
9. Research on **testing:** perspective, type of research, main results;
10. Research on **learning outcomes:** the impact of EMI on content and language learning.

The findings of the analysis are reported in Appendix 3, "Comparative Analysis" and were presented at the Conference *EMI practices in Europe*, 4-5 April 2019, University of Copenhagen.

## 6. Conclusions

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The **TAEC Literature Database** is a tool that was created with the aim of continual expansion. As a consequence, the spreadsheet file and the guidelines for entry inclusions are available upon request for researchers outside the project, who can simply consult them or add studies from their context. Given the array of categories and the richness of the information contained, the **TAEC Literature Database** lends itself to a variety of queries. By sorting the entries according to one or more categories, comparative analysis along different lines of inquiry can be conducted. Comparative research is much needed in order for the field of EMI to gain greater awareness of context-specific and cross-cutting features and to better assess the extent to which research findings are transferable outside specific settings.

## References

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Pecorari, D., & Malmström, H. (2018). At the crossroads of TESOL and English medium instruction. *TESOL Quarterly*, 52(3), 497-514.

# Appendices

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## Appendix 1: List of Journals

### A

*Acta Linguistica Hafniensia*  
*AILA Review*  
*Angles on the English-Speaking World*  
*Applied Linguistics Perspectives on CLIL*

### B

*Baltic Journal of English, Culture and Literature*

### D

*Dansk Universitetspædagogisk Tidsskrift*

### E

*Education Research International*  
*English for Specific Purposes*  
*ESP Today*  
*European Journal of Engineering Education*  
*European Journal of English Studies*  
*European Journal of Higher Education*

### F

*Fachsprache*

### H

*Higher Learning Research Communications*

### I

*Ibérica*  
*International CLIL Research Journal*  
*International Journal of Applied Linguistics*  
*International Journal of Bilingual Education and Bilingualism*  
*International Journal of Sociology of Language*

### J

*Journal of English for Academic Purposes*  
*Journal of Immersion and Content-Based Language Education*  
*Journal of Language and Communication in Business*  
*Journal of Multilingual and Multicultural Development*  
*Journal of Pragmatics*  
*Journal of Research in International Education*

### L

*L'analisi linguistica e letteraria*  
*Language and Education*  
*Language and Intercultural Communication*  
*Language Awareness*

*Language Learning in Higher Education*  
*Language Policy in Higher Education: The Case of Medium-Sized Languages*  
*Language Problems & Language Planning*  
*Language Teaching*  
*Language, Culture and Curriculum*

### **M**

*Moderna språk*  
*Multilingua*

### **N**

*Nordand - Nordisk tidsskrift for andrespråksforskning*  
*Nordic Journal of English Studies*

### **P**

*Procedia - Social and Behavioral Sciences*  
*Professional and Academic English*

### **R**

*Rask. Internationalt Tidsskrift for Sprog Og Kommunikation*  
*Revista de Contabilidad*  
*Revista de Estudos em Didática de Línguas da Universidade do Porto*  
*RiCognizioni. Rivista di Lingue e Letterature Straniere e Culture Moderne*

### **S**

*Sociolinguistica, Internationales Jahrbuch für europäische Soziolinguistik*  
*Sprogforum*  
*Studies about languages*  
*Studies in Second Language Learning and Teaching*

### **T**

*Tamara Journal of Critical Organisation Inquiry*  
*Temps d'Educació*  
*TESOL Quarterly*  
*Textus*  
*The Journal of Technology Transfer*

### **W**

*World Englishes*

## Appendix 2: Standardised labels

CATEGORY	LABELS	DESCRIPTION
<b>SURNAME, NAME</b>		Surname and Name of the author(s).  For institutional authors refer to APA style
<b>YEAR</b>		Year of publication
<b>LANGUAGE</b>		Language of the contribution (Catalan, Croatian, Danish, Dutch, English, Italian, Spanish...)
<b>TYPE OF PUBLICATION</b>	<b>monograph</b>	A scholarly (research-based) book-length work on a given topic
	<b>book chapter</b>	A research-based contribution in a scholarly volume
	<b>chapter in proceedings</b>	A research-based contribution in a proceedings volume
	<b>journal article</b>	A research paper in a scientific journal
	<b>introduction/epilogue</b>	Any introduction/epilogue to an edited book, a special issue of a journal, or proceedings
	<b>PhD thesis</b>	A submitted PhD thesis
	<b>conference paper</b>	A conference presentation (may include slides, abstracts, handouts)
	<b>handbook</b>	A reference book providing information, advice and instructions about a particular subject (communication from experts to experts-to-be)
	<b>institutional document</b>	Any document (e.g. report, directive, recommendation) issued by educational or political institutions
	<b>encyclopedia entry</b>	An encyclopedia article summarizing current knowledge
	<b>other</b>	Any other relevant publication type not included in the list
<b>AREA OF INTEREST</b>	<b>attitudes</b>	Beliefs, opinions, reflections related to EMI as a phenomenon and to its practice
	<b>policy</b>	Principle or course of action adopted or proposed as desirable, advantageous, useful or expedient; esp. one formally advocated by educational or political institutions
	<b>language use</b>	The actual use of language (spoken/written) in EMI settings
	<b>intercultural communication</b>	Communication across different cultures and social groups, how culture affects communication
	<b>training</b>	Activities related to the improvement of teaching performance
	<b>learning outcomes</b>	Gains and losses in term of content learning and language proficiency; skills development
	<b>testing</b>	Studies related to the assessment of teaching performance
	<b>identity</b>	Issues of self-perception, especially as a professional
	<b>multiple</b>	A mix of some of the above
		<b>N/A</b>
<b>FOCI</b>		Fill in this column if the selected label for the “Areas of interest” column is “Multiple”; use the same labels as for “Areas of Interest” and list them alphabetically, divided by a semi colon (;)
<b>RESEARCH</b>		The main research questions and/or goals



<b>QUESTIONS / AIMS</b>		
<b>PERSPECTIVE</b>	<b>empirical</b>	Seeks new information derived from the observation and analysis of data or from experimental work
	<b>conceptual</b>	Aims to discuss concepts or phenomena, interpret ideas, or introduce theoretical frameworks
	<b>N/A</b>	Select this label if “empirical” and “conceptual” are not applicable (e.g. for institutional documents)
<b>TYPE OF RESEARCH</b>	<b>quantitative</b>	Empirical research based on numerical data. Surveys are generally considered forms of quantitative research. Results can often be generalized, though this is not always the case
	<b>qualitative</b>	Empirical research based on (con)textual, rather than quantitative data. Case studies, observations and ethnography are considered forms of qualitative research. Usually results are not considered generalizable, but they are often transferable
	<b>mixed</b>	A combination of quantitative and qualitative types of analysis
	<b>N/A</b>	Not applicable
<b>METHOD</b>	<b>survey</b>	A research method that includes at least one question, which is either open-ended or close-ended, and is asked in written or oral form. The goal of a survey is to gain information about either a specific group or a representative sample of a particular group
	<b>case study</b>	An empirical enquiry that investigates a phenomenon within its real-life context, based on different sources of evidence (e.g. classroom observations, recordings, interviews). Clearly delimited in terms of time, space and social dimension
	<b>case study (multiple)</b>	A series of case studies (generally in book-length contributions)
	<b>experiment</b>	It compares two groups and their properties. Certain variables are manipulated. Generally in a controlled environment.
	<b>text analysis</b>	Analysis of spoken/written language (product-oriented) and discourse
	<b>mixed</b>	A combination of methods
	<b>N/A</b>	Not applicable
<b>DATA COLLECTION PROCEDURES</b>	<b>observation</b>	Direct observation and field notes
	<b>interview</b>	All types of interview, e.g. semi-structured, retrospective (stimulated recall), focus groups, etc.
	<b>questionnaire</b>	Paper-based or online
	<b>audio/video-recording</b>	Audio/video recording of an authentic or simulated speech event
	<b>database</b>	An existing collection of data (e.g. student grades)
	<b>multiple</b>	A combination of data collection techniques
	<b>N/A</b>	Not applicable
<b>METHODOLOGICAL SPECIFICATIONS</b>		Add any relevant details, for example whether the interview is semi-structured or retrospective (stimulated recall). Also specify whether the analysis of language was based on a proper ‘corpus’ of texts (using corpus-based/driven techniques)

<b>DOMAIN</b>	<b>Physical Sciences and Engineering (PE)</b>	Refer to the European Research Council's domain classification <a href="https://en.wikipedia.org/wiki/European_Research_Council">https://en.wikipedia.org/wiki/European_Research_Council</a>
	<b>Social Sciences and Humanities (SH)</b>	
	<b>Life Sciences (Is)</b>	
	<b>mixed</b>	
	<b>N/A</b>	
<b>DISCIPLINES</b>		Add specific discipline/subject if relevant; if not write N/A
<b>PARTICIPANTS</b>		Include details to clarify who participated in the study (e.g. how many people; whether EMI insiders or not; whether graduate or undergraduate students). Use the following labels: LECTURERS (for teaching staff); ADMINISTRATIVE STAFF; MANAGERIAL STAFF; STUDENTS; POLICY MAKERS; RATERS. Write the number of participants involved in parentheses, e.g. lecturers (2)
<b>TAEC PARTNER</b>		'TEAC partner' does not refer to the nationality of the author, but to the country that contributed the piece.
<b>COUNTRY</b>		The project countries focused on (Croatia, Denmark, Italy, Netherlands and Spain).  If the focus is on more than one country (including a partner country), write 'INTERNATIONAL' (if there are specific countries, these can be listed in brackets, e.g. 'International (Denmark, Finland, Iceland, Norway, Sweden)' )  Write N/A if not applicable (e.g. some conceptual papers)
<b>SETTING</b>		Add information about the specific setting focused on.  a. list universities individually – up to 4 b. write MULTIPLE – more than 4 c. no specific reference to a university – N/A d. write ANONYMOUS - if information cannot be disclosed
<b>MAIN RESULTS AND POINTS</b>		Report the main results obtained and/or the points made in the text.
<b>FULL REFERENCE</b>		Use the APA style.
<b>ENTRY DATE</b>		The date when the entry was completed.

## Appendix 3: Comparative analysis

### Research over time

#### 1. Overview

From the TAEC Literature Database, we base our analysis on 205 resources focusing on various aspects of EMI, published between 1999-2018<sup>2</sup>. As a point of departure, we place the research on a timeline by topic. Table 1 show the number of publications listed by the participating universities in the five countries. Of the 205 publications collated, Denmark produced 69 publications, followed by Italy with 52, Spain with 47, the Netherlands with 29, and Croatia with 7. One publication is not explicitly associated with one partner country, as it was produced by scholars working in the UK, but it was included because it focuses on Italy.

**Table 1. Number of publications by country**

Country	No. of publications
Croatia	7
Denmark	69
Italy	52
The Netherlands	29
Spain	47
N/A	1
<b>Total</b>	<b>205</b>

Figure 1 shows the overall research focus by country and year. The publication of EMI research increased steadily in 2011, with 2015 and 2017 showing the greatest number of publications, 28 and 41 respectively. The literature covers a broad range of topics and is divided into eight categories: (1) attitudes; (2) intercultural communication (ICC); (3) identity; (4) language use; (5) learning outcomes; (6) testing; (7) training; and (8) policy. Publications with multiple foci are present.

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<sup>2</sup> One publication dates 1993.

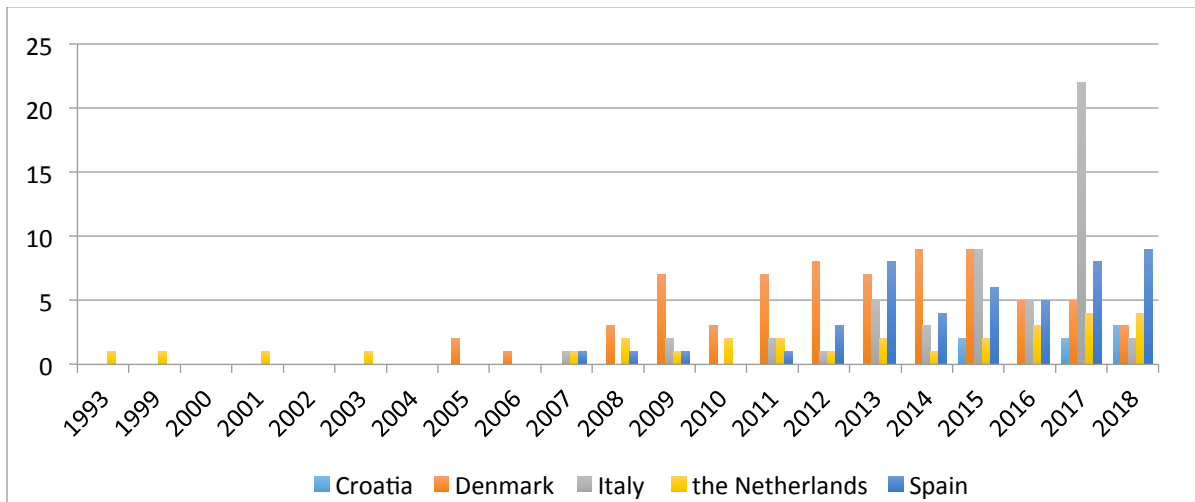


Figure 1. EMI research by country and year

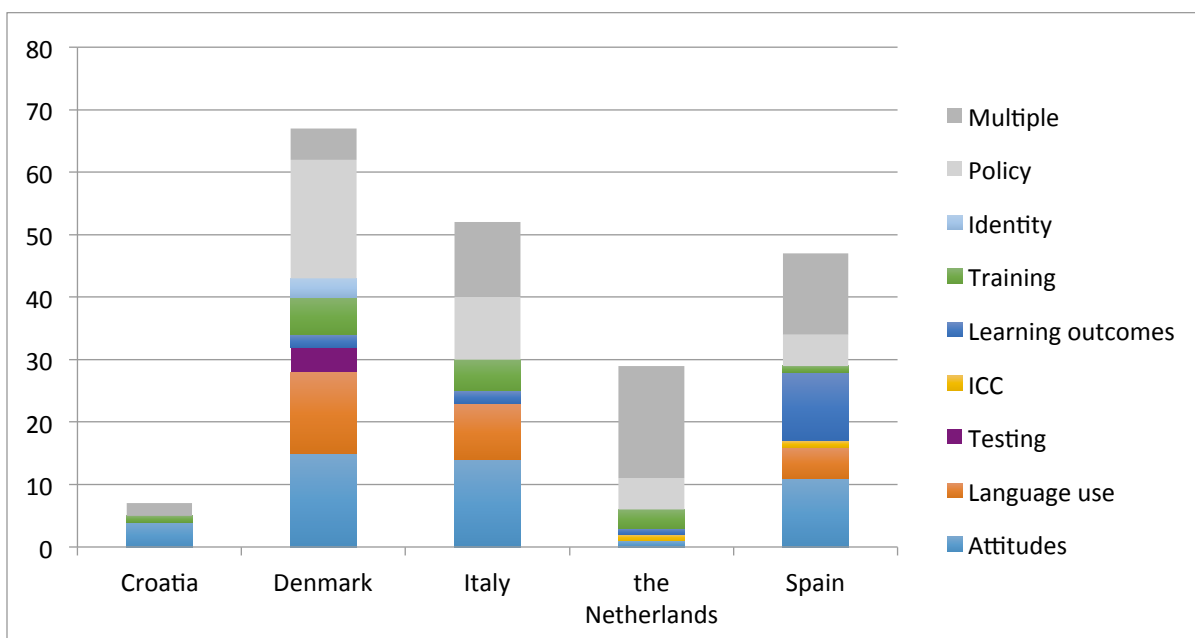


Figure 2. Area of focus by country

Figure 2 shows the range of the foci of the publications. Teachers’ attitudes, language use and policy are the two most researched topics in both single- and multiple-focus studies (see below). The focal areas for these publications have been included in the individual focus areas. In the following, we break down these eight categories to see the trend of research over the years.

## 2. Attitudes

The category with the highest number of publications is stakeholders’ attitudes to EMI. There is a total of 45 publications listed with an exclusive focus on attitudes and 32 multiple-focus studies including insights about attitudes. Figure 3 shows the breakdown of the publications by year and country. As we can see from the figure, little research took place in the early 2000s. The Netherlands

began reporting on teacher attitudes in the early part of the 2000s and then picked up again more than a decade later. Spain, which has 21 entries, did not begin publishing in this area until the 2010s, approximately a decade after the Netherlands, with a peak in publication in 2016, 2017 and 2018. Many of the reports on attitudes from the Netherlands and Spain were publications with multiple foci. Denmark reported 17 articles on teacher attitudes since 2008, Italy has 22 publications since 2007, while Croatia’s literature on this topic, six (6) publications, is more recent, namely from 2015-2018.

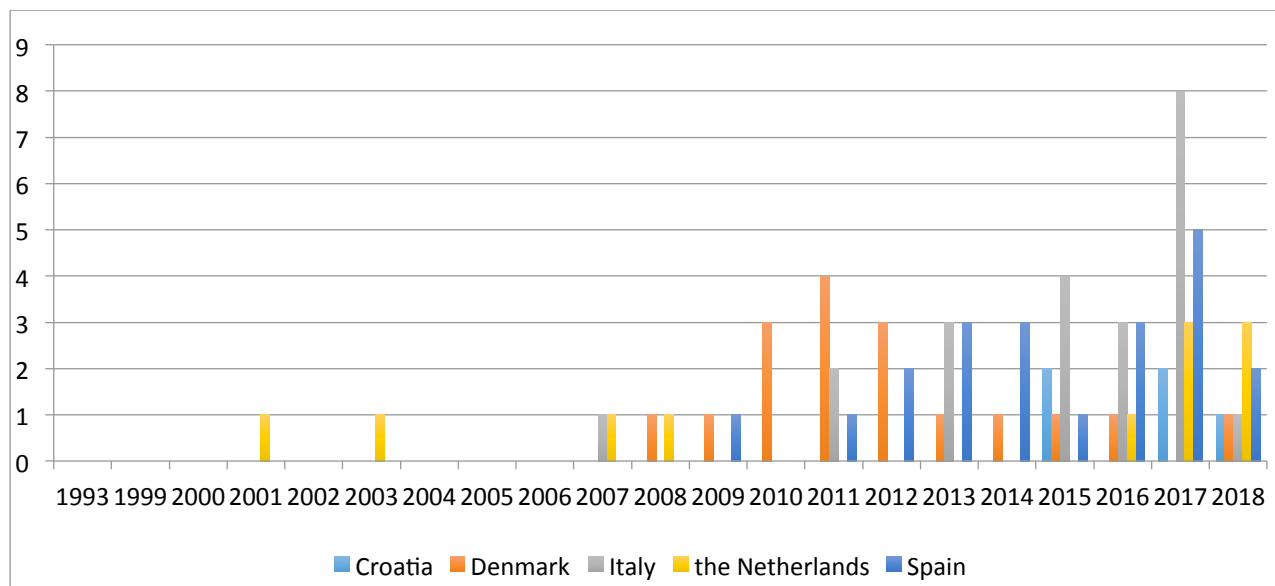


Figure 3. Attitudes

### 3. Policy

Figure 4 shows the publications that fall under the interest area of policy in the database. Of the 70 publications listed in the database, approximately one-third are from Denmark (24), with Italy reporting 18, Spain with 14, the Netherlands 12, and Croatia with two (2). Studies on policy appeared in the early 2000s in studies produced in the Netherlands and Denmark, i.e. the two countries in the project with a longer EMI tradition. However, policy started attracting a great deal of interest starting from 2013, when other European countries had EMI programmes in place.

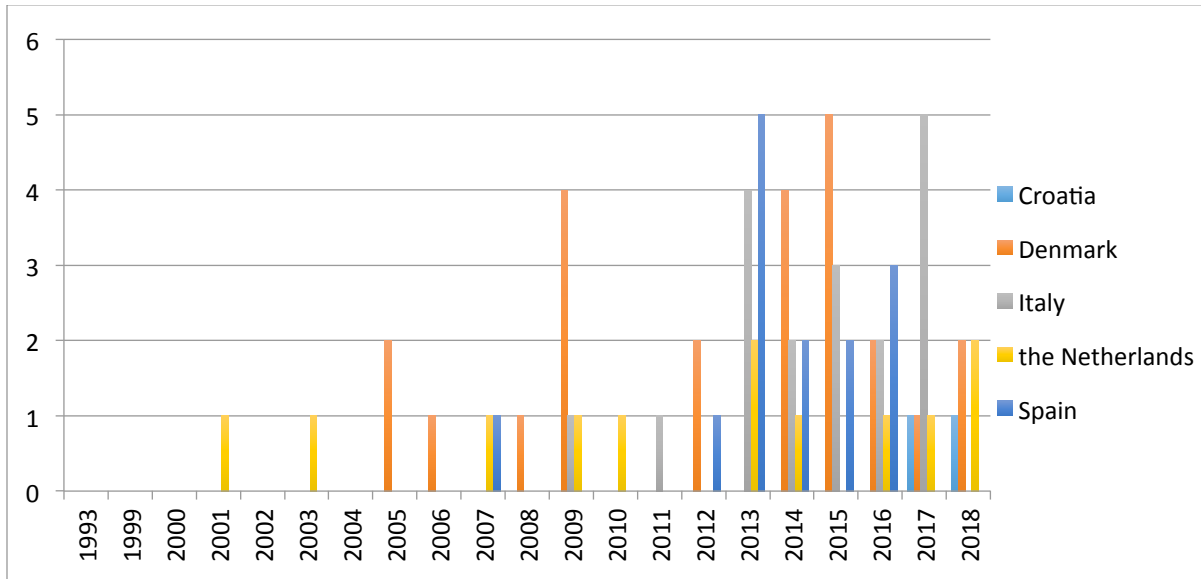


Figure 4. Policy

#### 4. Language Use

The research reported in the area of language use totals 49 publications. The area of language use covers that of both students and lecturers. As we can see in Figure 5, these publications have come primarily from Denmark (16 publications) and Italy (14 publications). The Netherlands has ten (10) publications, all in multiple focus studies. Spain has seven (7) publications over the period from 2001-2018, and Croatia has two (2) articles, which were produced very recently in 2017 and 2018 in multiple focus studies.

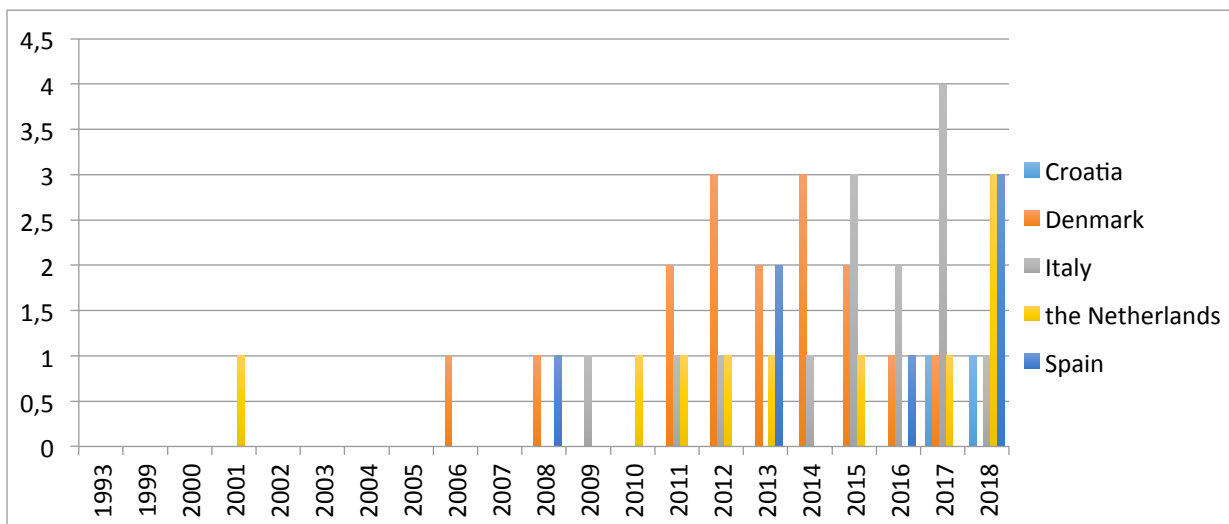


Figure 5. Language use

## 5. Intercultural communication

As can be seen in Figure 6, there are few publications in this area related specifically to EMI. Eight (8) of the 13 publications stem from the Netherlands and are mostly part of publications with multiple foci. Italy has produced three (3) publications. Lastly, Spain published two (2) articles in 2016 and 2018 that focus on the integration of intercultural competence in teaching.

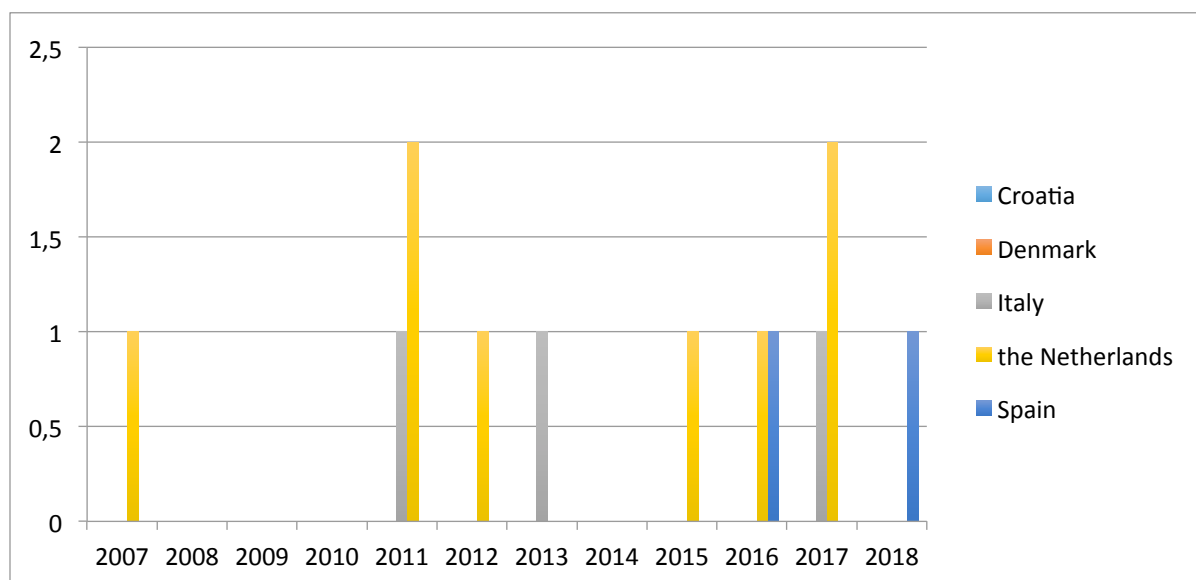


Figure 6. Intercultural communication

## 6. Identity

There are four (4) publications on identity. The three (3) exclusively focusing on this topic stem from Denmark, regard lecturers and were published between 2013 and 2017. The multiple-focus publication comes from Spain and it analyses student identity together with motivation, gender, and L1 background.

## 7. Training

Figure 7 shows a spread of research related specifically to the training of lecturers to teach in EMI classes. There are 31 entries for this area. The earliest publication is from the Netherlands in 1999. Unlike some of the other research areas, the studies are spread across the time period and all the partner universities. However, we can see that there has been an increased focus in this area over the past five years.

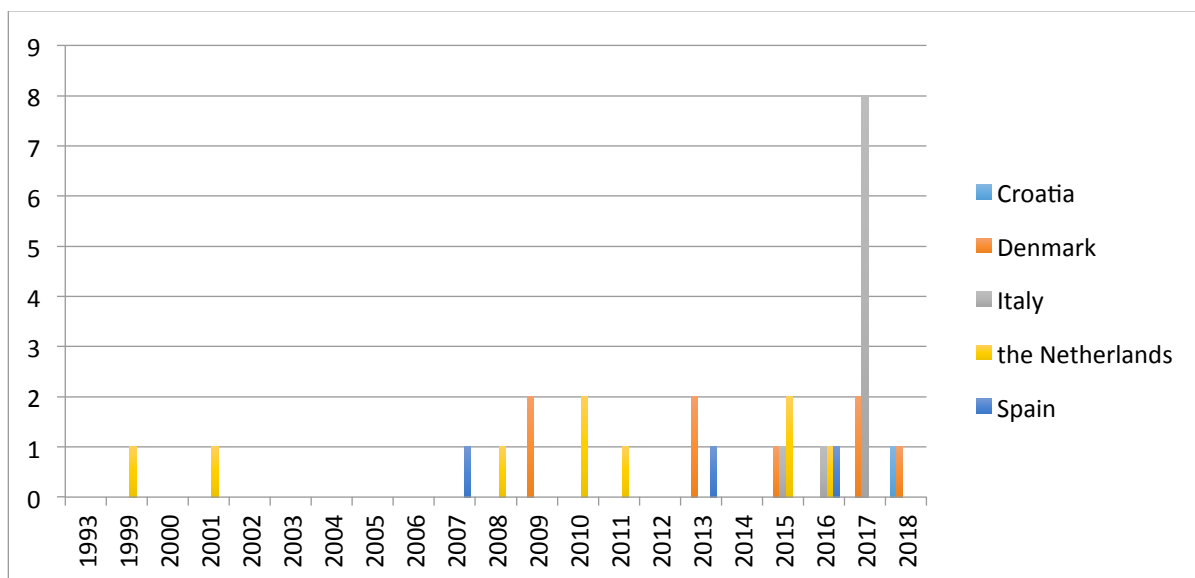


Figure 7. Training

### 8. Testing

Included in the database are seven (7) articles focused on language proficiency assessment – testing. Six (6) of these publications come from Denmark and focus on the assessment of lecturers for certification to teach EMI courses. One (1) publication comes from the Netherlands and it is a multiple focus study investigating testing together with policy, language use and learning outcomes as part of a reflection on quality assurance.

### 9. Learning Outcomes

There are limited publications related to student learning outcomes prior to 2013 (Figure 8). Since that year, 23 of the 26 publications listed are reported for studies with this focus. Spain has the most research focused on this area with 13 publications, most of them with exclusive focus on learning outcomes, and some including analyses conducted in international cooperative studies at multiple institutions. The Netherlands published nine (9) studies in this area, again often in papers with multiple foci. This is followed by Italy with three (3) publications and Denmark with two (2). Croatia has not published in this area.



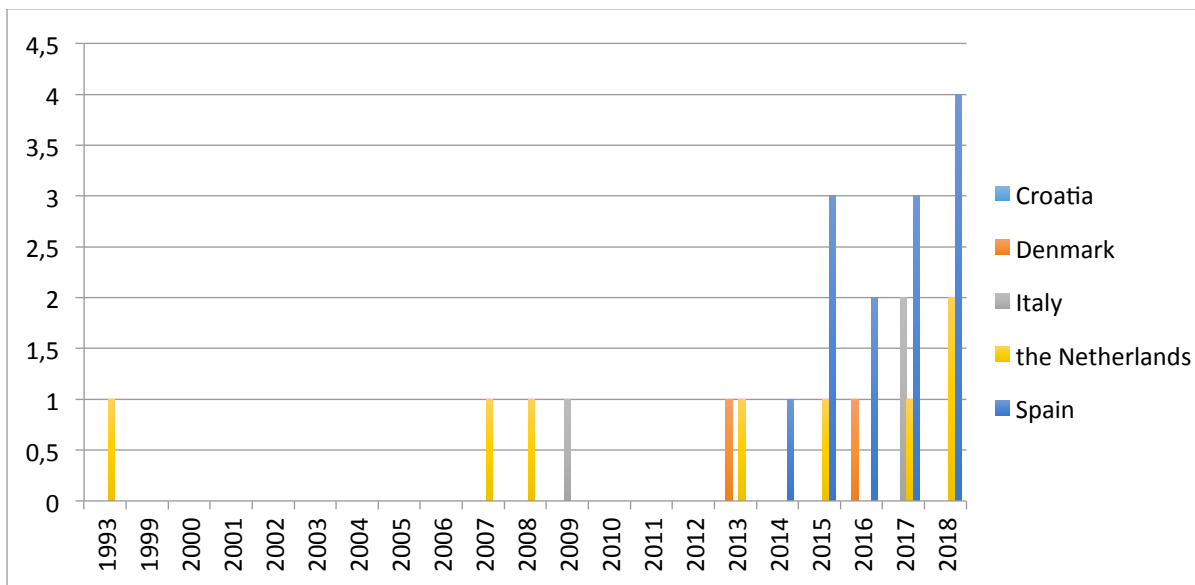


Figure 8. Learning outcomes

### 10. Multiple focus

The 50 publications in this category in the database have focused on two or more of the research areas listed above. The Netherlands reports 18 publications in this category, Italy reports 12, Spain 13, Denmark five (5) and Croatia two (2). As we see in Figure 9, an increased number of studies over the past five years have included more than one focus. Half of the publications were produced in the last five years.

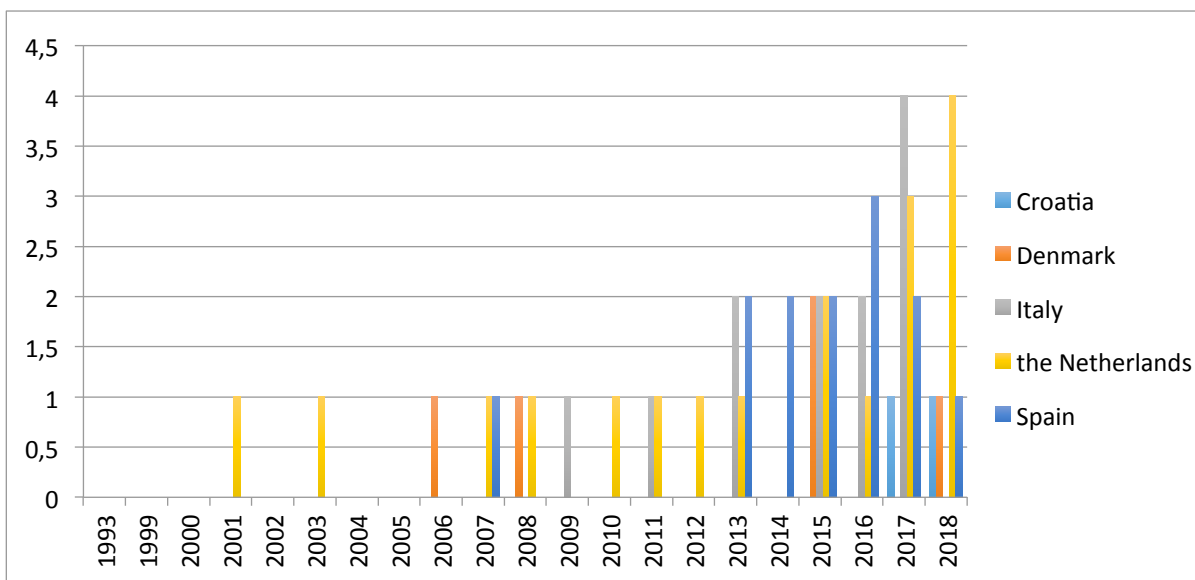


Figure 9. Multiple foci

These publications that have a focus on multiple areas tend to be monographs, PhD dissertations, and book chapters. They report on broad research and policy agenda and implementation. Thirty-two (32) of the publications include focus on attitudes. Of these 32, attitudinal studies include a

focus on policy in 20 publications. In all, there are 25 publications in this category that include policy as a focal area. Other areas include language use, intercultural communication, and training.

## 11. Conclusion

From the data presented above, we can see that the majority of research related to EMI and lecturers has focused on teachers’ attitudes and policy, as well as an introduction to student learning outcomes. In reviewing the timeline from the past two decades, it becomes evident that there are a number of areas where further research is necessary. To begin with, we have limited studies related to pre- and post-training of lecturers. In addition, we would benefit from empirical data to aid in the design of a tool to analyze self-assessment of proficiency, for preparedness to teach in English, regarding overall confidence, L1/L2 teaching experience; compensatory strategies, as well as strategies related to communication with students; correlations/links between lecturer and student language proficiency and learning outcomes.

This overview highlights the fact that there is a lack of research in the area of intercultural communication related specifically to EMI – in particular the relationship between EMI and internationalization.

We have only begun to investigate language use in the EMI context. Thus far, the focus of research has been on 1) speech rate, 2) rhetorical style, 3) domain loss/policy, 4) focus on form, 5) linguistic markers, 6) metadiscourse markers, 7) repetition and rephrasing. We should continue across all cooperating partners to gain more data for the development of training material for EMI lecturers.

## Methodologies in EMI research

Of all the resources listed in the TAEC Literature Database, 14 were classified as being neither empirical nor conceptual because they are products such as edited books, introductions, epilogues, encyclopaedia entries or brief reports on specific experiences. These will not be considered in this analysis, which focuses on the how the research methods have developed over time, how they are distributed across countries and how they combine with specific areas of interest.

Figure 10 presents an overview of the distribution of research perspectives in the TAEC Literature Database. It is evident that research drawing on empirical data outnumbers conceptual studies, with a ratio of almost 3:1.

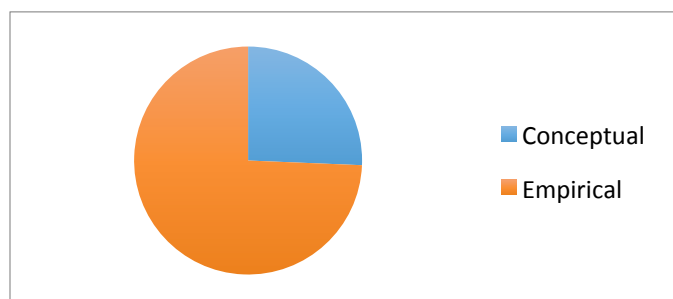
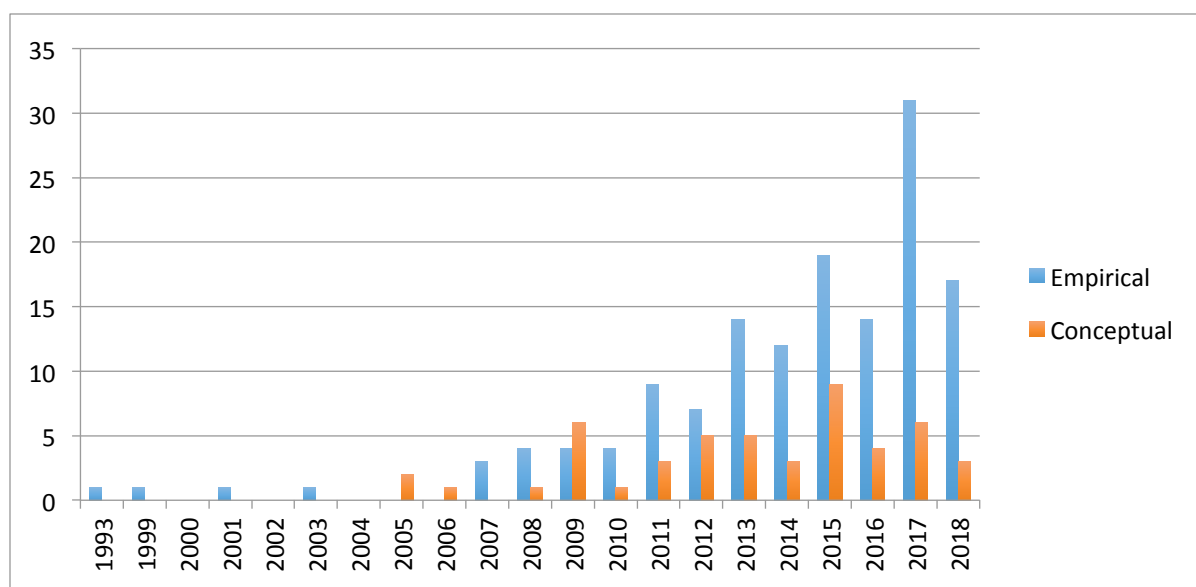


Figure 10. Empirical and conceptual research

Figure 11 shows how empirical and conceptual studies are distributed over time. The early research reported in the Database was empirical, but when EMI studies started increasing, i.e. in the late 2000s, both conceptual and empirical perspectives have been adopted. Despite the coexistence of the two perspectives, empirical studies have constantly grown with a peak in 2017 with 31 data-driven investigations. By contrast, conceptual studies are rather constant in number over time, with slight fluctuations in the mid-2010s, but in no year more than 10 publications of this type are reported.



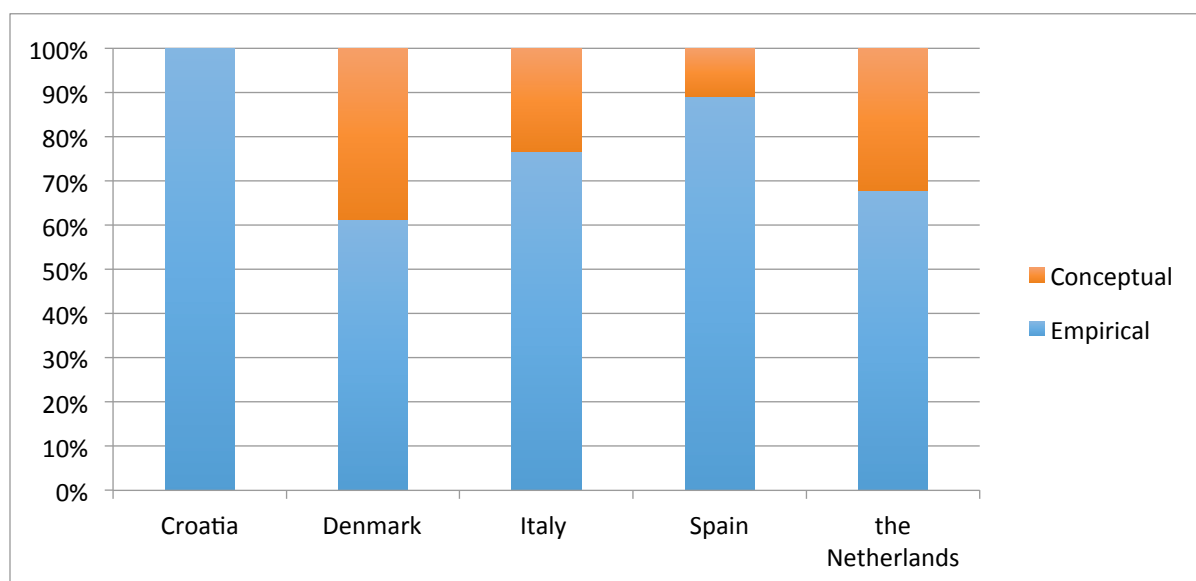
**Figure 11. Empirical and conceptual research over time**

Figure 12 presents the distribution of empirical and conceptual studies per country. As can be seen, Croatia does not feature conceptual studies. This result is likely to be connected with the early stage of EMI implementation in the country and the limited number of publications produced so far. Hence, conceptual studies may appear in the future in the Croatian context. The country with the highest number (24) and percentage (39%) of conceptual studies is Denmark. Some of them (5) are literature reviews but most of the others (14) deal with language policies, particularly parallellingualism and the risks of domain loss. The empirical studies (61%) mainly deal with attitudes, language use and testing.

Italy has 11 conceptual studies (23%) and 36 empirical studies (77%). Conceptual research tends to focus on policy, as in Denmark. Most studies are literature reviews, analyses of secondary data or overviews of the arguments against and in favour of EMI. Empirical research in Italy focuses on attitudes, language use, policy and training. There is a clear association between case studies and surveys, and the investigation of attitudes. Equally clear is the association between text/discourse analysis and the study of language use. Studies on policy and training draw data from case studies, surveys or use mixed methods.

Spain is the country with the highest number (41) and proportion of empirical studies, i.e. 8:1. It seems that debate on policies is not as developed as in the other partner countries. The topics discussed are the impact of EMI on multilingualism and the need for more integration of contents and language in the curriculum. The empirical studies focus on a wide range of topics, mostly attitudes, language use and learning outcomes. In the case of attitudes, surveys and case studies

predominate, as in the Italian publications. Language use is little explored (only 4 studies) and the methods adopted are text analysis and case studies. Learning outcomes are mainly explored through ad hoc experiments.



**Figure 12. Empirical and conceptual research by country**

In the Netherlands the ratio between empirical and conceptual studies is 2:1. Conceptual studies tend to have a multiple focus, with ICC, language use and training as the most recurrent areas of inquiry. Three (3) of the nine (9) conceptual studies are literature reviews, whereas the rest discuss pros and cons of specific EMI experiences at local level. The empirical studies concentrate on policy, training or have a multiple focus. The multiple-focus analyses deal with attitudes, language use, ICC and learning outcomes. Case studies (8) and surveys (6) predominate as methods, irrespective of the focus, and the favourite data collection procedures are questionnaires, interviews, observations and a mix of all these.

## Attitudes towards EMI

### 1. Overview

In the TAEC Literature Database there are 78 studies (65 empirical and 7 conceptual; six are labelled N/A) that explore attitudes towards EMI in Italy (22), Spain (21), Denmark (17), the Netherlands (11) and Croatia (6) (Figure 13)<sup>3</sup>. Forty-six (46) studies are exclusively focused on attitudes, while 32 also deal with language policy (20), language use (11), intercultural communication (7), training (6), learning outcomes (6), teaching practices (3), pedagogy (1) and testing (1).

<sup>3</sup> One study is labelled N/A because it was produced by scholars working outside the partner countries.

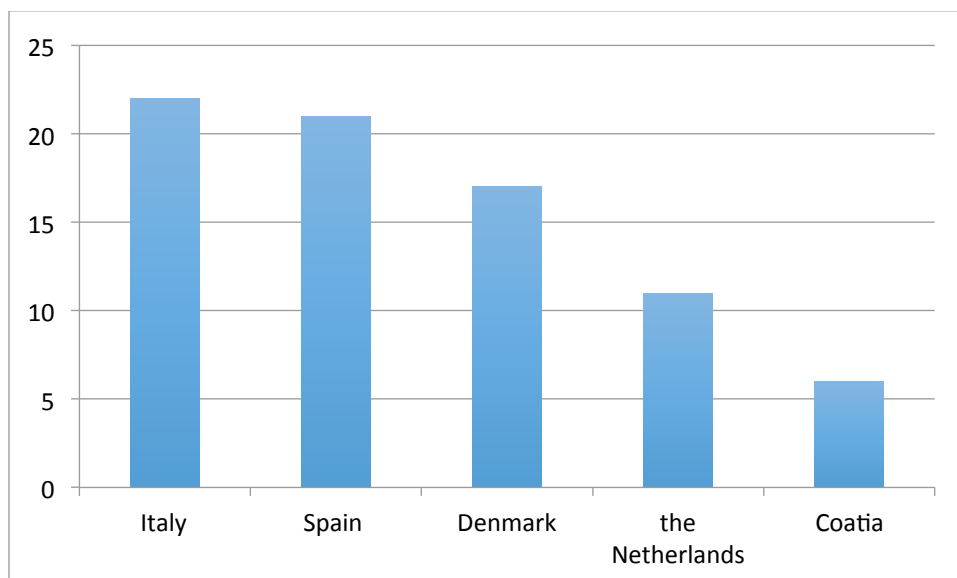


Figure 13. Studies on attitudes by country

The data were analysed qualitatively (32), quantitatively (11) and both qualitatively and quantitatively (22), while 13 studies are labelled N/A. A range of research methods and data collection instruments were used. The methods included a mixed-method approach (12 studies), case studies (25), surveys (25) and text analyses (3), while 13 studies are labelled N/A, because they draw on other studies and present literature reviews on attitudes.

The most employed data collection instruments were (online) questionnaire (17) (comprising open- and closed-ended questions) and interviews (14) (semi-structured individual, focus group, stimulated recall). Some studies also rely on audio/video-recording, direct observation, written feedback after training, collection of comments/reported experiences during a round table and argumentative essays. A good number of studies (27) adopt multiple data collection procedures, including questionnaires, interviews, video-recordings, but also analysis of policy documents.

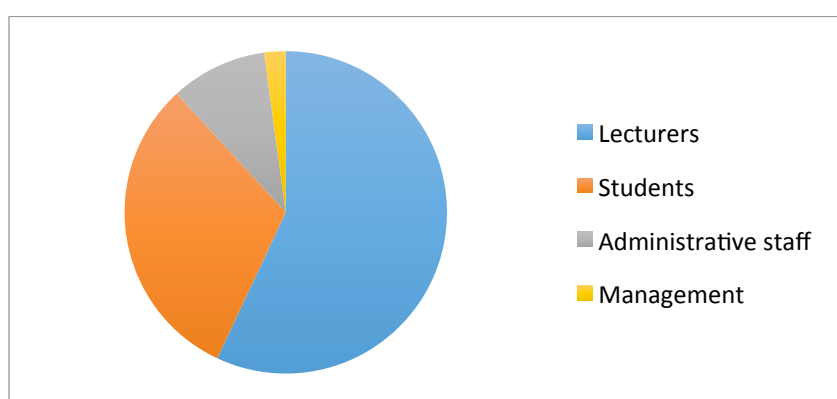


Figure 14. Stakeholders investigated

The research focused on the attitudes of lecturers (53 studies; two studies also involved language teachers), students (29), administrative staff (9) and management (2) (Figure 14). In many cases, studies explore the attitudes of more than one stakeholder group. The domains covered were Physical Sciences and Engineering (11), primarily engineering; Social Sciences and Humanities (13),

primarily economics and business administration; Life Sciences (5), primarily medicine; while in 34 studies participants from different domains were recruited, and 15 studies were labelled N/A.

## 2. Croatia

All six attitudinal studies carried out in Croatia are empirical. They aimed to investigate teachers' and students' stance with regard to the (feasibility of) implementation of EMI, self-evaluation of (language) competences for teaching/studying in English, position on and expectations regarding language proficiency, language policy and language support in EMI, willingness to participate in EMI, and perspectives on EMI strengths, challenges, implications and necessary prerequisites. The aim was also to investigate lecturers' attitudes towards translanguaging in EMI, as well as their perception of similarities and differences between English- and Croatian-taught classes.

Lecturers and students have generally positive attitudes towards EMI (particularly EMI insiders and lecturers), and are motivated to continue taking part in EMI. The perceived strengths of EMI are development of English language skills, heightened international visibility, increased mobility, enhanced international co-operation, improved competitiveness/competitive advantage on the labour market, professional advancement, larger literature base, boosted self-esteem, and view of EMI as an exciting novelty. The perceived challenges are inadequate language proficiency (that might result in content reduction, discourse simplification, impaired comprehension/learning/academic performance, hindered classroom interaction and reluctance to engage in discussions, lack of spontaneity, inability to improvise/elaborate/adjust to impromptu situations, lecture-based and teacher-fronted classes, reduced self-esteem, and negative perception of teacher professional status), teacher work overload, lack of language and pedagogical training, limited financial resources, and detrimental effect on L1.

The necessary prerequisites identified are human resources, financial resources, teacher language support (sustainable training and language experts' corrective feedback), student language support (tailored language courses and different types of instructional scaffolding), quality assurance (student surveys, teaching staff meetings, good information flow among different stakeholders, and classroom observation), workload modification and presence of foreign students. What teachers underline as the main language development programme strengths are microteaching followed by the course instructors' corrective feedback and critical (self-)reflection, and experiential learning. They also propose different types of teacher selection criteria, that is, language pretesting, trial lecture in English, prior experience of teaching in English, education in English, good teaching competences, and/or strong motivation to teach in English.

Students are more self-confident about their language competence than teachers, and rather judgemental about their teachers' proficiency. Moreover, students consider their teachers to be responsible for developing student language skills, while teachers do not feel equipped to deal with language issues, nor do they assume such a responsibility. Most teachers are open to occasional translanguaging in the classroom.

The findings also reveal several paradoxes and discrepancies: a) EMI as a standard practice in European higher education ↔ in Croatia, instruction almost exclusively carried out in L1, and the implementation of EMI triggering uncertainty and anxiety, especially among students; b) basic interpersonal communicative skills ↔ cognitive academic language proficiency; c) awareness of the prospective boons of EMI ↔ resisting its introduction for fear of the potential difficulties; d) wishing for L1 to be a fully-fledged language ↔ no feeling of responsibility for its development.

As for the comparison of English- and Croatian-taught classes, content, content coverage, teaching methods, student grades and learning outcomes are reported to be the same; the only reported difference is that teachers are less natural and self-confident when teaching in English.

### 3. Denmark

Among the 17 attitudinal studies conducted in Denmark, four are conceptual and 12 empirical (one is labelled N/A). The former provided a general overview of EMI, posed a dilemma about the position and use of English and Danish in higher education, that is, presented the possible consequences of changing the language of instruction, and considered the impact of internationalisation on university lecturers' teaching practice.

Despite lacking explicitness, lecturers complain about English-only local language policies. In terms of teaching strategies in the intercultural classroom, it is proposed that an intercultural pedagogy be developed.

Empirical studies aimed to investigate students' and lecturers' attitudes towards EMI, with a particular focus on the challenges of the implementation of EMI and language policy in EMI. Specifically, the aim of the studies was to enquire into the impact of EMI on teacher self-confidence, professional identity and classroom performance. Their (self-)perceptions of English language competences and teaching skills (and the relationship between the two) were also examined.

Lecturers hold positive attitudes towards EMI and regard it as an expected educational development. However, they voice concerns about language proficiency, changing student population and new pedagogic demands. The perceived negative consequences of EMI are reduced dissemination of knowledge and hindered classroom interaction, poorer student learning and national language domain loss. Teachers also tend to be under great strain, more dependent on slides and less capable of improvising. The benefits are internationalisation of higher education, better visibility of the university and language command improvement. Adapting to an international teaching/learning environment has been identified as both a challenge and a resource. Demand for provision of linguistic and pedagogical support programmes for less experienced EMI lecturers has been underlined, although the majority see a stay at a university in an English-speaking context more efficient than language courses, which are too time-consuming and less effective.

Younger teachers and teachers who are more involved in EMI have more positive attitudes towards EMI and are less concerned about the potential adverse effect of EMI on student learning and on Danish language and society.

Lecturers tend to self-evaluate lower than students, and older lecturers lower than younger ones, who are more inclined to improvise and adjust to the new educational environment. The majority of teachers, however, state that they are equally capable of conducting classes in English and in L1. Students' perceptions of their lecturers' language skills correlate with their perceptions of their teachers' pedagogical competences. It has been underscored that future discussions on oral/written language competences in EMI should revolve around the set/minimum threshold level.

### 4. Italy

Among 22 attitudinal studies conducted in Italy, six are conceptual and 14 empirical (two are labelled N/A). The conceptual studies addressed the challenges and opportunities of EMI, and what

is at stake due to inadequate language proficiency. They also provided an insight into reactions against English-only policy imposed at the Politecnico di Milano, accompanied by fears and perceived implications. Finally, they discussed the issue of accommodation of higher education institutions to the globalised academia and linguistically/culturally heterogeneous student body.

In addition to its advantages, such as greater competitiveness on the global market, the findings suggest opposition to (imposing) EMI, particularly due to insufficient English language proficiency diminishing the quality of education, an adverse impact on the further development of the Italian language, resulting in domain loss and monoculturalism, as well as interfering with one's rights of being educated in L1. Teachers expect their institutions to ensure a continuing institutional support in terms of language, pedagogical and intercultural skills for them to be able to overcome the complexity of EMI, adopt new teaching styles and save face.

The empirical studies enquired into students' and lecturers' (and administrative staff's) concerns about engagement in EMI, as well as their views on the policy of internationalisation and EMI, language support (provided by University Language Centres), language teaching in EMI, best practices in English-taught programmes, the influence of language proficiency on the success/quality of EMI programmes, and the impact of teaching in English on teaching practices. They also looked at lecturers' willingness to teach in a foreign language, students' reasons for undertaking EMI, and lecturers' and students' (self-)assessment of language proficiency.

Students' general perception of EMI is positive, and the primary reason for involving in EMI is language learning, although only weaker students report significant language improvement. International students are more critical of their own language level and less critical of lecturers' level than home students, especially those in later years. Students believe that more attention should be directed to language learning, as enhanced language skills are closely related to content learning and levels of satisfaction. As for the quality of the course, teaching methodology and the lecturer's ability to stimulate discussion are regarded as equally important as language skills.

Lecturers (particularly EMI insiders) hold positive attitudes towards EMI as a gate to the international market, a way of attracting international students and an opportunity to study in an international environment. They consider language support and dedication to EMI to be essential for its success, and believe that teachers should set a good linguistic example and teach language implicitly. Although no differences are reported between teaching in English and Italian, teachers identify the main challenges of EMI: longer lesson preparation time, greater concentration and effort expended, simplification of discourse, reduced speech rate, less elegant speech style, mixed-proficiency classroom and hindered student comprehension, lower ability to engage in informal communication and improvise, reduced spontaneity, difficulties with assessment, poor reputation, and challenges with cultural adaptation. Teachers point to the discrepancy between the attractiveness of the internationalisation policy and EMI practices, as EMI has been implemented/imposed without fulfilling the necessary preconditions, such as continuing language support (teachers are good at English for specific purposes, but lack knowledge of general English), adequate language policy (the question of the required language level and teacher responsibility for student language improvement) and pedagogical training (EMI requiring new teaching methods and promoting student autonomy and responsibility). Nevertheless, the majority hold that EMI does not compromise the fulfilment of learning outcomes because precisely the slower pace of lectures enables increased focus on key concepts.



## 5. Spain

Of all the 21 attitudinal studies conducted in Spain 20 are empirical and one (1) is labelled N/A. The empirical studies aimed to investigate lecturers', students' and administrative staff's attitudes towards EMI and multilingualism at university. They also enquired into lecturers' opinions about the impact of EMI on teaching and (language) learning, the role of English and translanguaging, their perception of differences between EMI and English for specific purposes, and their willingness to undertake pedagogical training. The impact of EMI on lecturers' ideology, identity and future prospects is also examined. Finally, they looked at students' views on the importance of English language proficiency and its increase in EMI.

Although lecturers are aware of the importance of language proficiency in EMI and language training, they do not think that EMI should involve language teaching because that would take time away from the content that has to be covered and because language matters should be dealt with by language specialists; rather, language should be acquired implicitly, through long-term exposition. They also understand the relevance of pedagogical training to adapt to a new teaching approach and new/diverse audience. However, their complaints are directed at the lack of both language (focusing on communication skills, necessary for classroom interaction) and pedagogical training. Moreover, the language level is not perceived as sufficiently high to guarantee the same teaching quality. Teachers are more inclined towards the idea of an ideal L2 speaker than students.

EMI and multilingualism are more supported by teachers and administrative staff than by students. The presence of English at university is praised for the mobility of students and their collaboration, language competence improvement, better employment prospects, wider literature base, boosting self-confidence, stronger student motivation, and, at the same time, criticised for interfering with multilingual policy and lack of opportunity for international students to learn local languages. Other challenges mentioned are low language proficiency level, shortage of teachers, the introduction of EMI without fulfilling the necessary prerequisites (such as training aiming to develop language and intercultural skills, collaboration between content and language teachers, and much-needed resources), teacher-fronted classes and greater effort required. In addition, the necessary quality assurance strategies are recognised: systematic monitoring of EMI programmes to detect areas for improvement; conducting student surveys, interviews and classroom observation; and producing reports, disseminating them and proposing courses of actions to stakeholders and decision makers.

Despite the fact that lecturers and students agree on the need to maximise the use of English, translanguaging is seen as an expected, natural and commonplace strategy, employed to overcome comprehension problems.

Students envision English as a passport to the European labour market. EMI students self-evaluate their English language proficiency higher than non-EMI ones and feel better prepared for using English in their future workplace. They also perceive language improvement to be bigger in EMI than in English as a foreign language classes, and prefer student-centred approach in class involving group work and classroom interaction.

## 6. The Netherlands

Among the 11 attitudinal studies conducted in the Netherlands, one (1) is conceptual and nine (9) empirical (one is labelled N/A). The conceptual studies focused on the development of

internationalisation policies and whether they promote monolingualism or multilingualism. Internationalisation is seen as strengthening monolingualism.

The empirical ones dealt with lecturers' and students' perceptions of the implementation of international dimension into the national curriculum, as well as the effect of EMI on different contexts and their languages, the quality of courses and content coverage/learning.

Problem-based learning is perceived favourable for the collaboration and exchange in an international classroom.

English proficiency is perceived less important in technology-based subjects than non-technology-based subjects: the relationship between foreign language competence and academic success is closer in social sciences and humanities than in technology-based disciplines.

There is an impact on the local language, as only English sources are used in EMI programmes. Regarding L2 learning, further research is deemed necessary.

## 7. Conclusion

In all the five contexts, lecturers and students have generally positive attitudes towards the implementation of EMI and are willing to (continue to) participate (especially teachers and EMI insiders, as reported from Croatia, Denmark, Italy and Spain). Nevertheless, they are aware that the strengths of EMI, such as heightened international visibility, enhanced international co-operation, greater competitive advantage on the labour market and improved language skills, do not mitigate its challenges, that is, insufficient language proficiency and its adverse impact on the quality of education, classroom performance and teacher professional identity, pedagogical competences and self-esteem, as well as the negative impact (of English-only policy) on the status and use of other languages in higher education. Despite the outlined challenges, in Croatia and Italy, lecturers explicitly state that EMI does not compromise the production of learning outcomes. The attitudes of administrative staff should be more investigated, especially in Croatia and the Netherlands, where such studies have not been conducted.

The importance of English language proficiency is acknowledged in all the settings (in the Netherlands, additionally, it is suggested that language proficiency is more important in humanities and social sciences than technology-based disciplines). Teachers in Croatia, Denmark, Italy and Spain express the need for language support (although, for example, in Denmark lecturers claim to be equally capable of conducting classes in English and in Danish, while in Spain they cannot guarantee the same quality). Other prerequisites listed are adequate human and financial resources. In addition, in Croatia, lecturer selection criteria, such as language pretesting, trial lecture in English or previous experience of EMI, have been considered. As for pedagogical and intercultural skills, lecturers' views on them and the need for relevant support have been given more attention in Denmark, Italy and Spain than in Croatia and the Netherlands. The importance of quality assurance methods (student surveys, teaching staff meetings, good information flow among different stakeholders, and classroom observation) has been reflected on in Croatia and Spain more than in other settings.

In Croatia, Denmark, Italy and Spain, lecturers' and students' self-perceived language competences have been enquired into (students tend to self-evaluate higher than teachers and appear to be rather critical of teachers' language proficiency, still consider them responsible for student language

improvement). Conversely, lecturers feel neither equipped nor responsible for language teaching, and advocate for implicit language learning, through immersion. The difference between EMI and English for specific purposes has been examined in Spain, and the results show that students favour language improvement in EMI.

Lecturers' perspectives on language policy in EMI have been looked at in each setting, discussing the language level requirements, the presence of English, the position of L1 in higher education and the explicit focus on language matters in EMI classes. The issue of (occasional) translanguaging has been addressed in Croatia and Spain, where it is regarded as expected and natural.

Lecturers' perceptions of similarities and differences between English- and L1-taught classes have been analysed in Croatia and Italy. In Croatia, the only difference reported was in the teacher's self-confidence and spontaneity, while in Italy no differences were mentioned.

In the research carried out in Croatia there is a strong focus on paradoxes and discrepancies related to EMI. The discrepancy between the perceived attractiveness of EMI and EMI in practice has also been observed in Italy.

## Language policies

### 1. Overview

There are 70 publications focused on language policies in the TAEC Literature Database. Contributions generally focus on higher education (HE) systems at national level but a few studies also report on the policies in place at specific universities. The contexts explored are Denmark (24), Italy (18), the Netherlands (12), Spain (14) and Croatia (2). Some works take a broader perspective investigating international regions.

Studies are almost equally split between conceptual (with no applicable methods) (31) and empirical (33). Six (6) report the label N/A (Figure 15). The empirical studies using qualitative methods (14) mostly report on specific cases and gather data from interviews, observations and databases. The studies using quantitative methods (6) report survey results based on questionnaires. Many studies (13), however, adopt a mix of qualitative and quantitative methods (interviews, questionnaires, analysis of policy documents).

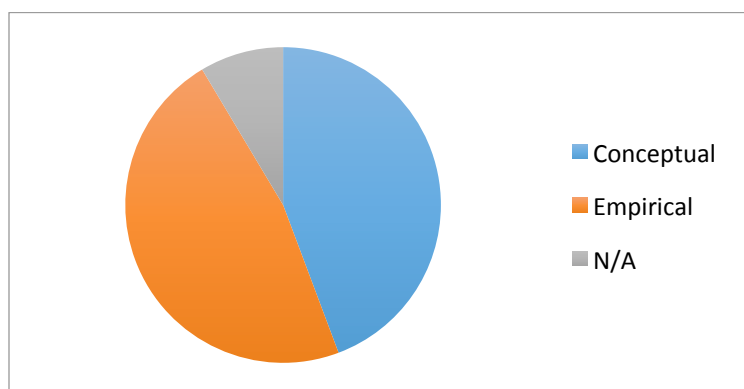


Figure 15. Research perspectives in language policy studies

## 2. Croatia

Not applicable. See multiple focus studies.

## 3. Denmark

The studies conducted in Denmark (24) have mostly focused on plurilingualism and parallelingualism (some studies take a broader perspective, above all on Nordic countries).

These studies argue that language diversity on the university campus is a resource and that plurilingual policies are fundamental in order to address the students' language needs. Accordingly, HE institutions should devise multilingual language strategies and a proposal for such a strategy is made in one of the studies. In order to include pedagogy and practices related to languages other than English, a descriptive rather than normative approach is needed. Language and research centres (e.g. CIP) should have direct involvement in language policy implementation.

As regards parallelingualism, in particular, there appears to be no uniform perspective or understanding of what it means in practice. It varies depending on its overt/covert meaning and top-down/bottom-up implementation. Parallelingualism in Nordic countries has had a positive impact on language policy development, although adjustments were needed depending on the local features of university settings. However, parallelingualism entails a binary view (English + local language), so a more inclusive perspective based on language use in plurilingual contexts is advocated. Domain and domain loss are central issues in the policy debate in Nordic countries, and are interpreted differently in different research works.

One study explored the relevance of ELF as a norm for language testing, arguing that language testing should be informed by ELF concerns.

## 4. Italy

The studies on policy conducted in Italy (18) revolve around two main topics: the spread of EMI programmes (with its implications and suitability) and the *Politecnico di Milano* (PoliMi) legal case.

The empirical studies report on surveys conducted through (web-based) questionnaires or ministerial databases, and observation. EMI mainly expanded in the fields of economics and engineering in the northern and central regions of the country. Institutions show a clear-cut focus on content rather than language and there seems to be little awareness among administrators of the implications of EMI, including reference to the linguistic landscape (e.g. lack of signs or web content translated into English) and lecturers' teaching skills.

In a survey mapping the state of EMI in 2010, the expansion of English-taught programmes is reported to have reached a saturation level. However, southern universities were shown to be catching up. Little attention is paid to the lecturers' teaching and language skills and more attention is devoted to the students' level of English. Among the competences required, universities give greater importance to the students' speaking skills. In some settings, University Language Centres are taking the lead in organizing lecturer training activities along with research into EMI.

In conceptual studies, general EMI frameworks are discussed to outline ideal scenarios in managing internationalization policies, taking into account parallel language policies in place in Nordic countries and terminological issues to conceptualise EMI/CLIL. Some studies focus on the PoliMi

legal case: one study explores the motivations behind the proposal of English-only courses and argues that such a policy is not suitable for Italy considering the general low level of English language competence. The hypothesis of ‘two Europes’ is put forward against claims of HE homogenization through the Bologna process.

Another study explores the macro-, meso- and micro-level policies at PoliMi. The Italian law is quite general. At meso-level, English is valued for its extrinsic properties. Clarity of language policy, aptness of concrete measures, respect of multicultural needs and sense of policy ownership are key factors for greater acceptance on the part of lecturers.

## 5. Spain

The policy studies in Spain (14) address the initial stage of EMI implementation policies (with more programs in Business Administration, Economics, Engineering, and in private vs. state universities), highlighting an ambiguous stance and contradictions with inadequate political response to growing interest in EMI programmes. ‘Institutional multilingualism’ in Catalan, Spanish and English is implemented, but low language proficiency among students poses problems. Good practices to overcome problems arising when implementing bilingual programs at HE level (e.g. determining the characteristics of the programme; establishing the language proficiency of the students and the teachers; time sequencing of the degree; training; coordination and language support) are also discussed.

## 6. The Netherlands

The studies conducted on the Netherlands focus on the language policies at national and local levels, discussing the role and efficacy of top-down and bottom-up initiatives. At national level, policies and their outcomes may vary. Divergences were noted between individual attitudes and institutional practice, especially in the case of bilingualism (less so in the case of internationalization). In particular, resistance to language policies that are imposed top-down was reported. A language policy that emerges with bottom-up agreement is desirable which does not impose specific conditions. This may lead to opportunities for explicit LSP teaching embedded within disciplines. An explicit language policy may be a pragmatic tool for an international university, but it is not a necessary one.

A case study on EMI policies and practices at the University of Groningen shows that both top-down and bottom-up actions were implemented. The CEFR was used as a reference point. However, the authors of the study argue that its role should not just be setting entry levels but also monitoring progression. Regarding individual differences in language and culture, universities should implement policies that favour mutual understanding and individual development. Faculty should come from diverse backgrounds to have truly internationalised programmes.

## 7. Multiple focus

Out of 50 studies with a multiple focus recorded in the TAEC Literature Database, 31 also include policy among the areas of interest under consideration. This is probably due to the need to better contextualize the results obtained. Most of these also focus on attitude, along with language use (alone or in combination with attitude).

There are two multiple focus research resources from Croatia, i.e. one book chapter and one monograph. Both works also focus on attitudes and language use in the University of Rijeka. These empirical works investigate lecturers and students' perception of challenges and opportunities arising from the EMI policies put into practice. In particular, the book chapter concerns translanguaging in the EMI classroom, pointing out that most teachers are open to occasional translanguaging in the classroom. However, translanguaging in EMI is difficult to implement because of student language heterogeneity, while in language homogenous classes, it should be purposeful and well thought out. The monograph looks at the perception of EMI by both insiders and outsiders, with a general positive view of EMI and no major differences between teaching in English and in Croatian (only outsiders have a more critical view). The challenges voiced by subjects range from language proficiency to anxiety and content elaboration. On the other hand, EMI is seen as a motivation booster and remains attractive to students, who may be judgmental of lecturers' (lack of) proficiency and consider teachers as language models (a role not taken into account by lecturers). Quality assurance measures are also presented for successful implementation of EMI.

The multiple focus studies conducted in Denmark (on Denmark and on the Nordic countries) deal with decision-making processes and how policies translate into and shape practices. In one case, policy analysis is combined with the study of the teaching staff's self-perception and expectations. Language policies are characterized by vagueness and discrepancies are reported between policies and practices due to contrasting ideologies. The level of policy is reliant on linguistic essentialism, compartmentalization, purism and form. The level of practice, by contrast, is described as being underpinned by constructionism, disarrangement and hybridity. There is the need for language policies to be formulated explicitly rather than being left to national and international market pressures.

In Italy, multiple focus studies on policy tend to revolve around the PoliMi legal case or, more generally, take a critical look at how EMI policies are being imposed top-down with the resulting consequences / fear of domain loss or diglossia. One study investigates this topic together with how English and Italian are used in PoliMi's website to see how course syllabi are formulated. The English versions of the course descriptions and syllabi underwent a process of omission and adaptation, which alter the original texts in ways that are not epistemologically neutral. EMI implies not simply a change in linguistic code, but the adoption of a different point of view and mentality, the risk being that Anglo-Saxon models are uncritically adopted at the expenses of local traditions and diversification.

Most of the multiple focus studies from Spain are based on surveys (questionnaires and interviews) and look at how EMI policies have been implemented in various Spanish universities (e.g. accreditation, the use of software tools, task-based and problem-solving methods, an activity book for industrial engineering students) and the resulting needs of different stakeholders (also the effects of EMI policies in Denmark on a group of Spanish exchange students). There is a strong focus on language proficiency (or lack thereof). The drawback of internationalisation in English is that the other (local) languages remain hidden. Emphasis is also placed on the need for methodological resources in order to adapt the materials and the teaching style, and for structural mechanisms to generate real and effective support measures.

The Netherlands are represented in the database with seven (7) multiple focus studies, including a PhD thesis and an institutional document. As in the other TAEC member countries, these works look at the possible challenges of EMI policy implementation, with a special focus on the role of languages and language proficiency requirements. Most are empirical works with observation and

analysis of concrete implementation of EMI. With reference to language proficiency issues, one study reveals that international students report difficulties in connecting with Dutch students sometimes. Problem-based learning (PBL) is considered to create an environment that facilitates exchange, thus supporting the international classroom. The importance of language proficiency is seen as dependent on disciplinary variation, as the relationship between foreign language learning and academic success is low in technology-based disciplines compared to humanities and social sciences disciplines. Nevertheless, students see the need for high levels of academic English proficiency and should be offered the opportunity to listen to lecturers with a C2 level of English so that they are given the opportunity to acquire the language at an acceptable level themselves. The importance of EMI training workshops is highlighted to raise lecturer awareness (despite reported drop in attendance). One study about DELFT University reports on the strategic policy changes made, including improvements for international mobility, improving the access for foreign students, implementation of an international dimension in the curriculum of domestic students, and international co-operation and development of educational strategies and programmes.

## 8. Conclusion

In the studies included in the TAEC Literature Database, some recurrent themes can be identified:

- Top-down/bottom-up distinction: need for balance. Too much regulation to be avoided (Catalonia); marked resistance to imposed top-down policies (the Netherlands/Italy); need for bottom-up activities and sense of policy ownership (the Netherlands/Italy); ideological differences at macro-, meso- and micro- levels (Denmark/Italy).
- Multilingualism, bilingualism, parallellingualism: language diversity is a resource (Denmark/Catalonia); need for adequate strategies (Denmark/Catalonia); cultural and linguistic diversity should not hinder communication (the Netherlands); the English-only policy is rooted in and reinforces monolingual ideologies (Italy).
- Institutional policy documents: vague formulation (Denmark/Italy).
- Domain loss: risks for the national language (Denmark/Italy).
- Proficiency levels: the Netherlands (Maastricht) → not an issue (for lecturers); Italy → a major issue for both lecturers and students. Language competence should have central role in language policy.

Among the issues that may deserve further attention is whether policies exist that are related to quality assurance mechanisms, e.g. language certifications and support for lecturers and students.

## Language use

### 1. Overview

Research focusing exclusively on language use constitutes 13% of the publications in the TAEC Literature Database. However, considering multiple focus studies, too, 23% of the resources included deal with linguistic issues in EMI. The first publication in this area appeared in 2008. Since 2011 the topic has received constant attention with at least two publications per year. Contributions come from Denmark (16), Italy (14), the Netherlands (10), Spain (7) and Croatia (2) (Figure 16). Studies with an exclusive focus on language use are from Denmark (13), Italy (9) and Spain (5), while the resources from the Netherlands and Croatia examine language use together with other topics, mostly attitudes, policy, ICC and learning outcomes.

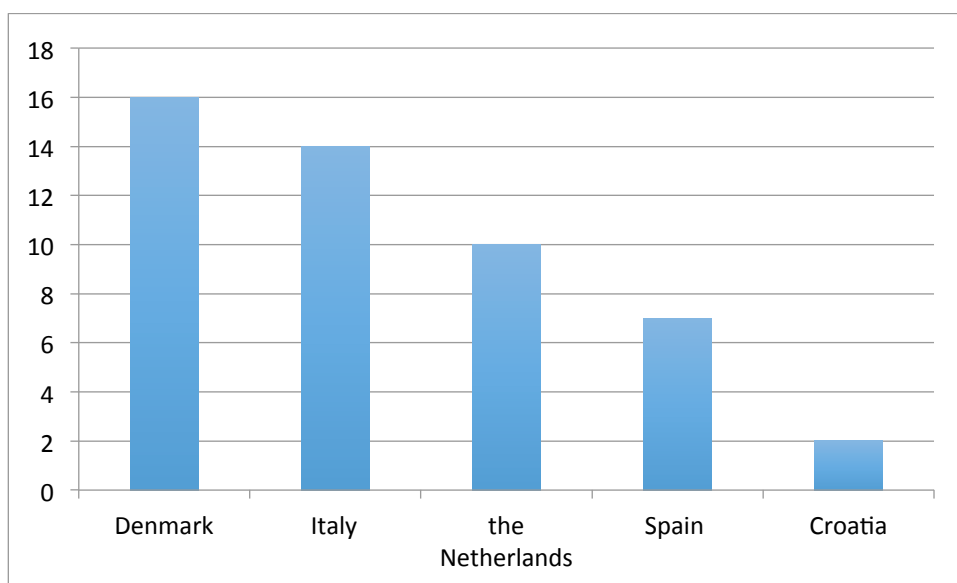


Figure 16. Research on language use by country

As expected, most of the studies on language use are empirical (39). There are nine (9) conceptual studies and one resource labelled N/A because it is an edited volume (Figure 17).

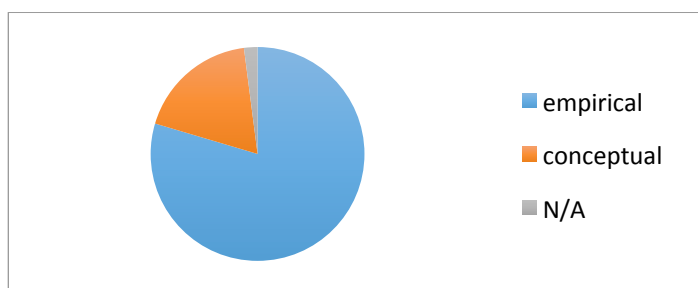


Figure 17. Research perspectives on language use in EMI

Empirical studies favour mixed research approaches, combining quantitative and qualitative research. The method most often used is text (discourse) analysis, especially for studies with mixed or quantitative approaches. On the other hand, qualitative investigations are mostly case studies. In either case, data collection is conducted through audio/video recordings, which have been entirely or partially transcribed. Multiple data collection procedures have also been used as well as classroom observation and questionnaires.

As for the participants focused upon, the data mostly come from lecturer language use (31). In some cases the spoken performance of one lecturer teaching the same class in English and in L1 is analyzed. Some studies (18) also deal with student language use, investigating topics such as students' cooperation strategies in dialogic lectures, students' metacognitive reflections on reading strategies. Of these studies only the minority takes an exclusive focus on one stakeholder population; in most cases, they combine reflection on student and lecturer language use. No studies involving administrative staff are reported (Figure 18).



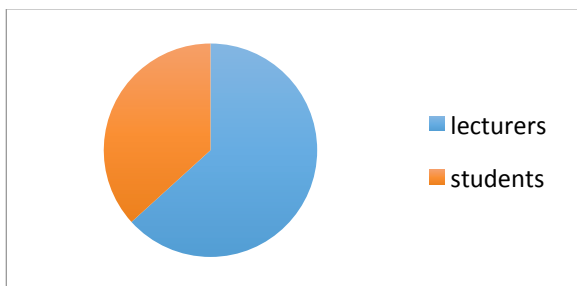


Figure 18. Target populations in language use studies

## 2. Croatia

No study with unique focus on language use is reported from Croatia. See multiple focus studies.

## 3. Denmark

The studies conducted in Denmark explore language use from both a linguistic and paralinguistic perspective. Specifically, the topics investigated include the relation between domain loss and lexis (including English borrowing), speaking rate, rhetorical style and register. Following, the main findings are reported.

### Domain loss and lexical borrowings:

1. Focus on technical borrowing from English into Danish in scientific fields: There is considerable variation across sub-fields, with computer science showing more lexical borrowing than physics and chemistry. The loans used by scientists are additions to the language (i.e. necessary and not luxury loans). Hence 'domain loss' is not the best metaphor to describe what is happening in relation to the impact of English. 2. No causal correlation between the use of English and the number of technical loan words from English into Danish

Speaking rate and rhetorical style: EMI classes are slower and characterized by a different rhetorical style compared to L1 classes.

Register: EMI classes present an intermediate register between spoken and written language.

## 4. Italy

The studies conducted in Italy are by both partners and academics not related to the TAEC project. The main topics investigated are the following: 'focus on form', discourse strategies and pragmatic cooperation.

'Focus on form': There seems to be very limited focus on form by EMI lecturers. The occurrences found are mainly to clarify terminology and the strategy is that of code-switching.

### Discourse strategies:

1. Repetition and rephrasing (EMI vs. native English):

- 'Repeats' (i.e. verbatim reiteration of grammatical items) are more present in EMI and in different clause positions compared to NS, showing the examined EMI lecturers' reduced fluency, particularly in relation to the construction of noun phrases.

- Possible link between content-based self-repairs and EMI: L2 is a burden on working memory.
- Reformulations are present in EMI as an attempt to better explain contents (code-switching as an attested strategy)

## 2. Metadiscourse:

- more used at macro-level than at the level of topic management
- formulaic constructions (recourse to 'say' verbs)
- references to the language of instruction as a face-saving strategy
- checking audience's knowledge
- greater presence of disfluencies when using personal metadiscourse
- nonstandard verb use with metadiscourse
- function more important than accuracy for metadiscourse to work

## 3. Comprehension checks (CC) (EMI vs. native English):

- higher frequency in EMI vs. NE
- non-standard forms
- differences between L2 and L1 English in terms of distribution and utterance position
- L1 interference in form
- long chains of CC in L2 English
- same functions in L2 and L1 English (esp. for discourse markers)
- use of CC in EMI related to uncertainties about clarity of linguistic formulation

## 4. Interpersonal strategies in EMI lectures (monograph based on a PhD thesis):

EMI lecturers use a complex combination of linguistic strategies at the macro-level of discourse (interpersonal episodes) and at the micro-level of lexis and morpho-syntax (direct questions, comprehension checks, imperatives, personal pronouns and terms of address) to express interpersonal meanings and build rapport with their students

### Pragmatic cooperation:

1. EMI lecturers use adaptive strategies of 'self-regulation', 'self-repair', 'self-repetition' and 'utterance completion' to facilitate understanding and overcome students' comprehension difficulties. Constructive work by learners is documented. 2. Even if language breakdowns occur at times, interactants are cooperatively working with the purpose of ensuring effective communication and overcoming language barriers.

## 5. Spain

Spain presents five (5) studies focusing exclusively on language use. All of them are empirical and all but one focus on lecturers. The data come in all cases from audio/video-recordings; in three (3) publications they are analyzed both qualitatively and quantitatively, while in two (2) a qualitative approach is used.

The topics focused upon are the role of repetitions, questions, discourse markers and code-switching. While these studies demonstrate that EMI lecturers have recourse to questions and repetitions effectively, often for pedagogical purposes, when it comes to discourse markers the need to widen the repertoire and to use them to signal more overtly lecture phases is reported. One study examines the oral disciplinary-reasoning episodes in which knowledge structures are explicitly

developed. The results suggest that both lecturers and students verbalize the co-construction of reasoning in two-part episodes and put an explicit focus on disciplinary terminology.

## 6. The Netherlands

No study with unique focus on language use is reported from the Netherlands. See multiple focus studies.

## 7. Multiple focus

The studies with multiple foci analyze language use (verbal communication) together with attitudes, policy, ICC and learning outcomes.

The language-related features examined in multiple focus studies are repetitions, metadiscourse, code-switching, focus on form, humour, examples, synonyms, giving definitions, questions, elaborating, engaging students, fluency, clarity, giving feedback, speech rate, spontaneity and expressiveness.

The studies conducted in Croatia by our project partners investigate lecturers' spoken language performance based on classroom observation, lecturer self-reflection and questionnaires. The focus is on the frequent language errors, fluency, vocabulary range and the structure of spoken presentations (particularly transition signals). The results provide evidence of L1 interference, face-threatening errors and limited lexical variety. Other problematic issues concern expressiveness and clarity. By contrast, lectures are well organized on a macro-level, a result that may be related to the fact that the lecturers examined had attended a training course where they were instructed to signpost discourse. Lecturers who engaged in microteaching think that their real performance is weaker; they regard language proficiency as essential and would welcome language support.

Italy has five multiple focus studies. One in particular presents a distinctive approach combining the analysis of lecturing style with a pre- and post-test administered to students to verify the impact of the style of teaching. The results indicate that only few lecturers adopted an interactive teaching style, stimulating learners to take part in the lecture and encouraging them to elaborate syntactically on their output. This may partly explain why no significant improvements were recorded in the students' lexical and syntactic competence.

Multiple focus studies from the Netherlands are in various cases literature reviews. Worthy of notice are studies dealing with lecturer proficiency levels, end of course student feedback on language use in EMI and exclusion mechanisms, and linguistic expressiveness in the L1 spoken Dutch and L2 spoken English of Dutch university lecturers.

Spain and Denmark only present one (1) empirical multiple focus study each, respectively on the marking of student errors by content and language teachers, and how professional identity is manifested in lecturer discourse in relation to the use of English vs. Danish.

## 8. Conclusion

Overall the main focus of language use studies is on verbal communication, although some investigations of nonverbal communication (paralanguage and kinesics) were conducted. The countries that have produced studies on language use have conducted research through specific lenses and favouring different methodologies. Therefore, to date, there seem to be few share lines

of inquiry that allow the comparison of results. In Denmark the issue of domain loss is a central concern, whereas in Italy and Croatia no studies on this topic have been conducted. In Italy and Spain, most studies have taken discourse analytical approaches often focusing on interpersonal meanings in lectures and ELF-related strategies (pragmatic cooperation). These studies have provided evidence of errors, dysfluency but also successful practices. In Croatia, too, these topics have attracted the attention of scholars, with analyses of aspects such as signposting, the use of questions and L1 interference. However, while in Italy the main methodological approach has been the analysis of transcription from audio/video recordings, in Croatia data have been obtained through classroom observation and stimulated recall of teaching events.

One issue that emerges from the studies included in the framework file is that the analysis of language use has been conducted on relatively small samples, which in some cases do not allow for the generalization of findings. Hence, future research on language use should try to build larger datasets.

Finally, little if nothing is known about disciplinary variation in language use in EMI contexts.

## Intercultural communication

### 1. Overview

Two (2) publications in the TAEC Literature Database focus solely on Intercultural Communication (ICC); one from the Netherlands and one from Spain. A further 11 multiple-focus publications feature some aspect of ICC in the research, with the majority coming from the Netherlands, three (3) from Italy and one (1) from Spain. The research was based in many domains, the majority of which was carried out in mixed domains or specifically in the Social Sciences and Humanities. There are numerous forms of publication, including one PhD thesis, journal articles, institutional documents, one monograph, one conference paper, and chapters in edited books. Type of research and data collection methods varied, as depicted in Table 2 below.

Description	The Netherlands	Italy	Spain	Denmark	Croatia
No. of Publications	8	3	2	0	0
Empirical	4	2	1	0	0
Conceptual	4	1	1	0	0
Qualitative	2	2	1	0	0
Quantitative	0	0	0	0	0
Mixed Methods	2	0	0	0	0
Case Study	2	2	1	0	0
Survey	2	0	0	0	0

Table 2. ICC research per TAEC country

## 2. Croatia

Not applicable.

## 3. Denmark

Not applicable.

## 4. Italy

The three Italian publications are multiple focus studies and specifically concentrate on the linguistic aspects of ICC in EMI, such as pragmatic skills, the effect of English as a lingua franca on the local language, and how to respond to the needs of increasingly linguistically and culturally diverse students. The first was published in 2011 and the most recent was published in 2017, with each publication expressing increasing concern regarding the impact of the spread of English on Italian academic culture. All three publications suggest that there are difficulties implementing ICC in the EMI classroom for various reasons such as frontal lecturing, a sense of domain loss because of increased English language use, and insufficient professional development for even the most language proficient EMI teachers.

## 5. Spain

The two publications from Spain are quite different from each other in focus. The first publication, from 2016, observed that while the use of English increases mobility, the local language is suppressed thus international students do not truly experience the local culture or identity.

The second publication, from 2018, looks at how to enhance students' ICC skills. It concludes that EMI and ESP teachers are best placed to help students develop these skills because of the link between students' self-reported language and ICC skills. The publication proposes that interaction and self-reflection are key in the development of ICC skills.

## 6. The Netherlands

Most of the publications from the Netherlands have a strong ICC focus and are published by researchers from various locations across the country. Additionally, most of the studies focus on how best to implement ICC skills in the international classroom setting, specifically in the EMI context in most cases. The focus of these publications range from EMI teachers' ICC skills to teaching students' ICC skills.

Integrating ICC in content course design is recommended in a number of the publications. One publication in particular finds that more experienced content teachers are better at creating meaningful interactions with students than those who were less experienced. It reports that these less experienced teachers would thus benefit from more examples of best practice. A number of publications from Maastricht University give explicit best practice advice to their content teachers regarding how to be more ICC cognizant in their EMI classroom. Advice ranges from how to give feedback to students to the benefits for students using a lingua franca in an intercultural classroom

and teachers' applying mindful listening. The benefits listed include the facilitation of cross-cultural contact, bridging such gaps, creating awareness, identifying potential barriers and learning how to overcome them. One of the Maastricht University publications also emphasizes the need for training teachers on ICC and the benefits of integration and incorporating ICC in the curriculum. A study at TU Delft, focusing on teaching ICC skills to students, also finds that sports activities, group discussions, and projects carried out abroad are all effective.

One Dutch publication looked at EMI development across Europe and looked at aspects of concern such as domain loss and elitism. Another Dutch publication looks at the transience of EMI lecturers and students, commenting that while it does facilitate broader research, this may lead to some people not returning home.

## **7. Conclusion**

ICC in EMI seems under-researched in Croatia and Denmark, while scant research has been carried out in Italy and Spain. However, institutes of higher education across the Netherlands have been researching the topic for some time, leading to valuable examples of best practice for fostering ICC skills in both EMI teachers and students, and concrete findings that ICC skills are best implemented and taught by content teachers. One of the publications from Spain also supports this latter aspect. Nevertheless, research from Italy and Spain seems more focused on how domain loss affects the intercultural experience and local identity, while research from the Netherlands tends to have a more positive outlook, although domain loss is also the topic of one Dutch study. One possible reason for this positive approach to EMI via the development of ICC skills is that EMI is typically at a more advanced stage in Dutch universities than in their Spanish and Italian counterparts. Arguably, English language proficiency is also higher in the Netherlands making the switch to EMI somewhat easier. Neither of these factors explain the lack of research into ICC in EMI in Denmark, though, as EMI is also well-established in Denmark and language proficiency levels are quite high. In conclusion, the importance of ICC in EMI outside of the Netherlands seems somewhat overlooked.

## **Identity**

### **1. Overview**

Three (3) publications just focusing on the topic of feature in the TAEC Literature Database. All three are set in Denmark, are empirical qualitative case studies, two of which were based at the University of Copenhagen (UCPH), and the third at Roskilde University. The publications were disseminated as a PhD thesis and chapters edited books. The Copenhagen-based study took place within the discipline of Applied Natural Science using multiple forms of data collection while the Roskilde-based study used interviews only. All three studies were carried out analyzing identity issues for least one lecturer.

### **2. Croatia**

Not applicable.

### **3. Denmark**

The research from UCPH was a case study focused on teacher professional identity when lecturers switch from teaching in their native language to teaching in EMI. The study was documented in a doctoral thesis, and later in a chapter in an edited volume and focused on applied natural science teachers at UCPH. The study found that teachers generally felt confident and secure in their EMI setting but observed that linguistic and instructional challenges exist. The study found, in particular, that the teachers linked their teaching identity to their teaching experience and pedagogic content knowledge.

While not specifically mentioning the EMI context, the Roskilde University study researched and presented the complexities of defining an academic individual as ‘international’ within the context of educational experience and language proficiency.

### **4. Italy**

Not applicable.

### **5. Spain**

The study stemming from Spain is a multiple-focus analysis of the intersection of motivation, identity, gender and L1 background. The population sampled is 198 EMI students, who were administered a questionnaire analyzed both quantitatively and qualitatively. The results indicate that main predictors of the students’ learning effort are their ideal L2 self, their attitudes to EMI and their family influence. By contrast, gender and the participants’ L1 do not seem to exert any significant influence.

### **6. The Netherlands**

Not applicable.

### **7. Conclusion**

Based on the research presented in the TAEC Literature Database, the topic of identity is either under-researched in the other TAEC countries or the research failed to appear during the literature review process. Perhaps the ties between identity and teaching in EMI have not been explicitly linked in the context of other studies. However, the Danish studies suggest that experience and linguistic proficiency both play a part in how secure and confident lecturers feel in their EMI context as well as whether or not the lecturer feels ‘international’.

## Training

### 1. Overview

There are 31 entries on training in the TAEC Literature Database; 16 have training as their main area of interest and 15 include this topic among other areas of interest, mostly attitudes, language use, policy and ICC. Figure 19 provides an overview of the distribution of studies per country. Within main area of interest, six (6) come from Denmark, five (5) from Italy, three (3) from the Netherlands, one (1) from Spain, and one (1) from Croatia. Within the 15 contributions that include training as multiple areas of interest, the Netherlands has six (6) contributions, Italy five (5) contributions, Denmark two (2) and Spain two (2).

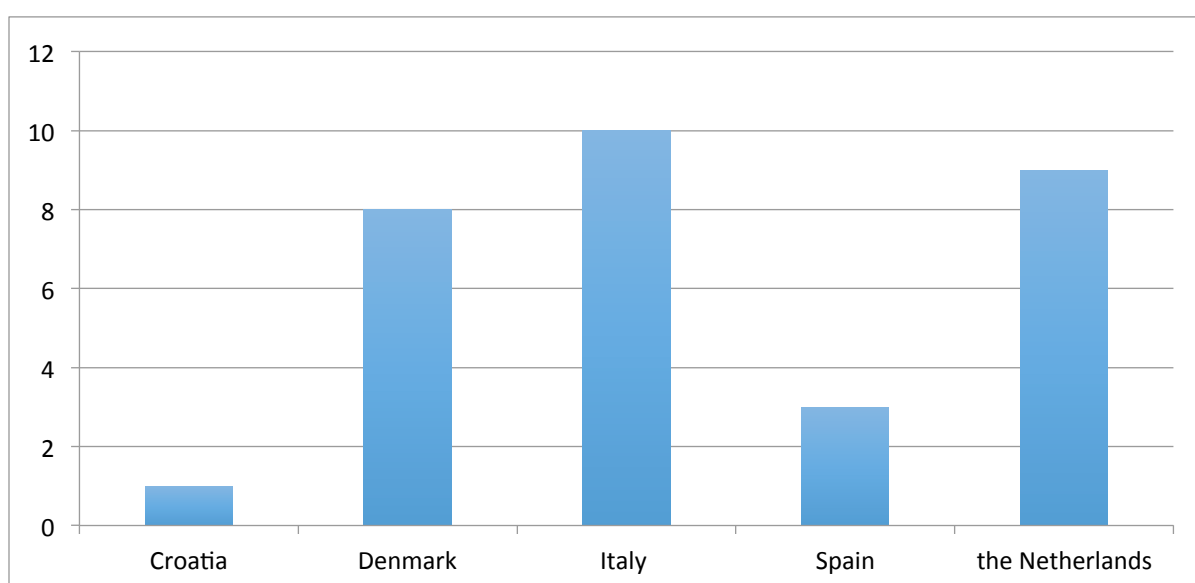


Figure 19. Research on training by country

### 2. Croatia

There is one study on training; it is empirical in perspective and mixed in type of analysis. The study focuses on a specific training programme and on assessing its benefits for lecturers. The main strengths of the programme were micro teaching, the course instructors' corrective feedback, critical (self-)reflection, experiential learning, and focus on signposting. The participants' suggestions for improvement included more advanced follow-up modules and the suitability of the programme for highly proficient speakers because of its LSP character.

### 3. Denmark

The studies from Denmark, three (3) correspond to the N/A category, as they offer course descriptions. Of the five (5) remaining, three (3) are empirical and present case studies, and two (2) are conceptual, one presenting a literature review and one working as introductory chapter.



Among the topics explored are an outline of principles of EMI in comparison to content-based language instruction; how to use specialized corpora as language resources; TOEPAS as a tool to evaluate lecturers' performances; and lecturers' development of competence in English.

#### **4. Italy**

The studies from Italy are both empirical and conceptual with only one being labelled N/A. In terms of content, these studies explore topics such as differences in learning outcomes between EMI and non-EMI students being taught by the same lecturer; the spread of linguistic and methodological training at European universities; the teacher training practices in specific university settings.

#### **5. Spain**

The three studies from Spain are all are empirical, two qualitative in nature and one mixed. These studies focus on very specific settings or participants. One investigates one lecturers' experience and reflections on the nature of the student-teacher relationship and giving suggestions for professional development. The study points out that teaching practice and reflection shape and fuel each other and provide a tool to improve professional skills.

One multiple-focus study explored training among the practices put in place by Universidad Politécnica de València in 5 years (i.e. 2002-2007) in relation to EMI and CLIL. The other multiple-focus study aims to evaluate the students and lecturers' opinions and perceptions of a partially English-taught programme. The results led to the design of a collaborative innovation project, which is described in the paper.

#### **6. The Netherlands**

The nine (9) papers from The Netherlands, four (4) of them are conceptual and five (5) empirical. One empirical study focuses on two courses offered by Delft University of Technology on EMI training. One article focuses on the observation of actual EMI practices with the aim of providing input for teacher-training courses. One of the conceptual papers focuses on the reasons for implementing EMI. One reference is a booklet that describes 10 best practices used in internationalizing courses and programmes at Delft University of Technology. A multiple-focus study is a PhD thesis which tries to look at basic questions on EMI instruction; it is empirical in type of research and mixed in type of analysis. The three institutional look at different aspects of teacher training in EMI such as innovation processes, mindful listening, giving feedback and cultural references implied in that.

#### **7. Conclusion**

In general, it seems that studies on EMI and training are rather limited. Most articles and references focus on analysing specific EMI practices at a national level; there is only one study from Italy in which European universities are the objects of analysis. In the case of Denmark and The Netherlands, the studies focus mainly on specific training resources developed at specific universities. In the case of Spain, the articles on training focuses on CLIL as well as on EMI. Therefore, based on the research in the Database the topic of training appears very much connected

to local realities and to be rather under-researched. This state of affairs may be due to the limited quality assurance mechanisms in place at many universities as documented in attitudinal studies.

## Testing

### 1. Overview

Seven (7) publications on the topic of testing feature in the TAEC Literature Database. Six of the publications come from Denmark, the majority of which are based on research set there, with one focused on Scandinavia in general; the final publication comes from the Netherlands. Four of the publications are based on empirical research, which takes place at the University of Copenhagen (UCPH). Two of the publications are based on conceptual research, one of which takes place at Copenhagen Business School and the other is an observational study at Maastricht University. At least one lecturer at each location carried out the studies in these seven publications. Of the empirical research, two are qualitative case studies, while the other two are mixed methods studies. Four of the studies are presented as chapters in edited books, one is a journal article, and another is a monograph. Data collection methods vary across the studies.

### 2. Croatia

Not applicable.

### 3. Denmark

Reviewed in chronological order, the first publication comes from Copenhagen Business School. This 2008 publication presents research into the viability of drawing on the CEFR assessment scale for an appropriate language certification of Higher Education lecturers who use English as a medium of instruction at the university. This research determined a need for a more robust development of the assessment scheme and that validity and reliability checks were also required.

The second publication is from UCPH in 2011 and follows the development of TOEPAS. It noted the various challenges of assessing EMI lecturers' proficiency and highlighted TOEPAS' need for formative feedback needs assessment, providing examples of such feedback. The authors also suggested that this feedback be used in raising the L2 user's awareness.

The following UCPH publications all reviewed TOEPAS' processes and validity. The first 2015 publication reviewed TOEPAS' consistency of rating, order and clarity of categories, and the validity of the cut-score. The review was successful, with all results positive. The second 2015 publication investigated if TOEPAS' formative feedback aligned with UCPH language policy requirements, concluding that the language policy was unclear thus there was a discrepancy between the policy and actual practices. The most recent publication, from 2018, explored whether TOEPAS' examiners apply standardised rating regardless of the lecturers disciplines. The study found that discipline does not play a role in TOEPAS rating. In addition, the study looked at which vocabulary uses TOEPAS examiners typically provided formative feedback and how effective lecturers found that feedback. The findings show that lecturers vocabulary issues tend to be in general English as opposed to discipline related, as they have been trained to use the vocabulary in their field.

The final publication examines Scandinavian university lecturers' attitudes towards teaching in EMI. This 2018 publication states that Scandinavian university lecturers generally feel positive towards teaching in EMI and any personal concerns are typically related to language proficiency, pedagogic demands, and changes in student demographic. It also provides an overview and description of TOEPAS.

#### **4. Italy**

Not applicable.

#### **5. Spain**

Not applicable.

#### **6. The Netherlands**

This 2013 publication observes the challenges of implementing EMI at Maastricht University, including issues such as domain loss. It looks at course and curriculum design but focuses more on intercultural collaboration than EMI testing.

#### **7. Conclusion**

Considering the majority of publications focused on testing came from Denmark, it could be perceived either that the link between EMI and testing was not sufficiently highlighted in other studies or that this aspect of EMI is further advanced in Denmark than the other countries. Considering that UCPH is the only TAEC partner to have developed their own system of testing, it is understandable that they have carried out more research on this aspect of EMI than the other partners have. However, the publications suggest that the TOEPAS method of rating UCPH lecturers' language proficiency for EMI is well researched and thought out, and that continuous evaluation ensures that it remains valid and fair. Meanwhile, lecturers' vocabulary for their discipline is mostly sufficient and they have found the formative feedback provided to be useful in their language development. Overall, lecturers in Scandinavia feel positive about delivering EMI classes.

## **Learning outcomes**

### **1. Overview**

There are 26 contributions in total, 16 with learning outcomes as the sole area of interest, and 7 as one of the multiple areas. In terms of country distribution, there are no contributions from Croatia with the "learning outcomes" area of interest, two (2) from Denmark, three (3) from Italy, eight (8) from the Netherlands and 13 from Spain.

## 2. Croatia

Not applicable.

## 3. Denmark

The two contributions from Denmark are a conceptual journal article and an empirical PhD dissertation. The conceptual article offers a state-of-the-art overview of studies about learning in EMI contexts, focusing on the Nordic countries. The PhD dissertation deals with the complexity of learning content and with academic writing in English in an academic ELF context.

## 4. Italy

The three Italian contributions are two book chapters and a journal article. The journal article is an empirical study where students' marks enrolled in EMI and Italian courses are compared, and the lecturers are interviewed about their perception on their students' progress. The EMI and Italian courses are comparable in general, but some EMI courses do worse, perhaps also due to factors such as group size that may have an impact on the marks. One book chapter has 'learning outcomes' as the sole area of interest, and it is a report on how a specific EMI course was implemented in an Italian University. The other book chapter is an empirical study with two areas of interest: ('language use' and 'learning outcomes'). Students took a pre and post-test, and the teaching style of the lecturers was analysed. No significant language gains were observed, probably due to the lack of specific language learning objectives and stimuli.

## 5. Spain

Half of the contributions on learning outcomes come from Spain and all of them are empirical. Eleven (11) out of the 12 contributions on learning outcomes focus specifically on this area of interest, whereas only one is a multiple-focus study which also analyses attitudes, language policy and intercultural communication.

The method of analysis employed in Spanish contributions consists of text analyses, experiments, case studies, and surveys. Data collection is mainly conducted through databases and questionnaires, followed by one study using audio/video-recordings and another one using interviews; two of the contributions are labelled "N/A".

The 11 contributions deal with: language gains and academic performance, students' use of pragmatic markers, students' interaction, writing, motivation and learning strategies. The "multiple" contribution looks into the impact of the language policy of the host university on students' language learning and identity.

The results on academic performance show the following: (1) no statistically significant differences between the students' performance in terms of content of the same degree in EMI and in L1; (2) similar results in students' performance in EMI group and in L1; and (3) language of instruction does not seem to have an impact on students' final grades, nor the use of different assessment formats, and low, medium and high achievers behave in a similar way, irrespective of the language of instruction used.

The findings on language performance reveal the following: (1) an increase in the frequency and variety of types of pragmatic markers in EMI students; (2) an improvement in lexico-grammatical and writing tasks in EMI students; (3) EMI students show acceptable results over the average command of grammar and vocabulary issues and significant weaknesses in aspects related to text format, register, and especially, on structure and discourse issues; and (4) academic literacy may be less developed in students' L2, yet it should be systematically addressed.

The other contributions show that: (1) EMI students have more mature learning strategies and motivation than their counterparts, which is shown in their level of self-confidence, time study management and perseverance; and (2) lessons and campus life in English allows for greater mobility, but at the same time places the local (i.e. Danish) language in a clearly subsidiary position in the life of the university.

## **6. The Netherlands**

All the contributions from the Netherlands but the one dated 1993 have multiple areas of interest, in different combinations. The areas covered, in addition to learning outcomes, are policy, language use, testing, attitudes, ICC and training. One publication is a journal article that reviews different studies comparing the impact of students' English proficiency across disciplines and assessing the tenability of the overall claim that such impact is lower in technological disciplines than in the humanities and social sciences. The book chapters are both conceptual, although one also seems to obtain empirical findings from interviews to students. This study focuses on the individual learning strategies that L2 English students adopt in order to cope with EMI. The other book chapter is indeed a conceptual contribution where the author argues that English support for staff is needed for quality assurance. The introduction to the edited volume is also conceptual and focuses on the different challenges of implementing EMI. The institutional document reports on an EMI course and why it was cancelled halfway due to lack of participants.

## **7. Conclusion**

To conclude, the number of contributions is very unbalanced geographically speaking, with Croatia featuring no studies. There is a prominence of journal articles stemming from Spain, which account for almost half of the total of contributions. To conclude, the area of learning outcomes is quite under-researched; hence future studies on EMI should pay greater attention to such an important topic, as what is at stake in EMI is indeed the learning opportunities this teaching mode offers to students.

The TAEC project is a collaboration between the following partners:



Maastricht University

