

Dissertation / Doctoral Thesis

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Just how muddy is it?

The impact of EMI on academic performance for Corporate Communication students

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All teachers are teachers of language (Bullock 1975)

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Abstract

Research to date has produced inconclusive findings as to whether English Medium Instruction (EMI) affects content learning and there has been scant research on content learning outcomes in Austria, particularly in the business administration field of Corporate Communication. The present study is a contrastive investigation of learning outcomes for EMI courses in the Corporate Communication degree programme at the University of Applied Sciences for Management and Communication in Vienna. By employing a mixed-method enquiry, this study inquires to what extent the learning outcomes of EMI business students differ from those of students who have received instruction in L1. The study explores the relationship between learning outcomes and teaching practices, while also analysing to what extent practices differ in L1 and EMI (as an L2) instruction. Dafouz and Smit's ROAD-MAPPING is used as a theoretical framework of analysis and as a point of access. The qualitative study includes interviews with eleven L2 EMI lecturers, while student focus groups provide the student perspective on teaching practices as well as self-reported impressions of their own learning. The contrastive review uses a unique corpus of four lectures conducted both in German and in English and delivered by the same lecturers, which is analysed linguistically to compare the frequency of use of Dalton-Puffer's Cognitive Discourse Functions (CDFs), questions and other meta-discursive features. This analysis is complemented by the review of a pre-and post-test of content delivered at the start and end of the recorded lectures to capture actual content learnt. Furthermore, an overview of student grades awarded in both the L1 and EMI cohorts is reviewed. Additionally, due to the parallel corpus, a unique contrastive study of natural spoken classroom discourse offers a contribution to the investigations of lecturer discourse. This review of various features is novel and opens up new research avenues reviewing the convergence of the CDF-construct with other linguistic devices. Furthermore, by using the ROAD-MAPPING framework as an aid for the literature review, in first-cycle coding and in the discussion of findings, this study adds to the understanding of its versatility in a phenomenological study. The findings provide new insights for educational policy designers on how to maintain high quality content learning outcomes when introducing EMI courses at the modular and programme level.

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List of abbreviations

BA	Bachelor
BELF	Business English as a Lingua Franca
CAT	Classroom Assessment Technique
CBC	Competence Centre for Business English
CBI	Content Based Instruction
CEIL	Content and English Integrated Learning
CLIL	Content and Language Integrated Learning
CC	Corporate Communication
EAP	English for Academic Purposes
EFL	English as a Foreign Language
EHEA	European Higher Education Area
ELF	English as a Lingua Franca
ELT	English Language Teaching
EMEMUS	English Medium Education in Multilingual University Settings
EME	English Medium Education (shortened form of EMEMUS)
EMI	English Medium Instruction
ESL	English as a Second Language
ESP	English for Specific Purposes
ETC	English Taught Cohort
ETP	English Taught Programme
GTC	German Taught Cohort
HEI	Higher Education Institutions
HELO	Higher Education Learning Outcome
IaH	Internationalisation at home
ICLHE	Integrating Content and Language in Higher Education
KPI	Key Performance Indicators

LOI	Language of Instruction
LP	Language Policy
L1	First Language
L2	Second Language
MA	Master
NNS	Non-native Speaker
NS	Native Speaker
RQ	Research Question
RU	Research University
SLA	Second Language Acquisition
TEFL	Teaching English as a Foreign Language
UAS	University of Applied Science
UAV	University of Applied Science for Management and Communication, Vienna

PART 1

1. Introduction

English Medium Instruction (EMI) outside Anglophone countries in tertiary education continues to grow throughout the world. This growth is driven by globalisation and the urgent need to educate students to be proficient in the global lingua franca. Incidentally, EMI has been an easy way for universities to offer this while remaining top of the class in the growing competitive university environment. At the same time, EMI offers universities a quick solution to facilitate exchange and encourage fee-paying students from abroad. However, all too often it is introduced without due consideration of the impact on learning outcomes. Applied linguists in the field of educational linguistics have taken up this issue and reviewed how EMI effects language proficiency and stakeholder attitudes, but there has been little research on content learning outcomes. The research done in this field to date has been inconclusive, which is precisely the gap which this dissertation project addresses. The project is a contrastive study of EMI and L1 programmes in a University of Applied Sciences (UAV) in Austria. This chapter describes the background and aim of the study, presents the research questions, and gives an overview of how the dissertation is structured.

1.1. Background and motivation for this investigation

My interest in this area developed while I was working on the curriculum overhaul involving a big change of one of the cohorts of the study programme *Kommunikationswirtschaft* [Corporate Communication], which was going to be converted to an EMI cohort. The UAV, like many other universities globally, had made a significant policy change by introducing an entire study programme delivered in English starting from September 2018. This university, with a focus on management and communication, recognized the urgent need to educate students to be proficient in conducting business activities in English, indisputably the global language of business. At the same time, the UAV saw the added benefits of offering more programmes in English to accommodate incoming students and attract international students to create multi-cultural cohorts. Furthermore, it was already recognized that

highlighting the international aspects of the university was an important marketing tool as well as an almost standard expectation from applicants.

As this was the first time that an entire EMI programme was going to be offered in the department, it provoked considerable debate and discussion in and outside of meetings. While discussing the issue with a colleague one day, she said the following: “(..) when we start with the new English-taught cohort, I’ll certainly have to review the content I deliver and think about adapting and simplifying it”. This intriguing statement, made in passing in 2017, is the reason for this dissertation. I had recently attended a lecture by a colleague presenting the results of her dissertation investigating pronunciation improvement exhibited by students spending a semester abroad (Richter 2015) where I heard the term English Medium Instruction (EMI) for the first time. I put the search rubric “English Medium Instruction Higher Education” into Google Scholar and started the research process. The most impactful paper for me at the time was the paper by Dafouz, Camacho and Urquia (2013): “Surely they can’t do as well “, which resounded with the statement made by my colleague.

Being an academic in the discipline of social sciences, this research interest immediately posed a few issues for me, as it was clearly in the field of *educational linguistics*, a discipline very different to my business education, professional and academic experience. As such, a considerable amount of time was spent adjusting to the new discipline, which involved reviewing research methods in the field of linguistics and coming to grips with some of the fundamental knowledge of applied linguistics that a robust dissertation in this field demands. As such, I went through what Franken (2015: 118) describes as “resituation”, or the transferring of my knowledge into another discipline. Eraut (2003: 58) defines “[t]ransfer as the learning process involved when a person learns to use previously acquired knowledge / skills / competence / expertise in a new situation” and this is more challenging in a complex and unfamiliar environment.

1.2. Problem definition, aim and research questions

EMI is now a well-established mode of delivery in tertiary education. Three European surveys undertaken by Maiworm and Wächter in 2002, 2008 and 2014 point to continual increase in the number of English-taught programmes (ETPs). The drivers of this growth are often described as being centred around the following rationales: economic, social/cultural and political (e.g., de Wit 1999). From an economic perspective, offering ETPs opens the university door to fee-paying foreign students. Socially, ETPs pave the way for greater empathy and harmony, and politically, universities offering courses in English benefit from better rankings.

Due to this growth pattern, there is an urgent need to address how EMI impacts learning outcomes and to explore whether it impacts disciplinary competence. EMI research to date has mainly focussed on language proficiency and attitudes towards it. Some authors have reviewed motivations to teach (e.g., Dafouz 2018; Doiz & Lasagabaster 2018; Jensen & Thøgersen 2011;), others have investigated the challenges EMI creates for lecturers (e.g., Gürtler & Kronewald 2015; Margić & Vodopija-Krstanović 2015). Considerable attention has been given to lecture delivery styles (e.g., Arkin & Necdec 2015; Gotti 2014; Thøgersen & Airey 2011;). While there has been some research into content comprehension (e.g., Dafouz et al. 2007; Dafouz & Sánchez 2013; Dafouz & Linares 2008; Costa & Coleman 2013; Cots 2012; Dearden 2014; Flowerdew 1994; Gotti 2014; Hellekjær 2010; Knapp 2011; Mauranen 2009; Pulcini & Campagna 2012; Sánchez-Garcia 2016; Suviniitty 2012; Vinke Snippe Jochems 2006), findings are mostly inconclusive. Researchers have also shed light on different teaching practices in the EMI lecture theatre and noted differences which could also contribute to inferior disciplinary learning outcomes. The atmosphere in an EMI classroom has been identified as different to its L1 counterpart by several researchers (e.g., Costa & Coleman 2013; Thøgersen & Airey 2011; Tzoannopoulou 2017; Zhang & May 2016). The main issue with research into content learning outcomes is the fact that it requires an interdisciplinary approach which is complicated in planning. Additionally, in tertiary education there are fewer opportunities to review large-scale comparisons and ensure validity. Another challenge faced by many researchers is the fact that the learning outcomes in EMI exclude language. EMI academics are content specialists and are rarely interested in

research in this arena. As such, research is mostly undertaken by applied linguists who are able to recruit EMI stakeholders from their universities to uncover attitudes towards and beliefs and perceptions around EMI. Contrastive studies are rare, and findings have generalisability issues, as lecturers seldom teach the same subject in the L1 and EMI cohorts.

Although some research has been carried out, studies have offered contradictory findings as to whether EMI hinders disciplinary learning. Same or similar learning outcomes were found in the studies undertaken by Klassen (2001), Gerber et al. (2005), Dafouz et al. (2013), Joe and Lee (2013) and Dafouz and Camacho-Miñano (2016). In contrast, the studies undertaken by Tatzl (2011), Hellekjær (2010), Pulcini and Campagna (2012), Suvinniity (2012), and Arkin and Necdec (2015) suggest that EMI results in inferior content learning outcomes. Against this backdrop, it is clear that there is a pressing need for further research into EMI content learning outcomes.

The primary aim of this dissertation is to contribute to this research cluster and to investigate how content learning outcomes are impacted by EMI education. Thus, this investigation will further contribute to the growing enquiry into these differences. A further purpose of this study is to explore the relationship between learning outcomes and lecturing practices. The overarching research question for this investigation is as follows:

How does EMI affect academic performance in corporate communication content classes in the BA program at a university of applied science?

With the following supporting sub research questions:

RQ1: To what extent are student learning outcomes in EMI and in L1 medium courses different?

RQ 2: To what extent are lecturing practices different in L1 and EMI in business studies?

RQ 3: What is the relationship between learning outcomes and lecturing practices?

This study does not engage with delivery of content by L1 speakers of English compared to L2 speakers, although this has been the subject of some investigation. Furthermore, it does not review language proficiency gains due to EMI.

The findings will inform university management about differences in learning outcomes expected and whether there is a need to adjust curricula when introducing EMI. Furthermore, this study will inform language teachers about what additional support could be helpful for EMI lecturers when teaching in the EMI classroom. The aim is further to identify those rhetorical practices which are particularly helpful to aid content learning and thus to contribute to the growing knowledge of helpful language skills for non-linguist content teachers.

1.3. Structure and design of this dissertation

The overall structure of the study takes the form of two main parts and fifteen chapters. The first part focusses on a review of the literature in this field of educational linguistics and the second part covers the empirical study. The ROAD-MAPPING framework developed by Dafouz & Smit (2016; 2020), provides a framework for researching EMI or English-Medium Education in Multilingual University Settings (EMEMUS). This framework will be discussed at length in Chapter 8, however, after writing the literature review, I realized that the chapters represented the framework's dimensions, thus each chapter title is given the matching dimension of ROAD-MAPPING in brackets.

Chapter 2 sets the scene around English-taught programmes, providing definitions and explanations of the different types of education offered in the medium of English, both at secondary and tertiary level. Chapter 3 is concerned with the background to EMI, exploring what is understood by university *internationalisation*. Primarily, the drivers of internationalisation at universities are set out and a picture is painted of the forms internationalisation typically takes. Chapter 4 focusses on the language policy which often underpins EMI implementation, offering details about how it is manifested in different regions of the world, firstly looking at the bigger picture globally and then zooming in on the status in Europe and finally specifically in Austria.

Chapter 5 seeks to present an overview of the literature to date, covering lecturers' thoughts around their beliefs about teaching in the EMI classroom, followed by what researchers have uncovered to date about whether lecturers perceive themselves as solely content teachers. Naturally there has been some investigation into student attitudes

towards this type of instruction and so this chapter finishes by presenting an overview of what researchers have uncovered in this regard. Chapter 6 is concerned with teaching practices, as this is a central strand of this dissertation, and so research findings around discourse strategies and learning outcomes are presented. Chapter 7 takes a closer look at academic literacy and reviews how disciplinary literacy is defined and conceptualised, with a closer look at disciplinary literacy in the social sciences and EMI. Knowledge and learning in higher education are elucidated in the last part of Chapter 7, with a look at Higher Education Learning Outcomes (HELOs), literacy in the lecture theatre, and finally Classroom Assessment Techniques (CATs). The final chapter of part one presents the theoretical framework underpinning this investigation.

Part two begins with Chapter 9, which sets the scene and context of the empirical study, firstly describing the differences between UAS and Research Universities (RUs) in Austria. By using the ROAD-MAPPING framework, a concise description of the way EMI has been implemented at the UAV is then given. Chapter 10 describes the research approach with an overview of the pilot study. The empirical investigation is broken down into two parts, which are explained in Chapters 11 and 12. The contrastive study reviews four identical lectures delivered in English and German by the same lecturer. These lectures were analysed linguistically and a pre-and post-test were carried out before and at the end of each lecture. Furthermore, the overall student grades from both language cohorts from all six semesters of the first intake of students in September 2018 are presented and analysed. The qualitative study involves interviews with lecturers and focus groups with students. The findings from these multiple methods are presented in Chapters 13 and 14, respectively.

Chapter 15 synthesizes the data gathered and addresses each of the research questions in turn. This chapter predominantly explores the relationship between the lecturing practices and learning outcomes from the lectures investigated. The purpose of the final chapter is to reflect on the extent to which this investigation has shed light on content learning outcomes in EMI and how successful the investigation has been in fulfilling the aims and objectives set out at the start. Finally, the significance and implications of the findings as well as the limitations of the study are discussed.

Throughout this dissertation, the term EMI will refer to this type of content-based instruction at tertiary level, as this term remains the most popular in scholarly articles and I do not wish to change the term when referring to research. Nevertheless, it is recognized that the relatively new term given to EMI coined by Dafouz and Smit (2016: 124), namely English Medium Education in Multi-cultural University Settings (EMEMUS) or EME, as it is sometimes shortened to, could be used to describe the phenomenon more accurately.

2. Terminology (Roles of English)

Before exploring the research specific to EMI, this chapter commences with a review of the different terms that are currently used in the extant literature in this field. Firstly, World English and English as a Lingua Franca (ELF) will be introduced and the similarities and differences between the terms and varieties indicated. Subsequently, this chapter focusses on the various programmes that are taught in English, in an attempt to provide the reader with an overview of where EMI fits into the wide range of different English Taught Programmes (ETPs). Some programmes associated with English learning and/or linguistics, however, will not be discussed in this chapter as they belong to clearly demarcated areas of language study and are beyond the scope of this investigation. These areas include English as a Second Language (ESL), English as a Foreign Language (EFL), English for Academic Purposes (EAP), English Language Teaching (ELT), Second Language Acquisition (SLA) and Teaching English as a Foreign Language (TEFL).

2.1. English as an international language

In 2019, there were 1.27 billion people worldwide who spoke English either “natively or as a second language” (Statista.com) and English remains the most frequently spoken language in the world, followed closely by Mandarin. Of those 1.27 billion, it is estimated that around 330 million are native speakers (NS); the rest are non-native speakers (NNS) of English, and they outnumber NS by approximately 4:1. According to the Eurobarometer in 2012, two thirds of Europeans (67%) consider English as one of the two most useful languages for themselves (Eurobarometer 2012). Without question, English is widely regarded as the first truly *global lingua franca*.

Yet, English was considered a “World Language” a long time before the discussion about its status as a global lingua franca began. In the 18th and 19th centuries, English spread and new varieties developed due to British (e.g., India) and US (e.g., Philippines) colonisation (Kirkpatrick 2010). These varieties or “World Englishes”, became a subject of linguistic enquiry. Braj Kachru is often considered the founder of this field of enquiry and his much-cited conceptual model illustrates the global situation of English up until the 1980s.

Generally speaking, the model depicts concentric circles showing the spread and varieties of English. At the core, the “Inner Circle” describes countries such as the US, Britain, North America, Australia and New Zealand where English is used daily. The “Outer Circle” includes those countries where English has played a role in administration and education, typically former colonies, including India, Singapore and South Africa, where varieties are influenced by the local languages. Finally, the “Expanding Circle” indicates those countries where English has a role as a foreign language, for example for scientific purposes, in such countries as China and South Korea, for instance (Kachru & Webster 2015 [1985]). Although this model is useful in describing how English is used in different places in the world, it does not come without its critics. As the model is based on a political situation at a certain point in time, its relevance today is questionable (Pung 2009; Sung-Yul Park & Wee 2009). Curiously, the model also fails to take into account where European countries could be placed, although continental Europe since then is usually placed in the Expanding Circle (Seidlhofer 2010b: 389). Mauranen (2018: 107) also recently highlighted that since the model’s conceptualisation, the inner circle countries have now often become multilingual due to the melting pot of cultures, while the outer circle countries have not become monolingual English-speaking nations as first envisaged. Moreover, as Jenkins (2017: 12) suggests, the fundamental difference between “World Englishes” as described by Kachru and “English as a Lingua Franca” is that in the case of the former, the linguistic repertoires exist within boundaries, whereas ELF transcends borders. Mauranen (2018: 107) describes the situation succinctly:

English is a striking example of a language that has overflowed the boundaries of its original regions, taking a wealth of shapes in its various new multilingual contexts, and manifestly hosting a number of other languages and multilingual speakers in its core strongholds, the ‘Inner Circle’ countries.

ELF is sometimes compared to Latin and thought to have the status that Latin once had as the dominant language of the elite and educated. However, this stance is contested and not shared by all; for example, Alexandar (2008: 104) challenges the notion, pointing out that unlike Latin, English is not limited to written text and there are native speakers of English, which means that English contrasts starkly to the Latin of the Middle Ages.

The third stage of globalisation started in the 1980s and was driven by technology (Lee & Carter 2009: 71), which is often regarded as the impetus for the recent spread of

English. Some argue, however, that it is the other way round; English has driven globalisation and if English had not been the dominant language in business, globalisation would not have been possible. There has been some debate about the linguistic impact of globalisation, and some claim that there are political stakeholders with a vested interest in maintaining and expanding this global dominance. For example, Dewey (2007: 334) presents a sceptical perspective on globalisation, suggesting it could be seen as a governmental agenda for upholding the status quo, retaining power and thereby maintaining English language teaching native speaker norms. Early on in this debate, Alexandar (1999: 33) criticizes the global dominance of English and suggests that English is still closely connected with “British Imperialism and (..) US-led neo-liberal world order.” He points out that English can be viewed as either an opportunity for liberation (in keeping with the ELF viewpoint, see later in the chapter) or a trap (Anglo-American norms and standards) (Alexandar 1999: 33). Whichever standpoint one takes - whether the spread of English has enabled globalisation or vice versa and whether it is indeed a liberation or a trap; it is indisputable that the world dominance of English and globalisation go hand in hand.

The spread of English over the last 40 years has been driven globally not only top-down at the macro policy level of institutions and organisations, but also bottom-up through popular culture. There are numerous examples -- whether one looks at websites, video-on-demand or influencers on social media -- where the domestic language is offered alongside English. Coleman (2006: 4) uses a vivid metaphor which he calls the “Microsoft effect”: the dominance of this software is similar to that of English, with both its ease of use and its difficulties and barriers to change, as well as the fact that it would be impractical to adopt another language now.

Those who are critical about this spread of English point to the issue of domain loss and the conceptualisation of form and function of this English. Domain loss is a concern of some linguistic scholars who think that the dominance of English endangers local languages. In his seminal article Graddol (2004: 1329) makes the now famous prediction of the “end of Modern Languages” and warns that each day could bring the loss of another language. In the academic arena, domain loss is a concern and has been a contentious issue in several countries. Jensen and Thøgersen (2011: 18) recount a heated debate which took place in Denmark between 2006 and 2009 following upon the nationalist party’s proposal of a law

guaranteeing the use of English at universities. The law did not pass, but the public discussion of the issue was fuelled. Pulcini and Campagna (2012: 69) also report on a public debate in Italy where the rector of Politecnico di Milano tried to introduce exclusive EMI education in 2014, which led to a petition and finally its abandonment. English has become so widespread that in the school system of many countries the subject of English is on a par with Maths and L1 skills; it is a must and not simply a nice-to-have. Indeed, in some countries e.g., South Korea, the aim is no longer for English to be learned as a foreign language, but rather for the citizens to become bilingual (Cenoz & Gorter 2010: 43).

Ehrenreich (2010) points to other concerns arising from the global dominance of English with regard to the form and function of this new “variety”; this is now a burgeoning area of applied linguistic enquiry.

In the 21st Century, English has become an indispensable “must” in the company (..) but what needs to be learned, however, is not English as a native language but communicative effectiveness (..) (Ehrenreich 2010: 408)

Barbara Seidlhofer set the scene for a serious ELF research agenda in 2000 with the announcement of her intention to create an ELF corpus. subsequently, in 2012, she established a journal dedicated to ELF, the *Journal of English as a Lingua Franca* (Seidlhofer 2009). She also put forward the much-cited definition of ELF in 2011: “any use of English among speakers of different first languages for whom English is the communicative medium of choice, and often the only option” (Seidlhofer 2011: 7). Seidlhofer describes ELF research as essentially falling into two categories which together constitute a form/function dichotomy. The former quantitative enquiry deals with language form and corpus analysis, while the latter has a qualitative focus and looks at meanings, motivations and context (Seidlhofer 2009: 40). Such research has shown that differences in form in ELF (lexical choice, pronunciation etc.) are not simply incorrect or flawed NS English, but rather are a feature of ELF which serves to aid understanding (Jenkins, Cogo & Dewey 2011: 282). The question as to what *kind* of English represents ELF English also continues to be a topic of great interest to researchers. To many sociolinguists, it is clearly not native English, and as Seidlhofer (2011:19) puts it: “it is important to realize that native-speaker language is just one kind of reality, and one very doubtful for LF contexts.” This is because trying to reach NS proficiency is unrealistic and unhelpful in ELF settings, where intuitive co-construction of meaning is of greater importance than achieving NS correctness. Furthermore, Gnutzmann

(1999: 163) suggests that “elaborate linguistic structures” can be detrimental to communication among ELF interlocutors. But ELF research has not just informed linguists in terms of the form or function taken, it has also, as Mauranen (2018:116) points out, shed light on how interconnected languages are, and in so doing, challenged our perceptions of languages and “redefine(d) our notions of what it is to speak one’s ‘own’ language”.

Jenkins (2017) and Mauranen (2018) have recently re-visited the framing of ELF in order to re-position it as a multilingual practice. Jenkins has even suggested that this practice should be redefined as English as a Multilingua Franca (EMF), explaining it as “multilingual communication in which English is available as a contact language of choice, but is not necessarily chosen” (Jenkins 2017: 64). A new term, *similect*, was recently coined by Mauranen (2018: 109) to denote the English interlocutors employ which is coloured and influenced by their L1; it is these similects which come into contact with each other when people use ELF. This notion is reminiscent of Graddol’s (2004: 1329) suggestion that hundreds of new forms of English have arisen all over the world.

Furthermore, there is a burgeoning area of research into Business English as a Lingua Franca (BELF) that acknowledges the importance and place of ELF in the business environment which is recognised by the lecturers interviewed. As Kankaaranta and Louhiala-Salminen (2017: 381) explain, BELF differs from ELF due to its domain (as in international business), the users (professional business people) and the goal (to create and maintain business relationships with a view to obtaining a successful business transaction). Ehrenreich’s (2010) review of English in use and of the attitudes towards English on the part of management in a German multi-national company also reveals that in this context there is not yet sufficient recognition that ELF is not NS English (Ehrenreich 2010: 410).

2.2 English-taught programmes

Educational linguistics is a field of applied linguistics first coined by Spolsky (2008) and aims to inform teachers and administrators in the areas of linguistics relevant to education. It describes “essential instruments for designing language education policy and for implementing language education management” (Spolsky 2008: 8). Spolsky suggests that

there are three components of language policy comprising of practices, beliefs and management, and that these exist in “highly complex, interacting and dynamic contexts, the modification of any part of which may have correlated effects (and causes) on any other part” (Spolsky 2004: 6). English taught programmes (ETPs) are introduced by education managers as policies for various reasons, driven by stakeholders at both the macro and the micro level. At the macro, European level, Hélot and Cavalli (2017: 473) indicate that the European Commission and the Council of Europe (47 member states) define language policy, the latter being driven by the Language Policy Unit (Strasbourg) and the European Centre for Modern Languages (Graz). The European Commission produced a White Paper¹ in 1995 that considers the importance of education in Europe in the context of technical and economic change and guidelines for high-quality education. Hélot and Cavalli (2017: 474) claim that

for the Council of Europe, multilingualism is a societal phenomenon whereas plurilingualism is an individual characteristic and both multilingualism and plurilingualism are central features of a European identity based on democratic citizenship. Multilingualism is the only term used by the EU and it includes both perspectives.

Multilingualism is embraced at the policy level in Europe, as it is common knowledge that it brings advantages to individuals and society as a whole, having both economic effects, and also, as as Cenoz and Gorter (2010: 50) improving cognitive skills, metalinguistic awareness and cultural awareness. Yet this view of multilingualism is in stark contrast to the practices described by Seidlhofer, Breiteneder and Pitzl (2006: 5), who remind us that English is predominantly used for in-house communication in offices in Brussels and Vienna. Similarly, Lindström and Sylvén (2014: 163) point out that the more international an institution claims to be, whether it is a university or business enterprise, the less multilingual and diverse it becomes due to the commonly accepted use of ELF.

Naturally, there are critical voices around the macro level policy driving ETPs. While bilingual education is of central relevance in the EU’s policy, it often ends up being seen as a privilege and a “sign of social distinction” (Hélot & Cavalli 2017: 483). As described earlier, domain loss is also a concern in academia. In Sweden, Lindström and Sylvén (2014: 158)

¹ White Paper on Education and Training, Teaching and Learning. Towards the learning Society.
https://europa.eu/documents/comm/white_papers/pdf/com95_590_en.pdf

point out that the non-dominant local language is a potential loser when the use of English spreads in a multilingual academic community. Tsui and Tollefson (2004: 2) further argue that:

medium-of-instruction policy determines which social and linguistic groups have access to political and economic opportunities, and which groups are disenfranchised. It is therefore a key means of power (re)distribution and social (re)construction, as well as a key arena in which political conflicts among countries and ethnolinguistic, social and political groups are realized. Because medium-of-instruction policy is an integral part of educational policy, debates surrounding it necessarily pertain to educational efficacy. All too often, policy makers put forward an educational agenda that justifies policy decisions regarding the use and/or the prohibition of a particular language or languages. Yet, behind the educational agenda are political, social, and economic agendas that serve to protect the interests of particular political and social groups.

However, it is not just macro policy driving the introduction of ETPs. Reasons for the introduction of ETPs were explored by Costa and Coleman (2013) in their broad study in Italy in which over 50% of universities responded. Their findings indicate that the main reasons for introducing ETPs are to improve the international profile of the university (32%), prepare Italian students for the foreign market (24%), attract foreign students (21%), improve English language proficiency (8%) or improve the national profile of the university (8%) (Costa & Coleman 2013: 12). What is noticeable is that these reasons are mainly economic and reflect the stakeholders' beliefs, one of the pillars defining policy, as described by Spolsky. Airey (2016: 75) states that content teaching in other languages can occur when teaching a minority ruling language to the majority, or as in the USA where Spanish is taught to immigrant children, or in areas where the local language is subject to erosion (e.g., Welsh) or where parents elect to have the children taught in a minority language (e.g., French in Canada). In their broad survey, Maiworm and Wächter (2002: 80) also review the reasons for introducing ETPs, which are summarized in Table 2.1. While these findings resonate with the findings of the previous authors, this study additionally highlights that there are different rationales for ETPs depending on context. Interestingly, financial motivation seems to play a lesser role in all of the countries surveyed.

Table 2. 1 Reasons for implementation of English-taught degree programmes (Maiworm & Wächter 2002a: 80)

	Country of institution								Total
	DE	DK	FI	FR	NL	PL	Other EU and EFTA	Other CEE	
To attract foreign students	92	91	85	87	94	80	80	89	87
To make domestic students fit for global/international markets	77	82	82	100	81	93	78	68	81
To improve the income base of the institution	16	18	3	21	31	33	11	53	19
To offer study programmes leading to degrees new in the country	78	27	33	56	38	47	47	44	53
Count (n)	(66)	(11)	(34)	(16)	(16)	(15)	(46)	(19)	(223)

The following sub-chapter explores the different labels given to different types of ETPs. They are variations depending on location, level of education and whether the emphasis is placed on either language or content. Airey (2016:73) offers a useful visualization of how they relate to each other in terms of language and content (see Figure 2.1). However, my literature review indicates that it is not as clear cut as that and that there are overlaps and other variations. Airey freely challenges his own continuum in that he admits that this dichotomy is artificial as “it is a fallacy to think that content and language can be separated in this way—content and language are inextricably entwined” (Airey 2016: 73). In the following sub-chapter, I do not discuss EAP (English for Academic Purposes) as I see this as a certain aspect of language proficiency specifically in the tertiary sector. Furthermore, EAP is not the only programme with pure language learning outcomes in the tertiary sector, for example one could easily add English for Specific Purposes (ESP) to this continuum. This chapter rather zooms in on other programmes which are language and content focused and where the demarcations are blurred. I propose an updated continuum to reflect this (see Figure 2.2). Furthermore, the chapter aims to disentangle the terms which are sometimes used interchangeably and to locate them in the sector in which they predominate.

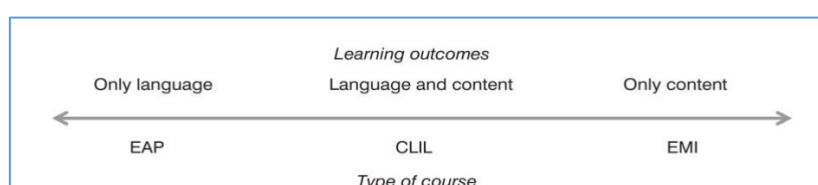


Figure 2. 1 The language / content continuum (Airey 2016: 73)

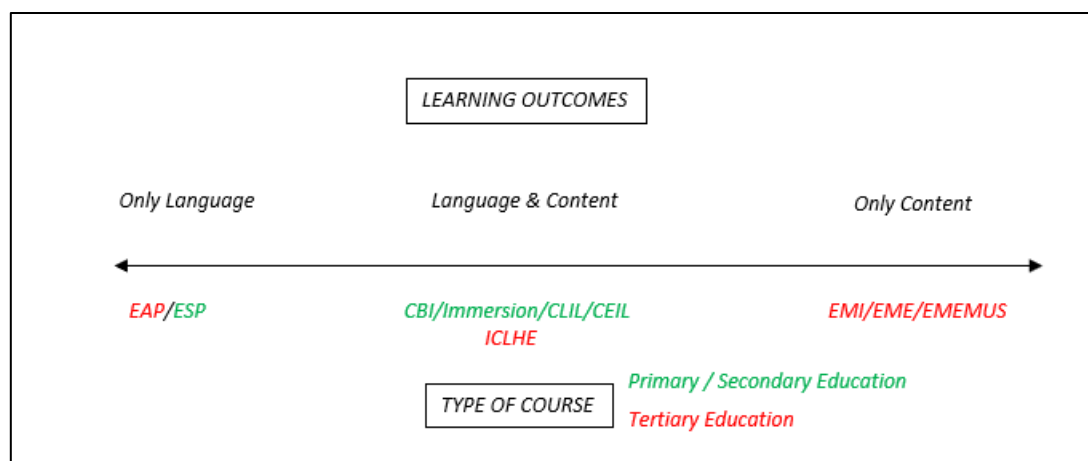


Figure 2. 2 The language / content continuum (my adaptation)

2.2.1 Secondary Education - Immersion, CBI, CLIL or CEIL

Immersion programmes are generally associated with education in North America and sometimes regarded as the precursor of CLIL. Immersion pedagogy has been around for several decades, but it is disputed exactly when it was born. Boyle and colleagues (2005: 25) suggest that it was first initiated in 1963 in Miami and then took off in the 1980s. Met and Lorenz (1997: 243), however report that immersion programmes started to emerge in the early 1970s in the US, driven by a thirst for diversity. These programmes generally include Spanish, French, German, Japanese and Chinese as the target language. Although the exact year of commencement is contended, the popularity the programmes still enjoy is undisputed. The Center for Applied Linguistics (2011) report that in the United States the number of immersion programmes in 2011 was 448 compared to 258 in 2003. Cammarata and Tedict (2012: 252) suggest that some of the reasons why people have embraced immersion programmes to such a great extent could include a desire to make reparations for colonial wrong-doings of the past as well as a response to the melting pot of cultures. In their literature review of research on immersion programmes, Watzinger-Tharp, Swenson and Mayne (2016: 914) indicate that students in dual language immersion programmes are able to achieve academic success or to outperform their peers in monolingual programmes.

There are several different types of immersion programmes, which can be distinguished according to whether content or language is at the fore and what the extent of the programme is. Boyle and colleagues (2015: xix) offer an overview of the different

programmes; they describe „two way dual” as those in which bilingual pupils (e.g., of English / Spanish) are integrated with monolingual English speakers and “one way dual” in which pupils speaking one language receive education in two languages. Met (1998: 40) also explains the difference between “total” immersion, where the whole curriculum is taught in the target language, and “partial” immersion, when the days are split between the languages. Met also offers a continuum depicting the different variations (see Figure 2.3).

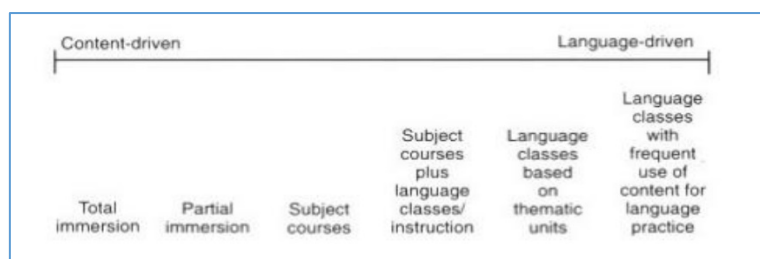


Figure 2. 3 Content-based language teaching: A continuum of content and language integration (Met 1998: 41)

Literature on Content Based Instruction (CBI) is scant in comparison to that of the other ETPS, which are discussed later in this chapter. It is unclear from my literature review whether CBI has its focus on content or language; although the name implies that content is the focus of the learning outcomes, CBI is predominantly viewed as a method for improving language proficiency. For example, Met (1998: 35) describes it as an approach to second language instruction that involves the use of a second language to learn or practice content. Stoller (2002: 9) on the other hand comments that too often CBI is seen as a “shell for language teaching” and calls for a dual focus on content and language. This dual focus is acknowledged in the description offered by Butler (2005: 229), who states that CBI “aims to develop both the students’ language and their content knowledge.” Brown and Bradford (2014: 331) suggest that the definitions of CBI are too broad and that these result in a misunderstanding of its goals and effectiveness. They call for a new, narrower definition, but do not offer one in their article. Stryker and Leaver (1997: 3) describe CBI more as a philosophy rather than a methodology and do not see any single formula for its implementation. They suggest that a CBI curriculum is based on the subject matter, uses authentic language and texts and is appropriate to the needs of the group (Stryker & Leaver 1997: 5). Met (1998:36) proposes that learning language through content provides students with opportunities to use language as it functions in the real world in time efficient way: to

communicate authentic meanings, for authentic purposes, and to accomplish authentic tasks.

Content and Language Integrated Learning (CLIL) is a term first coined in Europe in 1994 by David Marsh and Anne Maljers (Airey 2016: 71), and thus it appeared on the agenda in Europe much later than the immersion programmes. CLIL is sometimes described as the European version of its North American counterparts but with a maintenance of L1 teaching. In short, CLIL can be seen as a "foreign language enrichment measure packaged into content teaching" (Dalton-Puffer & Smit 2013: 548). It is typically implemented in primary and secondary education sectors and mostly integrated into the standard timetable; teachers are often "regular" content teachers who speak English well (typically L2 speakers). As is the case of my son's school (International School in Klosterneuburg, 2016-2022) and his experience, content teachers are sometimes accompanied by native speakers as assistant teachers. The L1 and target language are timetabled as independent subjects. Dalton-Puffer and Smit (2013: 546) offer a summary of what CLIL encompasses. They describe it is a mode of education where the medium is used as a *lingua franca*, i.e., it is a foreign language, it usually starts when literary skills in the L1 are already developed, and it is taught by content teachers who are not native speakers of the target language. In the Eurydice Report (2017), CLIL is generically described as a programme where the target language is a communication vehicle and this language is used to teach certain curriculum subjects other than languages themselves (Eurydice Report 2017: 55). The report indicates that CLIL is implemented using a variety of target languages and that countries take advantage of their own linguistic diversity, e.g., in Spain CLIL exists for six of the regional languages (Eurydice Report 2017: 56). In some instances, CLIL is implemented in languages other than English, but mostly, due to the predominance of English, the second "L" in the acronym actually stands for English. As such, in 2011 Dalton-Puffer (2011: 183) suggested that CLIL could be referred to as CEIL: Content and English Integrated Learning. Whether CLIL can be identified as an ELF scenario is discussed by Hüttner (2018: 487-9), who indicates that several studies show that CLIL is different from ELF mainly due to the use of translanguageing (because of a common language), which is often absent in ELF situations.

The motivating factors for introducing CLIL mirror those generally ascribed to ETP programmes. Marsh, Maljers and Hatiala (2001: 17) describe five dimensions or reasons for

implementing CLIL: these include a cultural, environmental, linguistic, content and learning dimension. There is one clear added value which lies in language acquisition. Hüttner and Smit (2014: 165) report that CLIL offers students a means to master disciplinary language and facilitates a positive attitude towards foreign languages. They explain that CLIL is so diverse and is implemented in so many ways that due to its context specificity, there is no uniform CLIL pedagogy. Rather, CLIL should be regarded as a teaching approach. These researchers describe it as an “educational approach where [some] curricular content is [additionally] taught through the medium of a foreign language [which is often also taught as a subject itself], typically to students participating in some form of mainstream education at the primary, secondary, or tertiary level” (original definition by Dalton-Puffer, 2011: 183; additions by Hüttner & Smit 2014: 164).

Generally, CLIL is a programme offered in the secondary sector and EMI is frequently the term used in tertiary education. However, this is not always clear-cut. Aguilar (2015: 723) points out that CLIL and EMI are often used interchangeably by researchers; this is an issue I also came across in my research for Chapter 2.2 (e.g., Aguilar and Rodríguez 2012; Aguilar 2015; Dafouz & Llinares 2008). While Ruiz-Garrido and Palmer-Silveira (2008) also discuss at great length the advantages of CLIL in the tertiary education sector, the difference between CLIL and EMI are not addressed. It seems that the new MA programme they introduced at their university is truly CLIL, which is unusual at tertiary level and rather should be labelled as Integrated Content and Language in Higher Education (ICLHE). This issue will be addressed in the following section.

2.2.2 Tertiary education: EMI, EMEMUS, EME or ICLHE

English Medium Instruction (EMI) is a term commonly used nowadays in tertiary education to describe programmes where English is used as a vehicle. There are no language learning outcomes; content is firmly at the fore. Dearden (2014: 4) offers the following definition of EMI: “the use of the English language to teach academic subjects [other than English itself] in countries or jurisdictions where the first language (L1) of the majority of the population is not English” which is also used by some other applied linguists (extra wording in brackets adopted by Macaro et al. 2018: 37). However, this definition is problematic according to

some key EMI /ELF researchers. Baker and Hüttner (2019: 80) note that it does not describe in which education sector EMI is commonly found (tertiary) and also does not mention the idea that it is implemented in countries where English is not the local L1, which excludes Anglophone International Universities. Smit and Jenkins also point out that the Macaro et al. study (2018) ignores findings from ELF research and does not recognize that EMI takes place in an ELF situation (Jenkins & Mauranen 2019; Smit 2018).

Dafouz and Smit (2016; 2020) suggest that the term EMI is too restrictive and have coined a new acronym to describe this ETP setting: English-Medium Education in Multilingual University Settings (EMEMUS), which endeavours to cover the myriad of didactic approaches and settings in tertiary level education and places learning on a par with instruction. Furthermore, the new acronym underpins the fact that this type of education happens in multilingual settings (Dafouz & Smit 2016; 2020). For simplicity, they suggest the wider use of the acronym EME for short. In these articles the authors also present their “ROAD-MAPPING framework”, which provides a useful conceptual structure for investigating EMEMUS and will be discussed at length in Chapter 8.

Naturally, there are different reasons for introducing EMI programmes and these manifest in the different types of programmes which are identified by (Knapp 2011: 55):

Type 1: EMI in international programmes.

Type 2: EMI for students of English linguistics and literature and future teachers of English.

Type 3: EMI for (German) students of any subject, with the goal of preparing them for studying abroad and/or the use of English in their future professional lives.

There is a ‘type four’ that has recently been introduced at the UAV which is the subject of this investigation: programmes which are taught entirely in English with multiple aims. These aims include meeting internationalization goals, fulfilling international career ambitions for domestic students, nurturing cultural understanding and attracting foreign students who want to spend more than one semester at the target university. Naturally, in some contexts these foreign students would bring additional income. These goals are echoed by Coleman (2006: 4) who suggests that the reasons for introducing EMIs include CLIL, internationalization, student exchanges, teaching and research materials, staff mobility, graduate employability and the market in international students. Dearden (2014: 24) also

concur that the reasons universities often give for introducing EMI are related to economic growth, prestige and internationalization. Wilkinson (2012: 7–8) similarly explores the reasons for introducing EMI and summarizes them as practical, survival, financial, idealist and educational. Lueg (2018: 58) reminds us that EMI facilitates participation in global academia, thought exchange and the overcoming of language barriers. These aims, he says, are only achievable if “EMI is detached from the ownership of selected other tongue speakers and language idealism”. Lueg further claims that EMI provides international education to a diverse student group. Interestingly, Lueg refers to learnings from World Englishes, although he seems to be talking about the conclusions drawn by the ELF research community.

While the drawbacks of EMI will be discussed at length in Chapter 2, the main issues will be presented here. The disadvantages of EMI identified by leading scholars and summarized by Aguilar and Rodriguez (2012: 184–185) include students not speaking in class, having an increased workload and not performing at their best, while lecturers can evidence a diminished quality of teaching. Although Aguilar and Rodriguez describe these losses as CLIL losses (they are talking about tertiary level and so they are reported here), this example emphasises the confusion in nomenclature that persists. In a review of EMI in South Korea, Williams (2014: 17) also describes issues including a lack of language proficiency and academic achievement due to limited resources as well as a fixation on the pursuit of policy. Wilkinson (2012: 11) further comments on “domain loss, impoverishment of linguistic diversity, and issues with employability in the home country.” Alexander (2008: 89-90) heavily criticizes the spread of EMI programmes, accusing them of contributing to “brain drain” as graduates tend to flee their own economies on graduation, and describes EMI as an “artificially constructed sociolinguistic setting.”

In recent years, applied linguists have noted the benefits of integrated content and language learning found in secondary education and there has been a growing interest in Integrated Content and Language in Higher Education (ICLHE). This term was first used at an integrational conference in Maastricht in 2004 (Smit & Dafouz 2012: 6). As Jacobs (2015: 26) suggests, this integration paves the way towards “relational thinking” about content and language. Schmidt-Unterberger (2018: 531–535) proposes a “English-medium Paradigm” in which she describes different ways English is taught in HEI and suggests that ICLHE is almost

impossible² to implement due to the complexity in the required collaboration between content and language specialists. She also questions the added value of ICLHE, as the focus in tertiary education is on disciplinary knowledge, and recommends instead that EMI should be combined with ESP and EAP courses. Smit and Dafouz (2012: 11) take a different stand and see a difference in the foci of research:

(w)hile this distinction clarifies the pedagogical model adopted, the notion of “content and language integration” can also be interpreted with regard to discursive classroom practices, whereby the interactants co-construct meaning and their topics. From such a discursive perspective, integrating content and language (ICL) is understood as an integral part of the teaching and learning practices and can thus be seen as taking place irrespective of explicit teaching aims.

In this way, they suggest that EMI and ICL point to different foci of research, the former with a focus on instruction and the latter with a focus on discourse between the interlocutors.

2.2 Summary

This chapter started by exploring the expanse of the English language, firstly by reviewing Kachru’s model and the critique thereof and subsequently by discussing how the recent wave of globalisation has contributed to its continual spread. Particular concerns around domain loss were highlighted. The background to the origin of ELF and particularly the research interest in ELF were discussed, which has recently seen the coining of newer terms such as EMF and “similect”.

The second part of this chapter introduced educational linguistics, which set the scene for a discussion of how macro-level policy decisions often play a role in introducing ETPs. At the micro level, it was shown that universities have differing reasons for its introduction, which cluster around economic, reputational and language improvement aims.

A central part of this chapter was a closer look at types of ETPs found in secondary education, such as Immersion, CBI and CLIL, with a particular focus on their origins and drivers. At times, CLIL is used in tertiary education, but normally ETPs at universities are

² Three newly defined modules in the updated curriculum (start 2023) of *Corporate Communication* at the UAV have been created by the author and the head of the ESP language centre, indicating that this is indeed possible. A case study paper to describe this process is forthcoming.

described as EMI programmes. A definition of EMI was offered with a description of the various types, followed by a discussion of the recent coinage of the acronym ICLHE, which can be equated to CLIL in tertiary settings.

3. Internationalisation of universities (Internationalization and Glocalization)

The aim of this chapter is to examine what lies behind internationalisation, a strategic underpinning which many universities have adopted with EMI often being an integral part of the internationalisation strategy. This chapter is divided into three sections. Firstly, an overview is presented of how internationalisation has gained importance and changed in meaning and relevance over the years. Subsequently, the central role of internationalisation in many universities' strategies as well as the challenges posed by its implementation are described. Finally, a closer look is taken at a key part of this strategy, namely Internationalisation at home (IaH), with a review of the different elements that fall under this aspect of internationalisation. The chapter concludes with a brief overview of EMI, as this is an integral part of IaH, before EMI is explored in greater detail in the following chapter.

As a starting point, the terms internationalisation and globalisation are reviewed, as they are sometimes confused and used interchangeably, even though they mean very different things. In his interesting analysis of the term, Scholte (2007: 1473) observes that ideas of globalisation remain elusive and pervasive. Nevertheless, he proposes a definition, suggesting that the term captures the "present ongoing large-scale growth of transplanatory -- and often also supraterritorial – connectivity" (Scholte 2007: 1499). In contrast, a more recent definition is offered by Gygli et al. (2018: 3):

Globalization describes the process of creating networks of connections among actors at intra- or multi-continental distances, mediated through a variety of flows including people, information and ideas, capital, and goods. Globalization is a process that erodes national boundaries, integrates national economies, cultures, technologies and governance, and produces complex relations of mutual interdependence.

In tertiary education, the term internationalisation is used to refer to activities beyond borders, similar to the idea of globalisation involving activity beyond the domestic arena. Scholars have likewise endeavoured to convey meaning and purpose in a definition of internationalization; as the idea and what it means to a university has changed over the years, so too has the definition. Wächter (2003) reviews the evolution of internationalisation and identifies four phases. At first, the term was associated with individual mobility, then in a second phase with more organised, larger-scale mobility. He describes phase three as the time period when internationalisation of the curriculum came

to the fore alongside mobility. Wächter identifies phase four as having started in Bologna, where the education ministers of 30 countries agreed to the harmonization of the structure of degrees (Wächter 2003: 7). Similarly, Haan (2014) offers an overview of how definitions of internationalisation have evolved since 1992, showing how some exhibit different areas of focus (institutional, national, sectoral), while others are concerned with what internationalisation means. Summarizing, he states that there has been a "shift from an activity-focused to a strategy-focused" view and a "broadening from the individual institution level to the sector/national/regional level", as well as a "development from fragmented studies from diversified perspectives to a synthetic view of internationalisation" (Haan 2014: 244–245). Bartell (2003) also sees a development in the internationalisation process over the years, with universities shifting from a domestic, to a multi-domestic, and then to a multinational phase, and now to a global phase (Bartell 2003: 47). These studies demarcate phases, however arguably, overlaps arise and naturally in different contexts, universities are at different stages of this process and understand and implement strategies differently.

Knight points out that “internationalization is changing the world of higher education, and globalization is changing the world of internationalization,” implying that the instigator of internationalisation is globalisation (Knight 2008: 14). Maringe, Foskett and Woodfield (2012) likewise suggest that globalisation is the precursor of internationalisation and highlight that the difference between the two is that internationalisation aims to exploit knowledge via exchange and communication and seeks to find differences and leverage those. In this respect, they suggest, it differs from globalisation, which looks to “cultural, social, political and technical homogeneity as a model for integration” (Maringe, Foskett & Woodfield 2012: 13). Bartell (2003), on the other hand, proposes that globalisation is an advanced phase in the evolving process of internationalisation (Bartell 2003: 46–47). Some scholars criticize the neo-liberal path that globalisation (and with it, internationalisation) has taken and argue that it glorifies global perspectives to the detriment of local perspectives (Rizvi 2016).

In the extant literature on internationalisation, Knight’s definition(s) are often cited, as she was the first to propose that the essence of internationalisation was to integrate international dimensions into core university activities. She proposes that

internationalisation is “the process of integrating an international, intercultural or global dimension into the purpose, functions or delivery of post-secondary education” (Knight 2004: 11). This definition is not without its critics, however. Maringe, Foskett and Woodfield (2012) contend that Knight makes the assumption that before internationalisation, universities were solely domestic focussed, which these authors insist goes against the fundamental grain of the university. These authors instead propose that internationalisation is a “value creation process” driven by globalisation, one which enhances the quality and relevance of the core business of university life (Maringe, Foskett & Woodfield 2012: 11). Knight’s definition has recently been revisited by de Wit and Hunter (2015: 3) and now includes a slight adaptation:

The intentional process of integrating an international, intercultural or global dimension into the purpose, functions and delivery of post-secondary education, *in order to enhance the quality of education and research for all students and staff and to make a meaningful contribution to society* [my emphasis].

With this definition, the author re-focusses on the original goals of internationalisation, such as partnership and the sharing of culture and global citizenship, which are often overlooked nowadays due to predominant economic pressures.

Whatever stance one takes, internationalisation remains a core consideration in university strategy, and as Jones and colleagues recently suggest, that there needs to be a concerted effort to align the strategy for the “common global good” of society (Jones *et al.* 2021: 342).

3.1 Drivers of internationalisation

The internationalisation of universities has been an integral activity which has occupied stakeholders in higher education for many decades. There has been a huge development in student mobility with UNESCO (2020) estimating for 2017 that over 5.3 million students studied abroad, compared to 4.2 million in 2013. However, internationalisation is not just about mobility. Nowadays, as the definitions suggest, it encroaches upon many different areas of university life, conceptualised in international research collaboration, staff and student mobility, the importance placed on intercultural competencies, the replication of

degree programmes at satellite campuses, joint or double degrees and the rising importance of collaborative online international learning (COIL).

Much has been written about the drivers or rationales behind internationalisation. De Wit (1999) describes the rationales most often quoted in literature as driving the international activities of universities as academic, social/cultural, political, and economic. These rationales are in turn influenced by the stakeholder groups within government, private and educational sectors. He contends that the political rationale arose around colonial times and continued up until the Cold War, with the key idea of promoting peace and understanding while dominance was the implicit and undercover agenda. After the Cold War the economic rationale became more important as universities identified the financial benefit of mobile students (de Wit 1999: 3–4). This economic rationale persists; in the UK alone the number of non-EU citizens enrolled in higher education tripled between 1995–2015, from 98,000 to 312,000, with tuition fees making up 12.7% of university income in 2015 and 29% of those students coming from China (Hajela & Sumption 2017: 4–5). While there is naturally a different picture in the EU, the number of foreign students in Austria is significant; in 2020/2021 foreign students represented 29% in public universities, 50% in private universities and 19% at UASs (WKO Statistik).

The socio-cultural rationale is understood as the ambition for greater cultural empathy and harmony. In their taxonomy of rationales, Maringe, Foskett and Woodfield (2012) explain the academic rationale as encompassing educational and pedagogical aspects, with the aim of striving for excellence and the desire for diversity in the curriculum. They also propose that there is a technological rationale: the desire to be on the cutting edge of technical developments and to be able to use this technology across borders to promote equity (Maringe, Foskett & Woodfield 2012: 15). A further rationale is identified by Haan (2014) in a study carried out in the Netherlands comparing research universities and applied universities, namely that some institutions are recently being driven by the “bandwagon effect,” in other words, if other institutions are internationalising, then universities feel obliged to be doing this, too (Haan 2014: 255).

Universities place different emphasis on specific elements of internationalisation depending on context, goals and ultimately strategy. Researchers have also shown that

internationalisation means very different things to different institutions and in different parts of the globe. In his seminal paper, de Wit (2009) describes a comparative investigation carried out reviewing universities in Northern and Southern Europe. He observes that particularly in the Nordic region there is a tendency toward a competitive approach to internationalisation, compared to a focus on co-operation identified in the South. He suggests that the strategies are “filtered and contextualized by the specific internal context of the university and how they are embedded nationally” (de Wit 2009: 3). After conducting a large investigation of universities around the globe, Maringe, Foskett and Woodfield (2012) also argue that 3 models of internationalisation are emerging, namely commercially driven ones found in universities mainly in the West, cultural-integration models predominantly in Asia and the Middle East, and curriculum-driven models identified in poorer nations in the South (Maringe, Foskett & Woodfield 2012: 10). Furthermore, Haan (2014) identifies a fundamental difference in the attitude taken towards internationalisation by Research Universities (RU) and Universities of Applied Sciences (UAS). He suggests that while the focus of UAS is on mobility and internationalisation of the curriculum, with the intention of attracting students for economic gain and creating an international environment at Bachelor level, the focus of RUs is founded in a vested interest in international rankings (Haan 2014: 254). An esteemed pedagogic publication, *The Times Higher Education*, issues an annual table ranking the world’s “most international universities” (The Times 2022) which is very revealing in terms of the importance placed upon internationalisation. The metrics for the ranking are divided equally among the following four areas: proportion of international staff, proportion of international students, international co-authorship, and international reputation. It is therefore not surprising that the quantity of these Key Performance Indicators (KPIs) can sometimes only be attained at the expense of quality. National and international university accreditation in general spans all aspects of university activity and likewise includes internationalisation KPIs, which often mirror The Times’ metrics.

Such economic pressure creates tensions around internationalisation. Recently, de Wit (2020) investigated the current major trends in internationalisation which he describes as “competitive, elitist and a focus on market direction”. He calls for “more qualitative dimensions around citizenship development, employability and improvement in the quality of research, education and a service to society” (de Wit 2020: iii). The challenges posed by

internationalisation for universities are varied and contextually defined. These include the challenge of funding, the trend to privatization, economic pressure, a change from cooperation to competition, the competing and diverging opinions of a plethora of stakeholders and the complexity of the internationalisation of the curriculum (de Wit & Hunter 2015: 2). A further contentious topic is that of 'brain drain' versus 'brain gain', conceptualised through the universities' recruiting of foreign staff, which often serves to fulfil key performance indicators for rankings, yet in many instances to the detriment of developing countries, where salaries cannot be matched. Knight (2013) adds that the "dark side of internationalisation" also includes the priority given to ranking over quality education, with some institutions becoming "visa factories", and the troubling pursuit of double degrees, which rarely equate to a doubling of knowledge, but rather a doubling of titles (Knight 2013: 85).

Similarly, Green (2012) criticizes stakeholders for viewing internationalisation as a means to an end, rather than pursuing another ultimate goal, "such as enhancing the quality of scholarship and discovery, alleviating poverty or producing globally aware and competent graduates" (Green 2012: 4). Since internationalisation is often seen through the western idealistic paradigm, some authors call for universities to engage in critical de-Westernization and to encourage new discourses from multiple perspectives instead (Breit, Obijiofor & Fitzgerald 2013: 129). A comparable stance is taken by de Wit in that he proposes that internationalisation should be reframed outside of the Western, Anglo-Saxon paradigm (de Wit 2020: ii).

Collectively, these studies indicate how complex internationalisation is and its understanding is highly contextually bound with competing high-stake rationales. Highlighting this dichotomy, Hanna and Latchem (2002: 128) suggest that: "the jury is still out on whether altruism or commercialisation will prevail in internationalisation".

3.2 Strategy and implementation

As described in the previous chapter, internationalisation permeates many aspects of university life; a comprehensive conceptualisation of the ramifications of internationalisation is offered by Hudzik and McCarthy (2012: iv):

Comprehensive internationalization is a commitment, confirmed through action, to infuse international and comparative perspectives throughout the teaching, research, and service missions of higher education. It shapes institutional ethos and values and touches the entire higher education enterprise. It is essential that it be embraced by institutional leadership, governance, faculty, students, and all academic service and support units. It is an institutional imperative, not just a desirable possibility. Comprehensive internationalization not only impacts all of campus life but the institution's external frames of reference, partnerships, and relations.

This complexity of multiple stakeholders presents challenges in defining an adequate strategy and in determining how and if the strategy can be implemented. Whether universities actively create and implement strategies, or whether initiatives are introduced ad hoc and piecemeal has also been the subject of enquiry (e.g., Taylor 2016). The implementation of strategies is often difficult due to this myriad of stakeholders – academic and managerial professionals, owners, government education ministers -- all with different agendas and coupled with complex and convoluted university structures (Childress 2009: 291). Sporn (1996: 46–47) additionally highlights that university culture can either hinder or facilitate implementation, suggesting that university culture can be weak or strong, internally or externally focussed. He claims that incorporating an internationalisation strategy often calls for the adaptation of existing structures, thoughts, and processes, which would require a strong, externally focussed culture. At the same time, Taylor argues that a focus on the external is not enough and that due to complexity of units and persons responsible for internationalisation, a stronger internal orientation is a prerequisite (Taylor 2016: 152).

Knight (1994) suggests that universities should go through different phases to ensure proper implementation of the internationalisation strategy as can be seen in Figure 3.1.

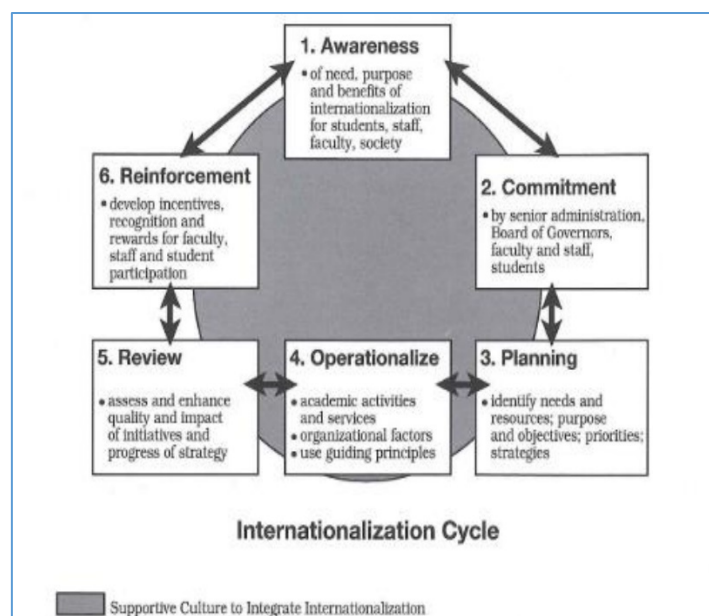


Figure 3. 1 Internationalisation Cycle (Knight 1994: 12)

This visualisation helps to highlight that the process is an ongoing one. Qiang (2003) acknowledges this and also suggests that the process is cyclical, conceding that reinforcement leads to awareness and commitment (Qiang 2003: 260). Any strategy is made concrete by the help of written plans, which could be published on websites or simply made accessible for internal colleagues. These plans should describe visions, initiatives, required resources, timeframe and KPIs (Childress 2009: 291). The use of KPIs is a practice taken from the business environment and represents a useful tool for benchmarking and checking progress. Examples of KPIs from the object of this investigation include the number of courses taught in English, the number of double degrees, the number of outgoing teaching hours, the number of exchange students, the number of international guest lecturers or the number of COILS (outlined in the next sub-chapter). Unfortunately, these indices contribute to the aforementioned dark side of internationalisation, as they can be manipulated easily since they have an immediate effect on rankings (Piller & Cho 2013: 37).

3.3 Internationalisation at Home

University internationalisation activities include diversification and collaboration with partners across borders in teaching and research, which can involve partnerships and projects such as branch campuses or double/joint degrees. Student exchange is one of the

most obvious examples, and it can involve whole degree programmes, a semester abroad or just short-term mobility in the form of excursions. All of these activities are often referred to as *Internationalisation Abroad* (Knight 2004: 17). *Internationalisation at home* (IaH), on the other hand, is concerned with the inclusion of international activities without having to cross borders. A third category has recently been coined by Mittelmeier and colleagues (2021: 269), called *Internationalisation at a Distance*, which involves capturing the benefits of exchange without leaving the country, as supported by technology. Although not a new phenomenon - distance learning was pioneered by the Open University in 1969 (Cooke, Lane & Taylor 2018: 129) - it has burgeoned during the COVID-19 pandemic, with many students attending a semester or more abroad online, as exemplified by the opportunities explained during an online conference in November 2020 hosted by the Österreichs Agentur für Bildung und Internationalisierung [Austria's Agency for Education and Internationalisation, my translation]. In sum, Werner (2020) contends that the epidemic has created an opportunity to re-evaluate globalization and adopt a more comprehensive strategy that goes beyond mobility.

Of particular interest to this investigation is the area IaH, as this is where EMI is firmly seated. The term IaH was first captured by Bengt Nilsson in 1999, which inspired the creation of an IaH network of academics who aimed to define and conceptualize it. Since then, it has had a firm place in many universities' internationalisation strategy. Wächter (2000: 6) defines IaH as "any internationally related activity with the exception of outbound student and staff mobility". As such, the crux was and is about refocussing on what can be done in terms of internationalisation within the boundaries of the home university, thus enabling all students to be exposed to those activities, not just those perhaps privileged students who can afford a semester abroad. Notwithstanding this, Erasmus+ does offer generous grants to make mobility affordable to students in partner countries, however, there are reasons some students still cannot take up this offer, e.g., care commitments at home, employment, etc. IaH grants more importance to international and intercultural aspects of research and teaching as well as to building relationships with the local community, which may perhaps already enjoy the situation of being an intercultural melting pot (Knight 2013: 85). As Wächter (2004:60) puts it, "IaH brought back the human touch. The process of internationalisation that had slipped away felt real again and academics, policy

makers and international relations officers once again felt they were working on the same thing.”

laH is mainly conceptualised through international research and internationalisation of the curriculum, which are taken up in the following sub-chapters.

3.3.1 International research

The internationalisation of research can be understood as a group of elements which “help to understand research as a phenomenon involving global aspiration, action and ambition” (Pérez-Encinas *et al.* 2017: 36). The international research activities of universities are often framed within laH and usually include the following four aspects as summarized by Adapa (2013: 8–9): co-authored works, collaborative initiatives proposed and implemented, number of researchers exchanged due to collaborative projects and the extent to which teaching is informed by collaborative research.

It can be argued that as international research now falls into laH, it is a convenient contribution to the internationalisation efforts, yet international research is not new. It has certainly become easier due to advances in technology which facilitate it (e-mail, shared analytical tools and platforms), but researchers have always worked across borders, perhaps just not as efficiently as they do today. While there are few papers dealing with international research within the realm of internationalisation, Woldegiyorgis, Procter and de Wit (2018) looked into the effects of international research and suggest it has a positive effect on productivity, quality and impact, with international co-authored publications being more frequently cited. They describe different rationales -- national, institutional and individual -- all with the central aim of increasing productivity and quality (Woldegiyorgis, Procter & Wit 2018: 163–165).

Naturally, funding is a core driver of international co-operation, with the European Research Council presiding over a budget of €13 billion between 2014 to 2020. Such initiatives aim to drive international collaboration, since “increasing the international exposure of researchers can help them to develop their full research potential” (European Research Council). Conducting research in international teams can increase exposure at conferences and in publications and enables researchers to collaborate with other scholars

who may complement their research area, which can ultimately lead to improved career prospects. In the management of organisations it is common knowledge that multicultural teams bring numerous benefits, such as enhancing the ability to learn, reducing the tendency to groupthink and overcoming rigid structures (Stahl *et al.* 2010: 442–444). However, working in multicultural teams can be challenging, as Turner (2009: 248) reports, as issues including unequal language skills, leadership ambiguity, miscommunication, conflict, unequal commitment to time-keeping, differing expectations and over-talking can arise. Notwithstanding this, it has also been shown that heterogeneous teams can be more creative in solving problems and can come up with innovative solutions (Maznevski & DiStefano 2000: 195). Therefore, not only can international research teams enable ground-breaking research, but top talent is also often recruited to prestigious universities, which then has the double advantage of fulfilling a KPI whilst simultaneously providing the opportunity to increase research output in quality and quantity.

3.3.2 Internationalisation of the curriculum

Internationalisation of the curriculum (IoC) has been a topic of interest in tertiary education for 20 years, but it is often unclear what it means in practice (Leask 2013: 104). Oftentimes, it is unclear whether this lack of clarity lies in the responsibility of university management or with faculty staff. Notably, the qualitative research synthesis undertaken by Wimpenny, Beelen and King (2020: 229) highlights that there is a lack of knowledge about the training requirements of academic staff regarding how they can contribute to IoC. The researchers conclude that only if development of the international curriculum is undertaken by all stakeholders can universities offer this curriculum to all students sufficiently. IoC essentially involves including international dimensions in the curriculum, expanding learning outcomes to include worldviews with the aim of enabling students to become global citizens. This can be conceptualised in different ways, ranging from comparing and contrasting local theories and practices with international perspectives, working on projects with faculty from abroad, to including more programmes and courses taught in the medium of English. Some researchers (e.g., Leask 2015) see IaH as a form of internationalisation of the curriculum. Leask developed a framework capturing this which place knowledge at the core (see Figure 3.3). This visualisation shows how multi-layered the environmental context is and how other

elements are at play, including the prevailing paradigm, other requirements from the practical discipline, as well as the learning and assessment framework.

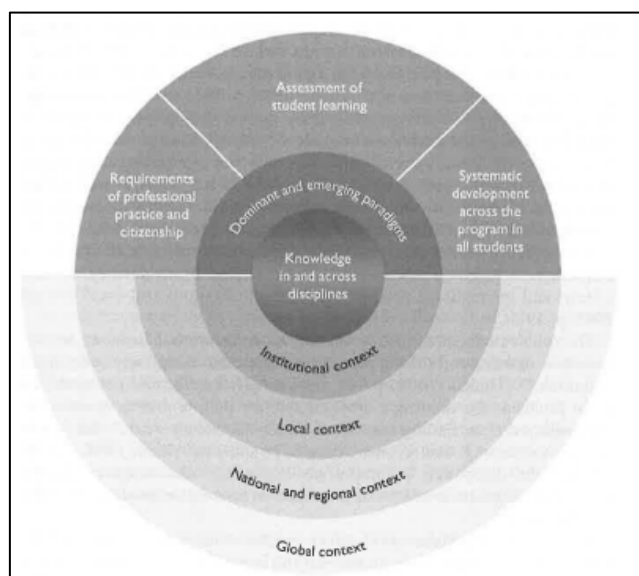


Figure 3. 2: Conceptual Framework for internationalisation of the Curriculum (Leask 2015: 27)

This challenging environment is conceptualised in the research undertaken by Clifford and Montgomery (2015), who investigated data taken from global participants of an HEI online course about internationalising the curriculum for students. Although the focus of the article is the potential impact of transformative learning, the study reveals that the “political environment of their institutions and disciplines” (Clifford & Montgomery 2015: 60) were often hindering such change and implementation of other such IaH activities.

This chapter now concludes with one of the most important aspects, not only for this investigation but also for IaH in general, namely EMI. It is important for IaH as it offers students the opportunity to study in the medium of English at their home university without having to go abroad. The recent curriculum revision at my own university in 2018 is a clear example of this. Changes implemented included an “international semester” in the Corporate Communication BA program with several aims. Firstly, this was the semester which had been designated as the mandatory semester abroad for all full-time students. With more students going abroad, more incoming students were expected, and so this semester was designed for domestic students in order to create an international atmosphere. In this semester the electives are taught in English to allow access for incoming students as well as a mingling of home and foreign students. The new curriculum of 2018

also stipulated that of the three cohorts taught in German, one was to be converted to be taught entirely in English. The aim was to recruit at least 20% non-Austrians and as such, to create a multi-cultural cohort. Promotion of the programme was carried out in neighbouring countries, at international student recruitment fairs, and by digital marketing measures. Although this figure has not yet been reached, it takes time for programmes to gain awareness. While there continue to be ongoing efforts to recruit students from abroad, it should be noted that these students do not receive any preferential treatment during the admissions process.

EMI also contributes to the aforementioned dark side of internationalisation. The number of EMI courses is often set as a KPI and is often seen by university management as an easy step to take, however research has shown that this is far from the case. Piller and Cho (2013) report some dire consequences of a Korean policy introduced in 2007, which stipulated that all university courses had to be taught in English, with the ultimate aim of improving the universities' international ranking. This policy resulted in a financial reward being offered to teachers who did so and penalties for those who did not. Tragically, the pressure from this policy allegedly led to four students and one professor committing suicide (Piller & Cho 2013: 38). This is naturally an extreme example of a blanket implementation of an EMI policy.

3.4 Summary

Chapter three started with a review of the boundaries between globalisation and internationalisation as well as with a general discussion of the question of which one is the precursor. Following a review of the different definitions scholars in this area have put forward for internationalisation, the discussion showed that over time, economic considerations have remained at the fore; however, the importance of global citizenship has recently become intrinsic. Elucidating the drivers of the process and strategy, it emerged that the importance placed on these rationales is contextually bound. Implementing internationalisation as part of a university's strategy is complex due to the myriad of stakeholders with different interests and different levels of training. The idea behind IaH was presented starting with a description of the importance of international research and then further elaborated by showing that at the core lies the intention to set the path for students

to become global citizens within the boundaries of their own universities. The chapter concluded by highlighting how EMI plays a significant role in IaH. The following chapter will now turn to EMI in more detail, reviewing the rationales that have led to its growth, with a focus on Europe in general and Austria in particular.

4. English medium instruction (Language Management)

Existing research recognizes there are tensions around the implementation of EMI, which is nevertheless a growing pedagogical practice. There are some regions where this growth is steady and some regions where critical voices are getting louder and are calling for a reverse in policy. In her broad study of 55 countries, Dearden (2014: 20) shows that 51% of those surveyed reported that public opinion considered EMI to be “controversial” and that there is generally a dichotomy of attitudes toward it. Those participants who were overwhelmingly in favour of EMI reasoned that due to the globalisation of the workplace, English instruction is essential, while those against it reported that they were more concerned about domain loss and social inequalities. Macaro et al. (2018) offer a systematic review of research to date on EMI covering its’ growth, implementation, student and teacher beliefs and variables impacting those beliefs, the professional development of EMI teachers and the impact on English language and content learning outcomes. However, curiously, the framework conceived by Dafouz and Smit (2016; 2020) which offers a structure for investigating EMI is not mentioned.

This chapter will first review EMI education policy in general as well as the rationales which scholars have identified as driving the growth of EMI. Subsequently, a general picture of the status quo of EMI around the globe, as described in the extant literature, is presented. This summary is followed by a more detailed view of the status of EMI in Europe in general and then in Austria in particular.

4.1 Education policy and EMI

Language policy (LP) is concerned with the identification and implementation of a language of instruction in any kind of institution. The crucial stakeholders behind language policy and management are often individuals, organizations, institutional and regulatory structures, and their interaction (Spolsky 2009: 2). Baldauf (2005: 229) explains that LP is carried out at the macro, meso or micro level and it can be explicit (planned) or covert (unplanned). Spolsky and Shohamy (2000), both leading scholars in the field of educational LP, suggest how LP should ideally be considered and what the ultimate aims of such a process should be:

Successful language policy involves charting a feasible route from the existing general language practice to the desired practice, taking into account existing users and their willingness to modify their repertoire. A language policy may attempt to mandate the status of a language, its form or corpus, its acquisition or teaching within a country, or its diffusion to other countries (Spolsky & Shohamy 2000: 5).

The authors contrast policy with ideology, suggesting that language ideology is when the policy creator is not involved. For education linguistics, they suggest that the “who” or “stakeholder group” defining policy are education policy makers, who can be central, regional, or local, and who choose the languages to teach and determine the resources to be deployed for teachers and pupils. This is very different to LP drivers in speech communities, where, for example, language revivers’ interest may lie in modifying a corpus (Spolsky & Shohamy 2000: 5). Spolsky (2009: 2–3) later suggests that general LP is about “regular language choices made by an individual and determined by his or her understanding of what is appropriate to the domain (..) which is characterised by its participants, location and the given topic”. When explicit, a policy is often defined in a document, which can be freely available. When covert, a policy exists as verbal constructs or beliefs in stakeholders’ minds.

At first glance, LP in education may seem self-explanatory; stakeholders decide which language or dialect of instruction will be used and then implement this, often without much reflection and planning. Lo Bianco (2005: 255) suggests that official language planning is uncommon and proposes that language and policy planning should ideally follow the following steps: (1) problem identification (fact-finding); (2) goal specification (policy); (3) cost–benefit analysis (costed demonstration of alternatives); (4) implementation; (5) evaluation (comparing predicted to actual outcomes) (2010: 152–153). However, he claims this “rarely happens” (Lo Bianco 2005: 263). As discussed previously, Spolsky (2008: 2) states that policy is defined by language beliefs, management, and practices. In education, beliefs about the benefits of LP stemming from regulatory structures define policy at the macro level which often cascade down to policy at the institutional level and are then taken up by management. Unlike language policies in earlier education, e.g., immersion in the US, which are often driven by contextual practices, EMI is rarely driven by such practices, and instead, practices are manifested in how the stakeholders interpret and implement policies. As such,

the focus of this chapter lies on the macro-level beliefs of regulatory stakeholders and the rationales of management at the micro (institutional) level driving EMI growth or decline.

At the macro level, governments often see EMI as a panacea for flagging economic growth, something which promises opportunities for tapping into globalisation; educating young people to have an international mind-set and English language proficiency is regarded as a way of enabling them to compete in the world market. This view is particularly prevalent in the Far Eastern region; examples include the government policies of China (2001) stipulating that a certain number of programmes must be taught in English and the Global 30 movement in Japan (see Chapter 4.3). At the micro, institutional level, the rationales for introducing EMI programmes are primarily in order to enable mobility and accessibility into the international research community for both students and staff, and facilitating collaboration with other HEIs (Dafouz, Hüttner & Smit 2016: 123). Notably, unlike the beliefs at the macro level, the aim of improving language is absent, although it may occasionally be introduced as an “explicit language learning endeavour” (Dafouz, Hüttner & Smit 2016: 124). This is due to the persistent perception of policy makers that the sole focus is on content in EMI, which, unlike ICLHE or CLIL, is explicitly understood to unite content and language. It is widely believed that English proficiency in EMI happens automatically, and so it is not necessary to explicitly name a language goal. Moncada-Comas and Block (2019: 2–3) have gone so far as to suggest that EMI is becoming in this way unofficially “CLILised”. Dimova, Hultgren, and Jensen (2015: 6) illustrate drivers of EMI growth at even finer levels (see Table 4.1). They also report different findings which do not mention language explicitly at all, although the use of ELF arguably lies at the centre of all of the examples given.

Table 4. 1: Drivers of EMI at different levels, Dimova, Hultgren and Jensen (2015: 6)

Level	Example
Global	General Agreement on Trade in Services
European	Bologna Declaration
National	Internationalization strategies
Institutional	Targets to recruit international staff and students
Classroom	Presence of non-local language speakers

At the micro-level it is not just about recruitment of students and staff, context and time of implementation also naturally play a role. Another investigation into drivers behind the

growth of EMI over two decades was carried out by Wilkinson (2012), who looked at the motivations for expansion at Maastricht University (see Table 4.2).

Table 4. 2 Phases and motivations for expansion of EMI (Wilkinson 2012: 9)

Phases → Motivations ↓	Cross-border 1987	Europeanisation 1991	Consolidation 1995	Globalisation 2002	Monetisation 2007
<i>Practical</i>	geography	recruitment (international & exchange students)		recruitment (student expertise)	recruitment (money)
<i>Idealist</i>	multilingual- ism	internationali- sation-at- home			
<i>Educational</i>	new pro- grammes	new programmes		new pro- grammes	
<i>Survival</i>		home market too small/too saturated	profiling institution as bilingual	profiling institution as interna- tional	profiling institution (rankings)
<i>Financial</i>			cost of bilingual options		recruitment (bring in money)

This overview highlights that in the late 1980s, practical reasons revolving around mobility played an important role, and that later, economic factors were, and continue to be. This resonates with the reasons which Wächter and Maiworm (2014: 52) describe in their pan-European survey. They indicate that the main drivers include sharpening the international profile of the institution (akin to Wilkinson's "survival"), abolishing language obstacles ("idealist"), improving international competencies of domestic students ("educational"), counterbalancing too few students ("financial"), nurturing brain gain ("practical"), as well as some altruistic motives ("idealist"). The phases identified by Wilkinson must be reviewed with caution, as arguably globalisation, for example, continues to play a significant role in driving EMI growth. Likewise, some of the motivations presented over time, for example those in the "survival" category, are still valid today. Furthermore, scholars have considered different rationales across the globe and these drivers are very much related to EMI in Northwest Europe. Lasagabaster (2015: 118) also reflects on (Spolsky 2010), who distinguishes between those countries which implement EMI due to obligation (e.g., European countries) and those which do so out of economic ambition (e.g., South Korea).

4.2 (Dys)functional EMI policy

All too often governments implement LP without due discussion with key stakeholders. In Denmark, for example, Jensen and Thøgersen (2011: 18) report that the Ministry of Culture proposed “parallel language use” in its LP of 2003, however in 2006 there was heated debate when the nationalist party pressed for a law to make Danish the predominant language in HE. The proposed law did not pass, but caused considerable unrest, fuelling the perceived threat to Danish. In Italy there was also uproar when in 2013 the rector of the *Politecnico di Milano* announced that all second cycle programmes should be taught in English, which resulted in a backlash and fast back-peddling (Pulcini & Campagna 2012: 69).

In the broad review of macro- and micro-level medium of instruction policies in 10 countries in Asia undertaken by Hamid, Nguyen and Baldauf (2013), findings indicate that there is a dominance of English in eight out of ten of those countries, as English is often regarded as a quick and cheap solution to achieve economic ambitions. The researchers uncovered such inconsistencies in LP, finding that although authorities do not seem to connect with micro-level stakeholders, these authorities still dominate policy (Hamid, Nguyen & Baldauf 2013: 6).

A closer look at the way one HEI in China implemented EMI policy was undertaken by Hu, Li and Lei (2014), who review whether there were any differences between official policy and how it was implemented by stakeholders. They found that at the macro level, the drivers for EMI were prestige and job opportunities; an official policy claimed that it produced “international talent,” albeit for a small elite. This policy was taken up by the HEI, and EMI was introduced as an answer. The HEI introduced English language proficiency entrance requirements for the EMI programmes and provided intense support for those in the programme. Furthermore, management offered better incentives for those teaching in EMI classes. At face level this was all laudable, yet in practice students and staff struggled with English and used various methods to cope, including simplifying content, textbook teaching and codeswitching (Hu, Li & Lei 2014: 8–9).

Moncada-Comas and Block (2019: 4) look into the EMI policy-to-practice situation at a Catalan university in Spain and note that the institution had no official language policy document. They argue that there was a disjoint in practice in that the lecturer in this

investigation regarded himself as a typical content EMI teacher yet took up language issues with vocabulary learning. In another study in Spain, Cots (2012) reviews ambiguities between policy and practice at a Catalan-Spanish bilingual university. The university issued a white paper stating that English was to be the third medium of instruction after a transition period of support for students and staff, as multilingualism was deemed to be important for “survival” and a requirement for its internationalisation policy. However, this multilingualism ideal was contradicted in the same document in that there was a reference to a single language of instruction in the course plan created by the lecturer, which is clearly not multilingual. It seems that the university did follow up on the promise of support in that a tandem teaching pilot study was carried out with a content expert and language teaching expert. However, this pilot study was externally funded and then discontinued. Although this pilot study was originally deemed necessary, as policy makers believed that the students and lecturers’ proficiency was not good enough for EMI, policy makers did not think the situation was critical enough to provide their own funding (Cots 2012: 117–123).

This concise review of some examples of LP in practice indicates that the creation, implementation and subsequent practices brought about by the LP are far from easy, with serious implications for stakeholders at the brunt end of these decisions. Implementation of EMI without due consideration could mean that this policy becomes a pawn in nationalist political rhetoric as exemplified in Denmark and Italy with real fears of domain loss. The authors Tollefson and Tsui (2004: 2) suggest that the medium of instruction is the most powerful means of revitalising or killing a language and it defines which social groups have access to economic and political opportunities. These choices do not happen in isolation but in the context of contending social, political, and economic forces. To remedy these disjoints and discontent, Jenkins and Mauranen (2019: 6) call for stakeholding decision makers to review their particular contexts and carry out their own local research in order to discover the most appropriate LP for them.

4.3 EMI – the global picture

Dearden (2014: 15) suggests that when looking at the global picture, EMI is in a “(..) state of flux. From country to country, EMI is being promoted, rejected, refined, and sometimes even reversed”. There are different estimates of the number of EMI programmes in the world. In 2016, a journalist from the BBC News (Mitchell 2016) reported that there were 8000 English taught courses outside of Anglophone countries, most of which were offered in the Netherlands in Europe. Yet, according to the Times Education Supplement, there are over 70,000 BA and MA English taught programmes globally in over 700 cities worldwide (Minsky 2016). Of those, most of them are in Anglophone countries, but this report suggests that the number is growing in Europe, predominantly in the Netherlands and Germany, but also in Asia in China, South Korea, Hong Kong, Malaysia, and Singapore. Briggs, Dearden and Macaro (2018: 675) offer an overview of the growth of EMI globally and note that while the statistical evidence for this is given in Europe, it is lacking elsewhere in the world. Much research has been done around perceptions and beliefs of EMI stakeholders (mostly students and/or lecturers), which often come with a commentary about the status of the situation locally so that information can be gleaned from those papers. As described earlier, Kachru’s (1985, 2015) model of English categorizes countries in the world into the *Inner Circle* (e.g., USA, UK, Canada, Australia, New Zealand), the *Outer Circle* (e.g., India, Malaysia, Singapore, Tanzania) and the *Extending Circle* (e.g., China, Japan, Korea). These categories capture the spread, patterns of acquisition and societal penetration of English (Bohmann 2019: 11) and offer a useful model for reviewing EMI against those historical backdrops. I now present a picture of the status of EMI globally, drawn from my literature review and covering the trends of EMI in South America, Africa, Asia and Europe (for which a more thorough overview is provided). As the medium of instruction choice in the *Inner Circle* countries (North America, Australia, British Isles, South Africa) is predominantly English, it does not lie within the scope of this dissertation.

The literature on EMI in Latin America is unsurprisingly scant, as typically the medium of choice is Portuguese or Spanish. Kamhi-Stein, Díaz Maggioli and de Oliveira (2017: 1–2) do, however, report that the role English in the region has changed from that of globalization promoter in the 1990s to an “instrument of empowerment” in the 2000s,

meaning that English enables countries to establish a “more socially just approach to understanding the world”. King (2004: 335) describes a situation in many South American countries where there is an “enrichment” model of bi-lingual education; English is the target language for those elite students who can afford it, which contrasts to the “transitional” models, which aim to transition more impoverished students to Spanish. However, the author does not shed light on how widespread this situation is. A brief internet search of courses offered at universities in English showed that even the biggest university in the region, the University of Sao Paulo (USP), with over 80,000 students, points out on its website that “it is worth remembering that most of USP activities are carried out in Portuguese” (University of Sao Paulo). Berry and Taylor (2014: 587) report that while the status of internationalisation of HEI in Colombia is still novel, it is well-established in Mexico. Yet in both countries it is now seen as a priority. However, of the six interviews the authors conducted at different institutions, at no point are EMI courses mentioned, not even in the context of IaH; only one university in Columbia reported that more classes were being developed in English. Additionally, the interviewees reported that the dominance of Spanish hindered internationalisation (Berry & Taylor 2014: 599). Smit and Dafouz (2020: 24–27) also paint a picture of the status quo in Latin America, summarizing that although EMI is not growing as fast as in other areas in the world, contextual factors such as the growing importance of Spanish and business interest in the region are paving the way for new opportunities.

English is used as the LOI in most low- and middle-income postcolonial countries at all levels of education, even though it is the L2 for most learners. Milligan and Tikly (2016: 277) recount that views on the use of EMI in these contexts are highly divided, as some regard it as linked to economic prosperity, a standpoint which is often supported by stakeholders at all levels, whereas others see the necessity to teach in the local language to prevent domain loss. In the Middle East, the context is slightly different, with EMI prevalence due to the large expatriate and migrant populations (Briggs, Dearden & Macaro 2018: 676).

The situation in Africa, in many so-called *Outer Circle* countries and several former colonies, indicates that even after independence, the languages of the colonists -- English, French, Spanish and Portuguese -- are still predominant in education. Alidou (2004: 202–205) paints a bleak picture of the general medium of choice in education: the ongoing

vicious cycle of the missing codification of languages good enough for education to be taught in those languages, leads to the continuation of EMI. This circumstance is coupled with the desires of rich elites to maintain the economic and political status quo, which is often facilitated due to medium of instruction choice. Changing the medium of instruction to the local language could be a sign of independence, however this is often riddled with problems due to the plethora of local languages and the conflict that may arise when choosing and indicating a preference for one. This situation is compounded by the pragmatic issue of a lack of literature or textbooks or lecturers in local languages. At the tertiary level, Kritz (2015: 29–30) explains that although this level of education is growing at a higher rate than elsewhere in the world on account of wider access to secondary education, HEIs in Africa cannot meet demand and thus many students study abroad. Nyika (2015: 3) also indicates a central issue with regard to funding: the availability of funds so desperately needed in Africa is often linked to the best students and staff producing high quality research output and collaborations, which is mostly required in English. Therefore, it is apparent that making a stand and changing the LOI in HEI in Africa is complicated, with several socio-political and economic implications. In summary, the situation in Africa has not changed since the time when EMI as a LP was adopted during the colonial era to strengthen the colonial position; due to the aforementioned challenges, EMI remains the main LOI in Africa.

In 2012, the Asia Pacific Cooperation (APEC) set a course for more EMI in order to facilitate more mobility in the region, along the lines of the Bologna process (Kirkpatrick 2014: 4). There is similar debate and concerns throughout the Asian region as there are in other regions in the world relating to EMI and the issue of domain loss. Although, as Kirkpatrick reports (2014: 18) that there is a greater sensitivity to the importance of maintaining education in local languages, parents still regard their children's future success as being linked to speaking English, and this resonates across all levels of education. Many universities in the region, including those in Singapore, Hong Kong, Malaysia and the Philippines, are keen to be seen as an "international education hub (..) and are vigorously expanding their EMI offerings" (Kirkpatrick 2014:19). Notably, the University of the Philippines at Dilman tried to reverse the policy due to domain loss concerns and attempted to introduce more teaching and research in Filipino but had to abandon the policy shortly after it was introduced due to its unpopularity (Kirkpatrick 2014:21). With the "Global 30"

project, Japan's universities launched more programmes in English in order to attract more international students (Kirkpatrick 2014: 21-1). Furthermore, since 2005, when it became an institution evaluation criteria, there has been a dramatic increase in the number of EMI courses (Chun *et al.* 2017: 1).

In the *Expanding Circle* countries, the picture is similar. The appetite for EMI in China started in 2001, when the government defined 12 key policy measures to improve the quality of first cycle programmes, which, in a similar way to Japan, became criteria for evaluating HEIs. It was stipulated that 5-10% courses in the short term and at least 20% in the long term should be offered in English (Hu, Li & Lei 2014: 22). In 2004 the government ordered another overhaul of undergraduate education with EMI playing a greater role, as it was seen as a "key reform initiative to develop a global perspective in Chinese students, enhance their command of English, and provide access to cutting-edge knowledge in the West" (Hu, Li & Lei 2014: 29). Kang (2012: 30) and Williams (2014: 3) paint a bleak picture of the situation in South Korea. There is a draconian pursuit of English competency, with parents sending children to Anglophone countries at a young age. The LPs in HEIs aggravate this situation; for example, Korea University offers over 30% of courses taught in English, Korea Advanced Institute of Science and Technology implemented a policy to teach all first-year courses in English, and Pohang University of Science and Technology held 93% of all lectures in English in 2010. Piller and Cho (2013: 34) describe the trend of implementing EMI in Korea as a "relentless pursuit". They posit that university ranking is responsible for this development, as it is used as a "measurement of internationalization". According to the authors, this internationalisation criterion is calculated by the number of foreign faculty employed, the number of international and exchange students, and the number of lectures being conducted in English (Piller & Cho 2013: 36). Although the pursuit of EMI in Thailand appears less aggressive, in 2008 there was also a top-down mandate to introduce EMI at universities with the aim of building international cooperation with other HEIs and facilitating staff and student mobility. The authors Hamid *et al.* (2018: 107) report that this policy was implemented with little support and success. Jindapitak (2019: 36) reports a recently established "English speaking year" in Thailand, instigated by the Ministry of Education with the aim of improving student English proficiency by sending 1000 lecturers on short training courses and inviting volunteer teachers to Thailand. Another *Expanding*

Circle country to experience a growth in EMI is Russia, which Belyaeva and Kuznetsova (2019: 427) explain is due to the inclusion of Russia into the EHEA in 2003. This inclusion set the scene for a major change, including going from a two- to a three-tier degree system, introducing new federal standards, and accepting the ECTS to facilitate mobility. A recent project launched in 2017 by the government sets out to develop the export potential of Russian HEIs and includes the development of programs taught in English.

Summarizing the picture of the status of EMI around the globe, it is clear that the breadth and growth is very different, with a surge in growth (albeit not always uncontested) in *Expanding Circle* countries and the continuing dominance in post-colonial *Outer Circle* countries. The situation in Latin America indicates that it is in a state of flux, while Europe represents an area where EMI is still growing and is still very polarized.

4.4 EMI in Europe

In Europe, the “Bologna process” (Benelux Bologna Secretariat 2007 – 2010; European Ministers of Education 1999) set the scene for an overhaul of HEI with a particular focus on comparability of standards. Furthermore, this brought about an alignment of higher education cycles across the region (e.g., introduction of a Bachelor and the move from Magister to Master in Austria) as well as an agreement on a uniform credit system, facilitating students to study abroad and gain credits which are easily translatable at their home institution. Naturally, this change enabled more students to venture abroad, which is generally accepted as the main driver for EMI growth in Europe, albeit not the only driver (outlined at length in Chapter 4.1). This growth is far from uniform across the continent and there have been cases of some decline due to the concern of linguistic imperialism as described by some critical linguists (e.g., Phillipson 2015, 2016), and concern at the micro level regarding insufficient proficiency of students and lecturers to enjoy the full benefits of EMI (e.g., Coleman 2006). Jenkins (2019: 12) has recently suggested that there could be a demise of EMI in continental Europe, citing discontent in the Netherlands, Denmark and Germany, and speculating that the role of English may change with Brexit, in that it becomes a neutral working language.

Maiworm and Wächter (2002a; 2008; 2014) carried out multiple surveys of English Taught Programmes (ETPs) in non-English speaking countries in Europe, the latest covering

28 countries. They report that there were 8089 ETPs in 2014, compared to 725 in 2001, which represents more than a ten-fold increase. However, the authors also report that the growth is starting to slow. The countries with the most programmes are (in descending order): the Netherlands, Germany, Sweden, France, and Denmark, however, some Baltic countries entered the top 12 in this last survey. Yet, the authors report that despite the growth in programmes, the numbers are still low compared to courses taught in the L1 language: this figure is just 1.3%. In 2014 there were still more ETPs in the Nordic and Central West European countries, indicating a division across Europe. This picture of division is also reported in the survey carried out by Dimova, Hultgren and Jensen (2015: 3–4), who viewed the number of Master programmes compared to the population as indicating a considerable north-south divide (see Table 4.3), which they attribute to the smaller Nordic countries' quest to recruit staff and students.

Table 4. 3 Overview of MA programmes (Dimova, Hultgren & Jensen 2015: 4)

Country	MA programmes in English	Population	MA programmes in English per 100,000 inhabitants
Iceland	29	321,857	9
Sweden	764	9,644,864	7.9
Denmark	363	5,627,235	6.5
Finland	296	5,454,444	5.4
Norway	206	5,136,700	4.0
Estonia	49	1,311,870	3.7
Germany	763	80,585,700	0.9
Spain	378	46,704,314	0.8
Italy	335	59,943,933	0.6
Turkey ³	164	76,667,864	0.2
Croatia	5	4,284,889	0.1

In accordance with their previous studies, Maiworm and Wächter (2014) report that research universities remain the dominant HEIs offering ETPs, with managers of second and third cycle programmes stating the importance of removing language obstacles, whereas first cycle managers aimed to improve the multi-cultural competencies of students. As research has shown that multi-culturally competent persons display superior job performance and have a positive impact on their co-workers (Leung, Ang & Tan 2014: 490), this is naturally a key skill for universities to offer. Only 20% of these ETPs are at first cycle level (Wächter & Maiworm 2014: 16–20). Naturally, the picture might have changed since the last survey was conducted.

As mentioned at the beginning of this chapter, the situation across the continent is very diverse. For example, it is well documented that the Netherlands enjoys “first place” for the number of programmes taught in English in Europe (Haan 2014: 243; Wächter & Maiworm 2014), with Haan even suggesting that in some HEIs there are more programmes taught in English than in Dutch. This is in stark contrast to many countries in Southern Europe, where the poorer level of English competency in general plays a role in both driving growth in EMI to remedy this, whilst at the same time creating a barrier because of the difficulties in implementation. In his study, Cots (2012: 108) confirms that the level of proficiency of first year students was B1 or lower, which is insufficient for EMI. He recounts that although the number of EMI courses at the local universities is low (3.4% of courses University of Lleida, 5.6% University of Pompeu), Spain is introducing EMI urgently to compete in the global academic world. He cites Barrera (2010), who claims that “(..) Catalan universities are far from the University of Maastricht, where almost all subjects taught are in English, even though it is a Dutch university” (Cots 2012: 107).

Ingvarsdóttir and Arnbjörnsdóttir (2015) reflect on the general status of English in the Nordic countries, where it is commonly believed that English proficiency is high, which can be put down to the fact that the languages are “small”. They state that

[t]he common view is that increased use of English will strengthen universities’ academic and scientific standing by attracting the best students and researchers. Nordic scholars are under pressure to publish in international journals, encouraged by academic advancement and financial incentives (Ingvarsdóttir & Arnbjörnsdóttir 2015: 138).

This statement echoes the aforementioned conclusion drawn by Dimova, Hultgren and Jenkins. In Iceland, this view is reflected in practicalities; 90% textbooks are English, most second cycle programmes and PhD. theses are delivered and written in English (Ingvarsdóttir & Arnbjörnsdóttir 2015: 143). Similar to other Nordic countries, EMI in Denmark is widespread and the authors report that approximately a quarter of all university programmes are taught in English, which echoes the findings by Wächter and Maiworm, who include Denmark as one of the leaders in Europe alongside the Netherlands and Sweden (Wächter & Maiworm 2014: 17). The aim of the University of Copenhagen, for example, is to attract foreign students and retain the best ones in Denmark. Although many

come from other Scandinavian countries with a command of Danish, the proportion of non-Scandinavian students is around 8% (Jensen & Thøgersen 2011: 17).

There are around 1000 first and second cycle study programmes offered in English in Germany, which represents 5.4% (statistia.de) of all study programmes³. Germany is said to hold 10% of the share of international students (Knapp 2011: 52), and without EMI this would be difficult to achieve. Knapp (2011: 51–52), for example, reports that at the University of Erfurt, at least two courses per faculty and semester have to be offered in English. Critical voices around the spread of EMI are loud in Germany, a country that prides itself on its 600-year history of academic and scientific tradition. In some circles there is contempt with regard to the use of English; Lueg (2018: 50), for example, states that some academics regard English as the language for those who prefer imprecision, due to the perceived simplicity of English compared to German. As noted by Ammon and McConnell (2002: 173), those countries with a long academic tradition, such as France and Germany, have been slower to introduce EMI due to the fear of undermining their language standing. The discussion presented by Alexander (2008:79) suggests that there is discontent amongst some stakeholders, as they see the introduction of “international courses” (EMI courses) as the “anglification” of education and suspect that some international students use German HEIs as a “stepping stone into the English-speaking world”, as the tuition fees are lower and entrance requirements are less stringent. Lueg (2018: 51) even suggests that there is concern for those students remaining in Germany who have studied in English that they may find their employment chances diminished as they have not studied in German. However, EMI is generally viewed as a necessity for economic and socio-political reasons (Gürtler & Kronewald 2015: 92).

4.5 EMI in Austria

Austria enjoys a similar longstanding academic tradition to Germany, symbolized by the renowned oldest university in the German-speaking realm, the Universität Wien [University of Vienna]. Concerns in academic circles around the notion of the anglification of education

³ An overview of study programmes and information portal for applicants is available at www.unicheck.unicum.de

are contentious and some critics have been quite vociferous in expressing them. For example, the German linguist Pohl (2020) postulates that English loan words are used too often in German and even laments the demise of the former title *Magister*: “Letzteres ist ein gutes Beispiel dafür, wie in den letzten 20 Jahren die akademischen Titel geändert (anglisiert) und auch vermehrt worden sind” [the latter is a good example of how the academic titles have been changed (anglicised) and also increased in the last 20 years] (Pohl 2020: 39). He suggests that EMI is unnecessary, as the work involved in implementing and teaching has no relation to society’s need, claiming that this need amounts to less than 10% of the population (e.g., only English teachers, pilots, IT experts, university teachers, some politicians, and people working in export). He also concedes that it is reasonable to have some study programmes taught in English, e.g., natural science and engineering, but for other subjects, like geography, EMI is “unsinnig” [nonsensical] (Pohl 2020: 46). He even suggests that in public institutions, German should be used exclusively, and EMI should only be implemented for those who speak fluent German. These rather extreme views are only held by a few, as researchers who have investigated EMI in Austria paint a different picture (e.g., Tatzl 2011; Unterberger & Wilhelmer 2011).

As discussed previously, universities’ language policies are often informal, and practice does not always reflect policy (e.g., LoBianco 2005). Dannerer (2015) carried out a review of the language policies and practices at three renowned universities in Austria. She found that while none of the three universities had formulated an extensive language policy document, multi-lingualism is supported and understood by implementing EMI and by promoting research in English (Dannerer 2015: 147).

In Wächter and Maiworm’s 2014 study, Austria was ranked number nine on the leader board with regard to the number of ETPs on offer in Europe, taking into account three criteria, namely: number of ETPs offered by HEIs, number of programmes taught in English, and number of students enrolled (Wächter & Maiworm 2014: 47). On this “leader board”, the clear winners are Netherlands and the Nordic countries, but Germany ranked behind Austria at number 15. Apart from the wide-scale investigations carried out by Wächter and Maiworm, Unterberger (2012) is the only scholar to my knowledge that has taken a closer look at the status quo of EMI in Austria in terms of the number of ETPs, with a focus on business study programmes. At the time of writing her article, she stated that there were no

BA programmes (this has changed since) and no uniform entrance requirements for the MA programmes (Unterberger 2012: 82). Curiously, she did not examine a significant sector in tertiary education in Austria, namely the Fachhochschulen, or Universities of Applied Sciences (UAS), although a focus was on “business”, a discipline which is also firmly seated in the UAS sector (see Chapter 9.3). In order to update this picture, I conducted a survey of Research Universities (RUs) and UAS in September 2020 to shed light on the current number of EMI programmes on offer (see Chapter 9.2), which indicates that EMI is still growing and confirms the previous patterns identified in the Wächter and Maiworm studies. As discussed previously, EMI is often a core measure of a university’s internationalisation strategy. In their investigation in 2002, Maiworm and Wächter revealed that the top five objectives of internationalisation for Austrian institutions were “[s]trengthening of internationalisation in general”, “[i]ntroduction of a coherent policy for internationalisation”, “[i]mprovement of international visibility of the institution”, “[i]mprovement of the quality of teaching/learning” and “development of foreign language competencies of students” (Maiworm & Wächter 2002: 42). These findings are echoed in Tatzl’s EMI investigation at the UAS in Graz, which shows that the primary benefits of EMI are perceived by lecturers as preparing graduates for the global workplace and for students as an improvement of communication skills and preparation for the international workplace (Tatzl 2011: 265). Other research on EMI in Austria was carried out by Richter (2015) who explored exposure of students to L1 speakers and the extent to which this has an impact on pronunciation. Her findings indicated that students did improve their pronunciation, which is in contrast to the widely held belief that pronunciation could not be improved after a certain age (Richter 2015: 176–177). This study was undertaken at the same university as this present investigation. Smit’s (2010) broad, longitudinal, ethnographic study of discourse strategies in the EMI classroom focused on the students’ use and attitude towards ELF and the impact of ELF on teaching and learning in a hotel management UAS. Her central finding was that the students, over time, became a “community of practice” by tolerating mistakes, using repair, sometimes code-switching to ensure meaning is understood, and that the main goal of becoming professional hotel managers is achieved (Smit 2010: 379–410).

4.6 Summary

As has been shown EMI is introduced for different reasons driven by interests from various stakeholders and these rationales vary according to context and geography. Researchers have pointed to the controversy that sometimes accompanies the introduction with examples from Denmark, Italy and further afield in China and Korea where EMI as a LP resulted in backlash.

The review of the literature has revealed that in the *Expanding Circle*, particularly in hispanophone countries, EMI is growing, but at a slower pace due to its relative infancy. On the other hand, typically in *Outer Circle* countries particularly in the Far East, EMI continues to grow rapidly often without enough due consideration of the ramifications of its introduction. In Europe, researchers have indicated that there is a north – south divide. Generally speaking, in the North where there is a longer history of EMI, the growth is slowing with some indication of a reversal of policy, whereas in the South, there is an increasing demand, but this is often hampered by poor English proficiency. Finally, this review pointed to a growth and continual interest in EMI, but with the rich academic tradition, this does not come without controversy amongst various EMI stakeholders, who are the focus of the next chapter.

5. Stakeholder voices (Agents)

Although research on EMI has grown in the past years, it still not plentiful enough to reflect the expansion of EMI, according to leading scholars in this field (e.g., Dafouz, Camacho & Urquía 2013; Doiz; Lasagabaster 2015: 119). The following chapter examines some key research carried out to date and is divided into the different findings related to the different voices of two stakeholder groups: lecturers and students. Naturally, there are other stakeholders at play in EMI settings, such as programme managers, persons responsible for internationalisation within an institution and beyond, e.g., education ministries, international organisations, to name but a few. The ROAD-MAPPING framework for considering these stakeholders or ‘agents’ is offered by Dafouz and Smit (2016: 17-18), which will be examined thoroughly in Chapter 8. These other agents will not be discussed in this chapter, as they do not contribute to answering the research question and so are beyond scope of this investigation. The following chapters will explore the findings of this literature review in detail; firstly, a discussion of *Belief Theories* is presented, as this is crucial for understanding lecturer practices. Subsequently, general attitudes of lecturers towards EMI are presented together with a review of some key themes emerging from the research in detail. The second part draws together various findings from the research regarding student perceptions of EMI.

5.1 Lecturers

Research to date has covered many aspects of EMI, with some authors paying attention to lecturer motivations to teach (e.g., Dafouz 2018; Doiz & Lasagabaster 2018; Jensen & Thøgersen 2011). Attitudes towards EMI are generally divided, depending on whether lecturers volunteered or are coerced to teach (e.g., Aguilar 2015; Aguilar & Rodríguez 2012; Dearden & Macaro 2016; Tatzl 2011; Tzoannopoulou 2014; Werther *et al.* 2014b). Researchers have also shed light on the concerns and challenges EMI creates for lecturers (e.g., Gürtler & Kronewald 2015; Margić & Vodopija-Krstanović 2015). While there have been fewer comparative studies (e.g., Dafouz, Hüttner & Smit 2016; Dearden & Macaro 2016), there has been considerable research into lecture delivery styles (Arkin & Necdec 2015; Dafouz & Sánchez García 2013; Gotti 2014; Thøgersen & Airey 2011). However, before

this is examined in detail, a review of some research insights into belief theories is presented, as this is crucial for understanding lecturer voices.

5.1.1 Belief theories

Beliefs of any kind are based on evaluation and judgement, and they contrast to knowledge, which is based on objective fact (Pajares 1992: 313). Skott (2015: 19) suggests that there is no consensus among scholars in this field in terms of a fitting definition of beliefs. However, he points out that there is agreement that there are four key facets: “[t]he term is used to designate individual, subjectively true, value-laden mental constructs that are the relatively stable results of substantial social experiences and that have significant impact on one’s interpretations of and contributions to classroom practice”. Beliefs penetrate most aspects of life and influence judgement and behaviour. They are personal, contextually bound and distinct from knowledge. Knowledge is discussed at length in Chapter 7.2, however, to further illustrate the difference to beliefs here, the definition offered by Eraut (2000: 114) is helpful. He posits that there are two parallel definitions of knowledge. He suggests one is codified and shaped by professional bodies and refers to skilled behaviour, and the other, personal knowledge, refers to the cognitive resource which includes skills, process, and experiential experience, and is explicit and tacit.

In 1992, Pajares set the scene for further research into teacher beliefs by examining the extant scholarly research on belief structures and summarizing the findings thereof. He outlines that beliefs are formed early through cultural transmission, help individuals to define and understand the world, are closely related to knowledge, and are subject to a filtering structure which shapes thinking. Furthermore, epistemological beliefs are key to knowledge interpretation, as they are often prioritized in relationship to other beliefs and are sometimes incontrovertible. Pajares further highlights those ingrained beliefs are difficult to change, they influence worldview, must be inferred and affect behaviour. Teaching beliefs are established long before a student teacher starts studying. He further surmises that there is a clear connection between teachers’ beliefs and their pedagogic planning and practices (Pajares 1992: 325–326). Barcelos and Kalaja (2011: 285–286) also offer a summary of beliefs and suggest that beliefs are context-dependent, complex, fluctuating and dialectical, connected to the micro- and macro-political contexts, related to

emotions, and can be influenced by others. They have connections to knowledge and are not causally but rather dynamically related to action. This view is further affirmed by Skott (2015: 16–17), who points to the direct relationship between teachers’ beliefs and their practices, as well as the positive effects beliefs can have on curriculum reform and implementation, if understood adequately. Borg (2018: 75) supports this but adds that a thorough understanding of teacher beliefs can help teacher learning and improve practices. A meta-study was conducted by Buehl and Beck (2015), who reviewed 250 articles spanning four years, and assessed the relationship between teachers’ beliefs and practices. This study painted an inconclusive picture whether beliefs influence practice or vice versa, or whether they are even disconnected from the related practices. The authors conclude that a more accurate alternative is that the “reciprocal, but complex, relationship between teachers’ beliefs and practices (...) and the strength of this relationship may vary across individuals and contexts as well as the type of beliefs and practices being assessed” (Buehl & Beck 2015: 70). They further identified factors from the literature which either helped or hindered teachers from connecting their beliefs with practice; these factors included other beliefs, knowledge, experience, and self-awareness, as well as external factors (Buehl & Beck 2015: 78-9). These findings could be more significant than the findings presented by the previously cited authors, both due to the meta nature of the investigation and to the fact that they contrast the consensus that beliefs do not affect practice, as suggested by Pajares (1992) and Skott (2015), thus further pointing to the complexity of the nature of beliefs.

It is not surprising that the beliefs of language teachers are similarly complex, but they also encompass attitudes towards language use and learning and are affected by various cultural, social and cognitive dimensions (Barcelos 2006: 20). There have been many studies into EFL teacher beliefs which ultimately contribute to knowledge of EMI teacher beliefs; of particular interest are those insights into the effect of beliefs on practices in the classroom. Zooming in on secondary school STEM education where English became the new medium of instruction, Tan (2011) investigated teacher beliefs with regard to their roles, the interaction of language and content, and how these beliefs translate into practice. This research showed that beliefs about content and language impact how teachers teach, in this case showing how the disregard for language while teaching maths resulted in students’ inability to master the discourse of maths (Tan 2011:336). The study by Inceçay (2011) is

small-scale, with just two pre-service ELT teachers, but the researcher carefully linked beliefs uncovered in semi-structured interviews to the actual practices of these teachers from teaching observation and reflection papers. The findings indicate that there is a connection between beliefs and pedagogic practices, but that these practices are also influenced by context, i.e., number of students, level, behavioural aspects (Inceçay 2011: 132). By contrasting metaphors created by Chinese EFL teachers and students with regard to the role of teachers, Wan, Low and Li (2011) looked into whether teachers would consider changing their behaviour, driven by their beliefs, as a result of these insights. The findings indicated students and teachers agreed concerning the role of the teacher as “provider, nurturer and devotee”, but there was a mismatch, as students also saw the teacher’s role as “instructor, authority”. Teachers reported a willingness to change their pedagogic practices; for example, they agreed that they would include topics such as “culture” into the schedule (Wan, Low & Li 2011: 240). Borg (2011: 371) further highlights that beliefs play an important role in teacher learning, particularly in language teacher education. His investigation into in-service teachers indicates that during teacher education, implicit beliefs can be reflected on more deeply and conceptualised. The investigation carried out by Hüttner, Dalton-Puffer and Smit (2013) involved 28 interviews at technical colleges in Austria. The researchers showed that while beliefs are important contributors to how CLIL is defined and manifested, this might be linked to the lack of direct language management in those settings (Hüttner, Dalton-Puffer & Smit 2013: 279-280). A comparative investigation carried out by Skinnari and Bovellan (2016: 165–166) of CLIL teacher beliefs indicated that across the countries investigated (Austria, Finland and Spain), it was discovered that teachers' views of language and content integration were comparable but understood differently. Generally, teachers see themselves as content specialists but at the same time pay due attention to language and multi-cultural elements, yet the way the teachers deal with these aspects is very diverse and at times contradictory. The researchers showed that all the factors influencing CLIL teacher beliefs, as summarized by Bovellan (2014: 55), including experience of learning, life, teaching, social and educational background, culture, attitudes and expectations, implicit assumptions, and prior knowledge were relevant in the study.

A rather different study was carried out by Briggs, Dearden and Macaro (2018), which compared teacher beliefs across secondary and tertiary education. They found that

secondary teachers are more positive than tertiary lecturers about the benefits of EMI providing high quality education and better career opportunities. Teachers in both sectors consider EMI as an opportunity to improve students' English proficiency but concurred that this opportunity came at the expense of content (Briggs, Dearden & Macaro 2018: 688-9).

This research points to the highly complex nature of beliefs and looks at whether beliefs have an impact on pedagogy; the question arises as to whether they can be challenged or altered to improve teaching practices, which is why there has been so much research in this area.

5.1.2 General attitudes towards EMI

In the tertiary sector, EMI lecturer beliefs are mostly investigated via questionnaires and interviews about feelings towards teaching in the medium of English (e.g., Airey 2012; Ball & Lindsay 2012; Dafouz 2018; Doiz & Lasagabaster 2018; Gürtler & Kronewald 2015; Tange 2010; Tatzl 2011; Werther *et al.* 2014a). Some investigations have revealed how EMI impacts content, others have zoomed in on lecturers' pedagogic practices (e.g., Dafouz & García 2008; Dearden & Macaro 2016; Suviniitty 2012a), whilst some have looked into code-switching (e.g., Karakas 2016; Jiang, Zhang & May 2016; Tan 2011). There has been a considerable amount of research reviewing the reasons why lecturers would or would not choose to teach in an EMI setting and how this profits their professional development (e.g., Dearden & Macaro 2016; Dafouz 2018). The findings regarding these focal points will be discussed in the following section in turn, with the aim of drawing together the literature and gaining an overall picture of lecturers' attitudes towards EMI. Mostly, the investigations were conducted as case studies of their own universities where the researchers work, using various data collection methods, and just a few of them compare and contrast attitudes to the same research questions across borders.

Some studies have indicated that EMI results in additional workload and is a burden for lecturers. Doiz and Lasagabaster (2018) are among those whose participants highlighted predominantly negative emotions in teaching through English, shown in such keywords as "motivated, tiring, materials, actor, stress, insecurity, speaking in English, spontaneity"; which reflect the burden involved (Doiz & Lasagabaster 2018: 672). Similar negative

attitudes were unearthed by Werther and colleagues (2014), who shed light on the situation in Denmark at the Copenhagen Business School using a multi-method investigation, which included recording lectures to see language proficiency issues and conducting five interviews to gather lecturer perspectives on EMI. Notably, the lecturers interviewed had little international experience and did not rate their own English proficiency as high, which may have had an impact on their EMI experience. They described being “saddled” with teaching in a haphazard way, stating that it was more of a burden than most would openly admit (Werther *et al.* 2014a: 453). Aguilar and Rodriguez (2012) collected lecturer perceptions in Spain about their first CLIL experience. Although the authors describe it as CLIL, it appears that there was little language support, and so the instruction resembles EMI more closely. All of the lecturers concurred that they would repeat the experience, and that content coverage was similar to L1 teaching (Aguilar & Rodríguez 2012: 192). In a later study, Aguilar (2015) zoomed in on physics lecturer attitudes towards EMI and CLIL by means of survey followed by qualitative interviews. The resounding response emerging from the survey was that EMI fitted well to this discipline and that lecturers did not see it as their role to assess language. Lecturers in Aguilar’s (2015) study also commented they would need specific training (Aguilar 2015: 8–9). A point emerging from Aguilar’s (2015) study in the Spanish context is the lecturers’ wish to have clearer distinctions between EMI and CLIL in their institutions, which seems to confirm the previous statement regarding the interchanging nomenclature used at the university in the 2012 study. Lecturers in this study generally had a positive attitude towards EMI, as they perceived it as helpful for improving their English, and they stated that their course became more international and multi-cultural through it, but they did complain about the extra workload (Aguilar 2015: 10-11). Staying in Spain, Ball and Lindsay (2012) enquired about the perceptions of EMI lecturers at the University of the Basque Country and found that lecturers were most concerned about (mis)pronunciation of English (Ball & Lindsay 2012:50). Nevertheless, most were happy to teach in English due to the small group size and diversity. In this survey no reduction in content was reported (Ball & Lindsay 2012: 58). However, lecturers complained about the lack of support and the extra time required (Ball & Lindsay 2012:59).

In a German study, feelings of frustration were also expressed, as lecturers perceived a lack of support from their HEI with regards to developing material. Furthermore, lecturers

criticized the fact that they did not receive any additional remuneration (Gürtler & Kronewald 2015: 106-7). In Austria, Tatzl (2011) investigated the UAS in Graz, using both surveys and interviews to uncover attitudes towards EMI programmes offered at the university. This was a small-scale study with few responses and the interviews conducted did not distinguish between native and non-native EMI lecturers, which could bias the results, as naturally L1 speakers of English would not have any burdens due to language and the possible extra workload translating material. Nevertheless, the investigation showed that teachers largely did support EMI, as it was perceived as aiding the future, global employability of students, and they also enjoyed teaching in the programmes. Notwithstanding this, the findings suggest that lecturers experienced increased workload, too. The linguistic challenge was perceived as the biggest hurdle for both students and lecturers, due to varying levels of language proficiency and lecturers' perceived loss of variety, e.g., when telling anecdotes and using humour when speaking in their L2 (Tatzl 2011: 261). In her Master thesis, Domanitz (2015) investigated EMI lecturer perceptions of EMI courses at the FH Campus Wien via seven semi-structured interviews. She found that although the courses were introduced in a haphazard way, with no top-down guidance or policy, lecturers accepted this without complaint. However, they lamented the added and one lecturer stated there had to be a "trade-off in terms of content", although they endeavoured not to do this (Dolmanitz 2015: 73). The lecturers did not believe they required additional skills to lecture in English; one even suggested that it was easier, as the students' English skills were poorer than his, so that he was at a further advantage (Dolmanitz 2015: 83).

Tange's (2010) study at the Aarhus School of Business in Denmark drew on 20 interviews and highlighted that for some lecturers, support is required, not just due to the increased volume of work, but due to the different atmosphere in an EMI classroom. A further theme identified by this author was the language issue, which lecturers reported had an impact on the "ability to communicate knowledge in an effective and student-friendly manner" (Tange 2010: 142). They described a different atmosphere in the EMI classroom, with little casual discourse. Furthermore, a key issue identified was "cultural diversity"; lecturers found this particularly hard to manage, as they not only had trouble with new classroom behaviours and varying academic skills, but also with the language difficulties that

EMI presents to non-native speakers of English, e.g., the trouble in using storytelling in L2 lectures (Tange 2010: 145). A small-scale study undertaken by Tzoannopoulou (2017) in Greece looked mainly at differences in lecture comprehension, but the author also explored attitudes in some semi-structured interviews. The main finding was that lecturers did not consider it their job to comment on language form, as their priority was the content and they did not regard themselves as language experts (Tzoannopoulou 2017: 486). This attitude is reported by many EMI scholars in diverse locations and contexts; due to its importance, it is explored in more detail in the following chapter.

However, lecturer voices are not all negative. Kilickaya (2006) carried out a survey encompassing 100 instructors at different universities in Ankara to gain insights into their general views on EMI in Turkey. The most significant finding indicated that teaching in the L1 allowed content to be covered faster and in greater depth, and they preferred a blend of Turkish-English medium instruction (Kilickaya 2006: 3–5). In the interviews that Airey (2012) conducted with 10 physics lecturers from four different universities, he found that the consensus was that they preferred to teach in English rather than Swedish and that for them, language is irrelevant in content classes. Airey himself commented that what was particularly striking in the study was the similarities in the views expressed; it was clear that the physics lecturers “don’t teach language and only English is used at higher levels” (Airey 2012: 71). However, these results must be taken with caution as they just represent the discipline of physics and so this finding might be one that is only found in the hard sciences. More positive voices were heard in Croatia, where EMI is relatively new and where there has been little research into this field to date. With their investigation into attitudes of teachers, Margić and Vodopija-Krstanović (2015) aimed to close that gap, capturing insights from 73 university teachers via an anonymous online questionnaire. Although the study uncovered some negative attitudes as recounted before, the lecturers stated they would be willing to teach in English and think that EMI or at least bilingual education should be introduced. They listed the strengths of EMI, including international collaboration, mobility, and international visibility (Margić & Vodopija-Krstanović 2015: 52–53). Once again, these positive attitudes should be taken with caution, as it appears that many of the lecturers included in the study were not EMI lecturers and so were commenting on a situation unknown to them, and only

6% had experience teaching in English at the university (Margić & Vodopija-Krstanović 2015: 50).

Career progression and personal development are some of the reasons why lecturers get involved in EMI education. In Spain, Doiz and Lasagabaster (2018) carried out focus groups with lecturers to investigate their motivations for teaching in EMI. They contrasted the lecturers' own image of their perceived self with the perceptions of others, drawing on the framework proposed by Dörnyei (Dörnyei & Ushioda 2009). Their research was conducted at the University of the Basque Country and involved 13 EMI teachers and 15 students. Lecturers indicated that their ideal L2 self was a persona in an imagined multilingual professional community with a vision of career advancement, albeit with considerable linguistic challenges and personal investment. In contrast, the "ought to" self, i.e., the perception of others, was characterized by external pressure and a fear of consequences, although this was not enough to prevent them from teaching in EMI programmes (Doiz & Lasagabaster 2018: 667). Another study uncovering lecturers' motivations to teach in EMI programmes was carried out by Dafouz (2018) using a survey with 45 respondents. Although the underlying theoretical framework was different, in this instance investment theory and ROAD-MAPPING, Dafouz shed light on the current personal benefits and their impact on professional development. Emerging from this survey was the idea that lecturers saw EMI as enhancing their "linguistic as well as their social capital, providing for a more promising future" (Dafouz 2018: 6). Similar to the conclusions reached by Doiz and Lasagabaster, lecturers in this study also believed that EMI offered them the chance to upgrade their academic situation and to "change and grow" (Dafouz 2018: 9).

It is apparent in the literature that there are divided opinions about EMI across generations as well as different views on the question in which education sector and field it is best implemented. Jensen and Thøgersen (2011) investigated attitudes towards EMI in Denmark via a questionnaire which had a high number of respondents (n=1131). However, while they did not have any conclusive results in response to the question whether there is a difference in academic level, they had clear results on general attitudes towards EMI. A distinct finding of this study was a division of opinion on maintaining academic standards in EMI, which was found across generations, with younger respondents having a more positive attitude towards EMI and those who taught more in English being more positively inclined

towards EMI (Jensen & Thøgersen 2011: 26–28). It must be noted that this survey explored lecturer attitudes towards internationalisation, rather than specifically EMI. Furthermore, the more the lecturers taught in EMI programmes, the more positive was their attitude (Jensen & Thøgersen 2011: 28).

In Germany, Gürtler and Kronewald (2015) undertook a large survey with 1032 respondents from UAVs and traditional universities. A clear message from the open responses was that lecturers believed that EMI would be better placed in tertiary cycles or in elective courses to ensure that fundamental skills were successfully gained and that EMI would be more appropriate in natural sciences or engineering (Gürtler & Kronewald 2015: 105). The responses to the question posed, as to whether they had experienced problems in the EMI programme, must be taken with caution as the researchers only used a 4 point Likert scale which did not offer respondents the opportunity to give a neutral answer. They found the predominant reasons for teaching in EMI to be “personal interest and student career preparation” (Gürtler and Kronewald 2015: 104). Instructors in this survey also regarded EMI as a “necessary but regrettable aspect of international education”, and some lamented that although the survey was based on “foreign language medium instruction”, it was a known fact that this only meant English, even though France is Germany’s most important trading partner (Gürtler & Kronewald 2015: 106).

Dearden and Macaro (2016) carried out a comparative study encompassing 25 lecturer interviews in Austria, Italy, and Poland. These findings, however, should be considered with some caution, as a critical limitation, which the authors openly admit, is that the interviews took place after the authors had carried out a week’s EMI training in their locations. This circumstance may have biased opinion in the course of the week. The authors do not expand on the nature of the training, merely stating that it dealt with “general issues”, which could be a range of topics including language proficiency, didactic methods, or specific cultural manifestations in EMI classes, etc. Teachers referred to EMI as “a passport to the global world”, which they had experienced themselves and wanted to pass on to students (Dearden & Macaro 2016: 466). A common motivator to teach in EMI was the predominance of literature and textbooks in English, implying that this facilitated teaching in English. The scholars also identified a generation gap regarding lecturers’ enthusiasm in getting involved in EMI, with the younger academics seemingly more eager,

and the older generation keener to protect their home language, as also reported by the Danish researchers Jensen and Thøgersen. Findings indicated that across all countries, lecturers perceived that they had not had enough support in EMI pedagogy (Dearden & Macaro 2016: 470).

In this overview of general findings of lecturer attitudes to EMI at the macro level, there is predominance of negative issues regarding workload, obligation and support. Although there are some positive attitudes, these are mostly split across generations and experience and have to do with personal gain. Attitudes also vary depending on whether lecturers volunteer to teach in EMI or not, and this is crucial information when evaluating the studies. Table 5.1 is a snapshot of the research presented so far and a summary of the methods and findings. Notwithstanding, the multitude of settings and methodologies implemented make it very difficult to generalise any findings at this level.

Table 5. 1 Overview of findings on general lecturer attitudes towards EMI.

Country	Author(s)	Year	Method	Attitude towards EMI	Workload
Austria	Tatzl	2011	Mixed	Positive	Increased, positive
Austria	Dolmanitz	2015		Indifferent	Increased
Denmark	Werther et al.	2014	Mixed	Burden	Increased
Denmark	Tange	2010	Interviews	Different atmosphere	Hard to manage
Denmark	Jensen & Thøgersen	2011	Survey	Division across generations	Division across generations
Germany	Gürtler & Kronewald	2015	Survey	Important, personal interest	Increased (inexperienced teachers)
Spain	Doiz, Lasagabaster	2018	Interviews	Burden, stress	Tiring
Spain	Dafouz	2018	Survey	Career progression	n.a.
Spain	Aguilar	2015	Mixed	Generally positive	Increased
Spain	Ball and Lindsay	2012	Survey	Generally positive	Increased
Sweden	Airey	2011	Interviews	Prefer EMI to L1 teaching	n.a.
Turkey	Klickaya	2006	Survey	Positive, content faster	n.a.
At, It, Pl	Dearden, Macaro	2016	Lectures	Passport to global workplace	Lack of support

5.1.3 EMI lecturers: not a language teacher, not a native speaker

Research has indicated that lecturers are often keen to convey what is within their remit; for language learning outcomes, lecturers in the context of “pure” EMI, see this is beyond their responsibilities. Dafouz, Hüttner and Smit state that “while teaching language and content concurrently arguably lies at the heart of EMEMUS programmes, this view is not shared by all university teachers” (Dafouz, Hüttner & Smit 2016: 2). And as one lecturer in Tatzl’s Austrian study starkly emphasized: “I’m not an English teacher, and I’m not a native speaker (..)” (Tatzl 2011: 261). Some L2 EMI lecturers are quite happy to openly state that they are not language experts and often do not even seek (or desire) native language proficiency. Within English language teaching the question as to who the better teacher is -- the native speaker, or the non-native speaker who has learnt the language -- has been discussed and debated at length. Twenty-five years ago, Widdowson, in a paper entitled *The Ownership of English* (1994), presented some thought-provoking and challenging ideas on who owns English and what the role of the native speaker is. He asks:

[...] what if you shift the emphasis away from contexts of use to contexts of learning, and consider how the language is to be specially designed to engage the student’s reality and activate the learning process? The special advantage of the native-speaker teachers disappears. Now, on the contrary, it is non-native-speaker teachers who come into their own. For the context of learning, contrived within the classroom setting, has to be informed in some degree by the attitudes, beliefs, values and so on of the students’ cultural world. And in respect to this world of course, it is the native-speaker teacher who is the outsider

(Widdowson 1994: 387).

Research has shown that being a native speaker does not automatically mean native speakers are better teachers. There are other variables that are crucial factors in successful English language teaching, such as experience, age, charisma, aptitude, and training, play a decisive role (Medgyes 1994: 74–80) these are apparently still sometimes overlooked. This is naturally true for teaching in all subjects. However, it is not only about the lecturer’s social skills, as rhetorical ability also contributes to superior teaching, as will be described in the next chapter. Suviniitty’s (2012) investigation aimed to see if there was a correlation between the EMI lecturer’s English proficiency and student comprehension, which she revealed was not the case (Suviniitty 2012a: 4). Costa and Coleman (2013) also reported students have positive attitudes towards teachers who are non-native speakers, as students feel “less inhibited towards them, and because, if the teachers know the students’ native

language, they are more careful” (Costa & Coleman 2013: 17). Mauranen (2009) also compared native/non-native lecture delivery by analysing lectures delivered by non-native English speakers extracted from the ELFA corpus and native speakers of English extracted from the Michigan Corpus of Academic Spoken English. The aim of her investigation was to uncover commonalities in rhetoric. She describes the “striking” similarities in the use of complex academic discourse by both native speakers and non-native speakers (Mauranen 2009: 214). In both studies, it was the competent use of discourse, such as elaboration and paraphrasing, exemplified by switching between the general and specific, and showing “causal relations between phenomena” (Mauranen 2009: 215) as well as the use of rhetorical questions (e.g., Suvinnity 2010: 50), rather than language proficiency which aided lecture comprehension. Other researchers have also pointed to the fact that lecturers who are highly competent in English do not necessarily give good lectures unless they make frequent use of communication enhancing pragmatic strategies (Gotti 2014: 374). Klassen’s research showed that effective lecturing behaviour which had an impact on student understanding includes “the use of concrete and practical examples, loudness of voice, clear articulation and an open attitude, maintenance of eye-contact, visual support of the main points and a balanced exchange of text and pictures or graphs” (Klassen 2001: 173). This was deemed more important than the language proficiency of both students and lecturers.

Baker and Hüttner’s (2019) comparative study of Thai, Austrian and UK practices in EMI settings also reviews the native/non-native paradigm. The responses of lecturers as to whether they believe it is necessary to be a native speaker of English are mixed, with some saying that “intelligibility and content knowledge” (Baker & Hüttner 2019: 91) are more important, and others asserting that English spoken with too much of a foreign accent would be inappropriate. In this study, however, the student responses show a preference for native English. Most studies to date have explored either language or content improvement and few have addressed the integration of these aspects. Dafouz, Hüttner and Smit (2016) addressed this gap by investigating lecturer conceptualisations of content and language integration across four different institutions. Notably, lecturers perceived language and content integration as complex and did not view them as “monolithic blocs but as diversified entities” (Dafouz, Hüttner & Smit. 2016: 13). There appears to be a dichotomy between those teachers from multilingual settings who understand the benefits of conceptualising

English as ELF and those from monolingual settings who regard the failure to adhere to native speaker English and the use of code-switching as deficient (Dafouz, Hüttner & Smit 2016: 16)

5.2 Students

This chapter will first detail research into students' perception about their EMI lecturers and then will focus on students' motivations to study as well as their perceptions of EMI programmes.

EMI researchers have shown that students sometimes relate better to lecturers who are not fluent in English and feel more confident in speaking out, since they perceive that such lecturers are more sympathetic as they are in a similar situation (Costa & Coleman 2013: 17). This perception is mirrored in Bartik and colleagues' study (2010), as one student claimed: "The teacher's English was good but the pronunciation was not perfect, so it showed me I did not have to be perfect to speak" (Bartik *et al.* 2010: 7). Likewise, Evans and Morrison (2011) reported that students found the Hong Kong accent easier to understand and that local lecturers were more "attuned to the students' difficulties and needs" (Evans & Morrison 2011: 203). In 2019, I carried out an illustrative survey at my university to investigate student attitudes towards EMI NSs and NNSs, which indicated that there was a divided opinion between BA and MA cohorts, with the BA students preferring NS EMI lecturers. Out of 31 answers, only 10 students showed a more open-minded attitude, whereas the MA students preferred NNSs. One of these students commented that "(..) as long as the lecturer is able to use proper and advanced academic language he/she does not have to be native speaker", while one MA student even suggested that "according to my experience in (sic) FH, all native speakers were not so good as a lecturer, since they are Americans, they prefer to speak about everything except the subject" (Riedl 2019). Similarly, Murata and Lino (2018) found that those students who had experienced EMI for the first time at university were most likely to take the view that the best English usage resides with native speakers, particularly in the first phase of their EMI experience. The authors suspect that the students were influenced by their English-learning experiences at secondary level (Murata, Kumico. & Masakazu, Lino 2018: 405). These perceptions contrast with the

empirical findings presented by researchers (e.g., Gotti 2014; Klassen 2001; Mauranen 2009; Suviniitty 2012b;) as outlined in the previous chapter, that while English language fluency may be superior, this does not necessarily mean that content is learnt better.

Chen and Kraklow's (2015) investigation into student motivation and engagement in Taiwan suggests that students do engage more intensively when they perceive that the programme has value and will prepare them to work in an international environment (Chen & Kraklow 2015: 60). Insights from Hong-Kong indicate that first year students have more issues in the EMI classroom, which improve with time due to diligence, motivation and effective learning strategies (Evans & Morrison 2011: 204). Students overwhelmingly appreciated the EMI experience in Spain, with a 70% positive response, especially due to the technical vocabulary they learnt and the listening skills which had improved (Aguilar 2012: 189). This is echoed in the questionnaire survey carried out by Dafouz and Núñez (2009), where students self-reported improvements in vocabulary, pronunciation and listening. It is also interesting that in this study 71% of students likewise said that studying in a foreign language was more motivating and does not decrease participation, a surprisingly similar percentage to the aforementioned study (Dafouz & Núñez 2009: 7). Motivation is also the topic of the Doiz and Lasagabaster (2018) dual study of lecturers and students. Similar themes emerged in the focus groups as reported above; students wish to study in English with such goals in mind as "career, cv, imagined international community" (Doiz & Lasagabaster 2018: 668). Generally, students enjoyed the EMI learning experience, but were more self-conscious participating in class. Nevertheless, students did not believe that the subjects were more difficult because of the language of instruction (Doiz and Lasagabaster 2018: 673-4). This last finding is the exact opposite of the findings of Dafouz et al., where the students claimed that studying is challenging in the first language and even more so in an L2 (Dafouz *et al.* 2007: 8). These findings echo with those of Fortanet-Gómez (2011: 6) whose survey, also in Spain, revealed that the main worries of students were the difficulties they experienced in grasping lectures and specialist literature together with a lack of specialized terminology and trouble writing reports.

Gao (2008) investigated Chinese students' learning experiences and motivations to study in the medium of English by following six students over a period of two years. While these students were motivated by "their own visions and desires, rather than external

requirements and forces” (Gao 2008: 606), their motivation was also tied to the given content and the changing role of English (Gao 2008: 612). Findings from a broad study carried out by Po-yung and Hang-yue (2014: 3) in Hong Kong showed that “career advancement” and “internationalisation of the university” were the reasons that students understood as the main motivators for EMI.

“Getting nothing for the price of two” is the chapter heading of a discussion of German students’ perceptions of EMI instruction (Knapp 2011: 58). 64% of the students claimed they had experienced occasional comprehension problems which were mostly language- and not content-related; the themes uncovered included less participation, lack of vocabulary knowledge, higher demands by lecturers, reduction of content, and the perception that there was less discussion in these classes. However, in summary, they presented more arguments in favour of EMI (53 in comparison to 18 arguments against EMI), which does not reflect the negative themes recounted above. Therefore, although the chapter heading seems to suggest negative findings, this is not entirely the case. In the Austrian study by Tatzl, students reported difficulties with time management and workload, vocabulary and technical terms, although they generally had a favourable attitude towards EMI (Tatzl 2011: 257-259).

5.3 Summary

This chapter started with an examination of how beliefs are defined and conceptualised, and showed that scholars to date are in agreement that beliefs are complex, highly personal and influenced by context, and when understood adequately, can help with curriculum development and improvements in practice. It is important to note that the generalisability of much published research on this issue is problematic due to the very context-specific nature of EMI, with differing levels of English proficiencies of students and lecturers alike. Moreover, universities have diverse experience of EMI both in terms of penetration in the university or country in question. With regard to lecturer perceptions of EMI specifically, recurring themes gleaned from the literature include increased workload (Margić & Vodopija-Krstanović 2015; Werther *et al.* 2014a) and lack of support as major negative features; while positive themes include career progression for both lecturer and students

(Aguilar 2015; Airey 2012), these attitudes are dependent on experience in teaching EMI and in academia in general.

Bringing the findings of the literature review of student perceptions together, it seems there is a general situation where students express utter frustration at the added burden EMI brings in tertiary education, yet they still favour it on the whole and recognize the benefits it brings. It seems that there is a dichotomy in terms of students' attitudes towards lecturers' English skills, some preferring less proficient and non-native speakers who might have more of an understanding for the students' learning predicament. Others maintain that the lecturer's English proficiency is a must and fear that a lack of proficiency could detract from learning. The matter of best practices to facilitate student learning and didactic methods used in the EMI classroom to enable this will now be taken up in the following chapter.

6 EMI teaching practices (Practices and Processes)

This chapter turns to research which has been carried out to uncover if there are different didactic methods implemented in EMI programmes. After all, as noted by Dearden (2014: 23), few EMI lecturers recognise that EMI teaching is not just about translating content from their L1 to L2. This first part of the chapter will focus on general methods, the question whether lecturers implement different tools purposefully or not, and the workload involved, whereas the second part draws together research conducted to date on delivery styles in lectures.

6.1 EMI – comparison to L1 teaching

There has been some interesting enquiry to date examining whether there are differences in pedagogic practices in the EMI classroom as compared to the L1 classroom. For example, Airey (2015) compared lecturers' experiences when switching to English by transcribing discussions of 18 Swedish lecturers captured during a course on "teaching in English" and analysing interviews with 12 of those lecturers. The aired themes were "more preparation, less detail, less flexibility, less fluency, no correction, short notice, no training, few differences and confidence boost" (Airey 2015: 169). Lecturers were unhappy that they were often given the task to teach in English at short notice with little support, hence the themes of "short notice" and "little preparation." However, what is striking in this study is that the lecturers were tasked with presenting a ten-minute mini lecture in Swedish one week and then in English the following week. It transpired that the lecturers' delivery style was very similar, and there were "few differences" in the style, which led to a "confidence boost" (Airey 2015: 169). Earlier, Alexandar (2008) revealed that after interviewing some lecturers in a pilot study in Germany, lecturers recounted that they had little time to prepare for EMI and fell back on "learning by doing" (Alexandar 2008: 80). In their comparative study, Dafouz, Hüttner and Smit (2016) shed further light on perceived differences in practices across three countries, which also include increased time for preparation, difficulties of student learning and a change in teaching practices to address this. Specifically, these differences were realized with extra language support, slower delivery, use of more visual aids and the inclusion of further explanations (Dafouz, Hüttner & Smit 2016: 133). Similar findings were reported by Dafouz et al. (2007), who collected data via a questionnaire from

70 content teachers. Their study indicated that three didactic adjustments needed to be made: adaptation of teaching materials, slowing down, and reducing content (Dafouz *et al.* 2007: 97). In Tatzl's study in Austria, in contrast to other findings, the lecturers stated that there was no difference between teaching methods in EMI compared to L1 instruction (Tatzl 2011: 261). A reason for this difference from the other studies could be that the lecturers interviewed seemed to be comfortable in an international environment, as one stated "if you are not travelling around as much, er, [sic] you might be quite challenged as a lecturer", implying that this was not the case for this person (Tatzl 2011: 259). Additionally, the interviews were with lecturers teaching in MA programmes, who tend to have more lecturing experience than those in first cycle programmes.

A more in-depth review of lecturers' perceptions of teaching styles when switching to EMI was undertaken by Vinke, Snippe and Jochems (2006) in the Netherlands. Over 131 lecturers completed questionnaires and reported that they did not experience differences when switching to teaching in English from Dutch but needed more preparation time and found expressing themselves more difficult. Furthermore, when comparing content and discourse strategies adopted, the teaching profiles in Dutch and English were similar (Vinke Snippe & Jochems 2006: 387).

6.2 EMI lecturing discourse strategies

This sub-chapter zooms in on a review of research to date on whether lecturers in the EMI classroom use different discourse strategies than perhaps they would have done if they were teaching in their L1. First, a brief discussion on lecturing styles in general is presented, then the chapter reviews scholars' investigations into different rhetorical devices lecturers may use, whether code switching, the use of questions or repetition, discourse markers, or speed of lecture delivery. Some researchers have directly compared real L1 and EMI lectures, some were practice or staged lectures for the study, and some just looked at EMI without comparing it to L1.

6.2.1 Lecturing styles

Bamford (2005) cites Goffman's (1981) seminal paper in which three modes of lecturing style were identified, namely "memorisation, aloud reading and fresh talk" (Bamford 2005: 123). Fresh talk could be categorized as the more modern delivery style, but naturally, speakers have to account for audience, for example, in a large traditional lecture theatre even today, fresh or free talk with audience interaction is problematic. Interaction in a lecture is desirable, as studies have shown that enhanced participation facilitates comprehension (Morell 2004: 326). Morell's investigation (2004) found that through the lecturer's use of personal pronouns, discourse markers, questions, and negotiation of meaning, student participation was increased in EFL lectures (Morell 2004: 335). The use of personal pronouns, attitude expression, allusions to prior knowledge, delivery techniques, and the usage of discourse markers in English lecture discourse were examined by the Group of Research on Academic and Spoken English (G.R.A.P.E.) at the Universitat Jaume I to shed light on features which could aid L2 EMI lecturers and students (Fortuno & Fortanet-Gómez 2005). Their key findings were that pronouns were used frequently; verbs were used to convey epistemic attitudes and an important feature to aid comprehension was the frequent reference to shared background knowledge (Fortuno & Fortanet-Gómez 2005: 173-4).

There is dispute among the EMI scholars whether EMI classrooms generally display a more traditional atmosphere or whether interaction and fresh talk is at the fore. For example, Dafouz and Sanchez (2013:144) argue that these EMI classes are characterized by a "democratic, less-hierarchical atmosphere." Thøgersen and Airey (2011:11), on the other hand, note a more formal style in EMI lectures, but they do suggest this is a language dependent effect, as the textbooks are in English, and the lecturers are mimicking the formal style to help students with comprehension. These findings are echoed in the studies by Costa and Coleman (2013: 17), who uncovered that EMI teachers in Greece and Italy used very traditional teaching methods. Similarly, Tzoannopoulou (2017: 377-378) noted that the Greek lecturers took on a "traditional lecturing approach" and were reluctant to change or improve on didactic methods. Jiang and Zhang (2016) also reported that they observed "heavy technical language, formal register, subject specific sentence structures but few

discourse markers” (Jiang, Zhang & May 2016: 9). A critical caveat to these findings must be added; these last studies report on what the lecturers reflected upon about past and experienced lecturing practices, rather than ideal lecturing practices. To the best of my knowledge, there has been little enquiry into the impact of the formality of speech. One study undertaken at primary school level by Schoerning and Hand (2012) revealed that the use of informal language has a favourable effect on student performance. A rather bleak observation, which is not mentioned in other findings, was the fact that the Turkish lecturers in Sert’s (2008) study lamented that in the EMI classes they could not use humour, they could not “create colour and spirit in a foreign language”, and that the EMI classes were neither “lively nor joyful” (Sert 2008: 165).

6.2.2 Pragmatic features

There has been considerable research into the pragmatic features lecturers use in EMI lectures. Björkmann’s (2009) investigation of lectures and student group work included recordings of four lectures. While the findings were that ELF interlocutors use pragmatic features for clarification, they must be taken with caution, as the researcher does not explicitly point to which findings are related to the different speech settings, i.e., student groups or lectures (Björkman 2009: 229). The enquiry undertaken by Gotti (2014) looked into several EMI lectures in the social sciences and the findings show that those lectures which were successful were those where interactive features were used, e.g., frame markers, rhetorical questions, rephrasing, emphasis (Gotti 2014: 357–358). In her doctoral dissertation, Sánchez compared the number of instances of the use of discourse strategies in L1 compared to their use in EMI lectures and identified different purposes: in the L1 they are used to modify language to achieve linguistic goals and in EMI to secure extra time to consider ongoing speech (Sánchez García 2016: 252).

Pragmatic tools often used by ELF interlocutors are code switching and translanguaging. Goodman and Tastanbek (2021: 33) describe codeswitching as language alternation within and between sentences and is by and large spontaneous. Translanguaging points to the changing of language in different parts of the lecture/class e.g., when the content is presented in the L2 and the tasks assigned to students thereafter are accepted in

the L1 (Williams 2000: 144). It is difficult to establish the impact of the use of translanguaging /code-switching on comprehension (Macaro 2013: 18), but there are a few studies which have endeavoured to do this. Tai (2021: 120) summarizes that research on translanguaging in the EMI and CLIL classroom has focused on functional discourse analysis and ethnography, but points out there has been little detailed research around how it serves to assist content assimilation. In his own study of translanguaging in a Hong Kong mathematics class, Tai showed that translanguaging helps to bridge students' knowledge gap, promotes response and interest and decreases distance between teacher and student (Tai 2021: 128). Paulsrud, Zhongfeng and Toth's (2021) volume offers an overview of research into translanguaging in EMI classrooms around the world. In one of the contributions, Adamson and Fujimoto-Adamson (2021) show that in the Japanese context, translanguaging aided both weak and strong students, as it helped to "manage flow of lessons, explain key concepts and give feedback" (Adamson & Fujimoto-Adamson 2021: 26). Another contribution, this time with a review of translanguaging in EMI in Italy, identifies the patterns and functions of translanguaging, concluding that it helps when providing assistance to students, aids task management, and ensures comprehension; moreover, by "verbalising content knowledge in their mother tongue first, students were then able to reformulate it in English with more precision" (Dalziel & Guarda 2021: 132–133). In a Chinese EFL context, Tang (2002) looked into the use of Chinese and found that it was used when students did not understand explanations in English, and more often when the students had a low English proficiency and both teachers and students had a positive attitude towards translanguaging. It was found that translanguaging contributed to an effective and efficient learning experience. Tarnopolsky and Goodman (2014) reviewed the use of Russian in EMI classes in a private university in Ukraine. They found that mostly lecturers reverted to Russian to efficiently explain vocabulary, for inter-language and inter-cultural comparisons, for comprehension checks, upon student request or when being addressed in the L1, explaining organisational issues, holding informal discussions before or after class (to save time), for disciplinary purposes or if the teacher forgets a word or expression. Students used Russian when they had comprehension issues, when doing group/pair work, when asking organisational questions, when asking for an L1 word (they naturally continued to speak in the L1), and when discussing with instructors before or after

the bell. Students and lecturers generally believed the use of Russian was more justifiable for instructors than students (Tarnopolsky & Goodman 2014: 393–394). In sum, this research points to idea that using translanguaging aids efficiency; there is little indication of it being a tactic used out of laziness. Yet, it must be noted that its use is very context specific, as many EMI classes are offered to incoming students and so the range of L1 languages is vast; in such cases, switching to an L1 to negotiate meaning becomes redundant. In classes offered in the context of “internationalization at home”, where a predominant number of students share the same L1, it could be a useful linguistic device. In these contexts, switching is often frowned upon by both students and lecturers, as it is regarded as being deviant or lazy.

6.2.3 Question use

As lectures are generally monologic situations, one strategy for retaining audience interest is the use of questions. Thompson (1998: 137-8) identifies two categories of questions, namely, those that are audience related (i.e., check, evoke response, seek agreement), and those that are content oriented (i.e., raise issues, introduce information). Bamford’s (2005) study showed that lecturers use questions to make the lecture more interactive, as an “(..) attention getting device, a rhetorical strategy designed to focus the student’s attention on the answer” (Bamford 2005: 129). Within EMI research, considerable work has been undertaken on this topic, including reviewing the use of questions in lectures and how they facilitate comprehension (Dafouz & Sánchez García 2013), how questions differ in L1 and EMI lectures (e.g., Sánchez 2016) and in the CLIL context what types of questions are posed (e.g., Dalton-Puffer 2007). Dalton-Puffer comments that it is important to understand questions posed in classrooms in order to evaluate what contributions they make to the process of content learning (Dalton-Puffer 2007); she distinguishes between display/referential, open/closed and “types of information asked for” questions (Dalton-Puffer 2007; 94;. 96-98).

Dafouz and Sánchez (2013) analysed three EMI lectures (n=240 minutes) from different universities and different disciplines. They found that questions were used in EMI contexts as confirmation checks (50%), self-answered questions (22%), display questions (20%) and referential questions (8%) (Dafouz & García 2013: 137). Most of the confirmation

checks were used to mark a switch to the next section of the lecture. A core finding was that the more numerous the questions posed, the greater the chance there was of student response. Confirmation checks were used more extensively in the Business Administration class (Dafouz & Sánchez 2013: 143). In her doctoral dissertation, Sánchez also showed that more prolific questions are posed in EMI lectures than in their L1 counterparts (Sánchez 2016: 219). On the whole, there are more similarities between the disciplines than differences; this also reflects the findings of the investigation carried out by Chang (2012) of small class lectures across three different disciplines (Chang 2012: 113).

6.2.4 Structure strategies

Young's research (1994: 174–175) looking into the macro-structure of lectures showed that when students are aware of the patterns in lectures as highlighted by the lecturer, this “greatly assist(s) students”, as the schema help them to predict and thus understand where the content fits in. She identified different macro phases, including the (1) discourse structure phase, (2) main content phase, (3) interaction phase, (4) example phase (5) conclusion phase and (6) evaluation phase. These macro structure phases display in turn the use of distinctive micro-features of discourse. For example, in the metadiscoursal ‘discourse structure phase’, students are notified of what is coming next to draw their attention to it; there are more “wh” interrogatives and rhetorical questions used to help students focus. In the ‘conclusion phase’, Young describes the more intense use of classification of the relationships between things that have already been said, with more repetition of facts, whereas in the ‘evaluation phase’, emphasis is often placed on lecturer subjective evaluation so that students know how to order these facts (Young 1994: 169-171). In lectures, discourse markers are those linguistic devices used to signal the most important content and to indicate changes in arguments or to highlight important information. The study carried out by Martín del Pozo (2016) reviewing discourse markers of EMI lectures, shows lecturers do use discourse markers predominantly in the discourse structuring phase, however concluded that they are “repetitive and stylistically weak” (Martín del Pozo 2016: 38). Unfortunately, the author does not offer any reasons why she came to that conclusion; furthermore, these findings are of limited value to this investigation as EMI lectures were not compared with L1

lectures. Investigating meta-discursive markers in lectures, Dafouz and Núñez (2009) analysed six university lectures delivered by the same teachers in EMI and their L1 (Spanish) and showed that while lecturers use these devices to structure their sessions and signal different sections of the lecture, they use more varied meta-discursive devices more frequently when delivering content in their L1.

6.2.5 Cognitive Discourse Functions

Dalton-Puffer's (2013) Cognitive Discourse Functions (CDFs) are a construct originally developed to aid and gain insights into how "cognitive development is scaffolded" in the school context (Dalton-Puffer 2013: 242), which is elaborated at length in Chapter 7.1.4. Researchers have reviewed how CDFs are realized in classroom/lecture theatre talk to endeavour to establish whether there is a link between the use of CDFs and the competences students gain. Dalton-Puffer and Bauer-Marschallinger (2019) mapped CDFs in use in a CLIL class to a part of the Austrian secondary school curriculum and found them to be helpful when reviewing competencies in action (2019: 54). Likewise a wider investigation of CDFs in use in five different secondary school subjects was undertaken by Dalton-Puffer and colleagues (2018), who found that while they are indeed used extensively, they are unequal in distribution and frequency and are used in natural language unintentionally. At tertiary level, Doiz and Lasagabaster (2021) reviewed the use of CDFs in EMI history classes to try to link their use with student competencies. Although the findings were impressionistic in nature and so should be reviewed with caution, the authors found the construct a useful device for conceptualising knowledge transfer in history. They also found that there were more "secondary level" CDFs in use, i.e., when more than one CDF is used to facilitate a more complete understanding (Doiz & Lasagabaster 2021: 68).

6.2.6 Repetition and speed of delivery

Repetition is a pragmatic device often used in lecture theatres, as it enables speakers "to produce language in a more efficient, less energy-draining way" and facilitates comprehension by providing "semantically less dense discourse" (Tannen 2007: 59). It also

serves as a “referential and tying function”, allowing more coherence and providing interaction between interlocutors (Tannen 2007: 60). Repetition can be further broken down into forms manifesting as self, or allo-repetition, and the repetition may be exact or paraphrased (Tannen 2007: 64). This pragmatic device is varied, and some EMI researchers have looked into whether there are any differences in the use of repetition in an EMI setting. Dafouz and Llinares (2008) reviewed data from several different CLIL classes at secondary and tertiary level and showed that repetitions are used more frequently when lecturers focus on content, mostly of the allo-repetition kind, with the aim of making subject content clear and confirming the contribution made by students (Dafouz & Llinares 2008: 55). Notwithstanding this, theirs was not a comparative study of L1 and EMI, but rather of secondary and tertiary education. Sánchez further found that repetition was used more in the Spanish L1 lecture than in EMI and speculates that the reason behind this could be that in EMI, students are more collaborative, and so repetition is used in L1 to ensure the message has got through (Sánchez 2016: 139). This is exactly the opposite of the findings presented by Thøgersen and Airey, which were that repetition was used significantly more extensively in the EMI lecture. The authors suggest that this “re-repetition” is beneficial to students in that it gives them more time to consider information; by providing an extra synonym, lecturers help students build “stronger lexical ties between the central terminology” and as such they have another chance at comprehension if they did not understand the first term offered (Thøgersen & Airey 2011: 217). These contrasting findings are not surprising due to the different contexts (Spain, Denmark), where there are different didactic traditions, different learning styles of pupils, and different accessibility to English in social and educational contexts, all of which has an impact on English proficiency.

There have also been a few studies investigating the speed of speech adopted by EMI lecturers in comparison to the speed in their L1. In the study by Thøgersen and Airey (2011), the researchers posed questions as to whether lecturing in L2 English affected rhetorical style and changed the speaking rate. Findings indicated that the lecturer needed more time to deliver the content in L2 English compared to the L1 (Danish) and lectures in L2 English were more formal, with more repetition used (Thøgersen & Airey 2011: 219). Arkin and Necdec reported similar results; in their study lecturers took 11% longer to teach in EMI classes than in their L1 classes as they speak more slowly, produce fewer syllables and have

shorter runs (Arkin & Necdec 2015: 188). This is in contrast to lecturers' reflections from the Aguilar and Rodríguez (2012) study, where lecturers reflected that they delivered faster, due to a lack of ability to paraphrase on account of their perceived limited English abilities (Aguilar & Rodríguez 2012: 190). These last findings, however, must be taken with caution, as they are anecdotal; the lecturers merely stated that they were faster due to their lack of fluency and inability to rephrase or explain and this was not empirically tested.

6.3 Content comprehension in EMI

Although there is extant research into aspects of EMI, such as attitudes, motivations, impact on didactic methods as reported in the previous chapters, there have been fewer studies into the impact which EMI has on content learning outcomes. Some researchers have addressed this gap with a deeper look into content comprehension (e.g., Costa & Coleman 2013; Cots 2012; Dafouz et al. 2007; Dafouz & Llinares 2008; Dearden 2014; Flowerdew 1994; Gotti 2014; Hellekjær 2010; Knapp 2011; Mauranen 2009; Pulcini & Campagna 2012; Sánchez-García 2016; Suviniitty 2012; Vinke Snippe Jochems 2006) but findings are still somewhat contradictory. There are various reasons why research in content comprehension is sparse; one of the main reasons is that it calls for an interdisciplinary approach, which can be a challenge to organise and implement. Furthermore, ensuring the validity of findings is difficult, due to the fact that there are many factors which have an impact on academic achievement, ranging from diligence, motivation, experience, lecturer pedagogy, etc. Moreover, findings have drawn on different methods for measuring learning outcomes, and some findings are purely anecdotal. Additionally, in tertiary education there are fewer opportunities to review large-scale comparisons and as such ensure validity. Finally, as EMI research is largely located in applied linguistics, researchers are mostly interested in language outcomes and may lack the competence to lead enquiries into content outcomes.

Nevertheless, there has been some enquiry into content learning outcomes, which will be reported in this section. The first part summarizes the research that has shown that EMI has no impact on content learning outcomes; the second part examines research that shows that EMI comes to the detriment of content.

6.3.1 Same or similar learning outcomes in EMI

An inspirational study in this area is that of Dafouz and colleagues (2013) “Surely they can’t do as well”; the title corresponds exactly to a statement made by one of my colleagues when discussing the launch of the new BA EMI programme at my university. Dafouz is one of the main contributors of research into content learning outcomes in EMI. This first study is particularly relevant to my current investigation as it looked at second-cycle programmes in social science subjects, more precisely Finance, History and Accounting. Furthermore, the university has an access grade, which ensures a certain amount of comparability between the two groups, as does my university. When student examination grades were compared, it was found that students in EMI and L1 medium programmes obtained similar results (Dafouz et al. 2013: 9). However, a later study led by Dafouz found that EMI students performed better in three out of four of the academic years (Dafouz & Camacho-Miñano 2016: 62). Another study, again in Spain, looked into content learning outcomes by matching 15 pairs of students on personal characteristics from each cohort, aiming to disentangle outside factors which may have impacted learning outcomes. The results showed that the EMI students fared better, but the study's authors note that it is too small to make any firm conclusions from these findings (del Campo *et al.* 2015: 77). So far, the studies by the Spanish researchers have provided contradictory results, due to the aforementioned reasons.

Klassen’s much quoted doctoral thesis looked into the relationship between effective lecturing behaviour and students’ learning results, undertaken at Delft university in the Netherlands, using a mixed method approach (Klassen 2001). She found that

student’s learning experiences do not only depend on their listening comprehension capacities, but also depend on their experiences of the lecture situation and, in particular, on the lecturing behaviour of the lecturer (Klassen 2001: 144).

No significant differences between the learning results of the English and Dutch group were found, which was mainly due to the level of students’ prior knowledge (Klassen 2001: 168-9). Another study indicating the same or similar results was undertaken in South Africa (Gerber et al. 2005). Over 800 students with various linguistic repertoires were tested, and although there were some differences between the test results of Afrikaans who performed

worse compared to English students, the authors reported that overall, there was no significant difference between the two groups of students (Gerber *et al.* 2005: 19).

Joe and Lee (2013) also aimed at investigating content learning through EMI lectures in medicine by means of a pre- and a post-test. It could be argued that due to the quasi-experimental setting and the fact that the tests contributed to the final grade, the results of this study are the most significant as the pre- and post-test excludes external influencing factors. Although the students perceived that EMI had a negative impact on content, the results of the post-tests for both cohorts were similar when both groups matched at entry (Joe & Lee 2013: 204).

6.3.2 Inferior learning outcomes in EMI

Some research has been carried out into student perceptions of lecture comprehension by using a questionnaire-based self-report. This means that an item was added to a questionnaire to find out students' self-reported perception of comprehension or a question about this was added to an interview. An example of such an inquiry is Knapp (2011), who showed that 64% of students in his German sample reported that they experienced occasional comprehension problems and 8% reported that these problems were more frequent (Knapp 2011). In a study in Turkey, Sert (2008) found that lecturers believed that EMI failed to facilitate the delivery of content effectively (Sert 2008: 167). Tatzl's study in Austria also indicated that lecturers were concerned about a decrease in content, as one lecturer said, "the content, erm, might be reduced to 60-80% instead of 100%" (Tatzl 2011: 259).

One of the earliest investigations into content learning outcomes was undertaken by Vinke for her doctoral dissertation who found that the EMI cohort students experienced a "moderate" loss in learning (1995: 135). The comparative investigation of German and Norwegian lectures by Hellekjær (2010) indicated that there was a slight difference in learning comprehension; however, if students had issues with comprehension, it was in both mediums of instruction. It must be noted that the learning outcomes were tested via self-assessment and so students may have had a different perception of understanding than in reality. Although the results were similar, the sample from the German university was

substantially smaller (n= 47) compared to the Norwegian lectures (n=391) and the author does urge readers to interpret the findings with caution. Both BA and MA students were in the sample, also raising the question whether the level of EMI experience might have had an impact on the results. The researcher used a 4 –point Likert-scale and the questionnaire did not pose questions directly on the content, but rather indirectly, by asking about understanding, e.g., Item 53: “Indicate on the scale to what extent you understand the content of the English lectures” (Hellekjær 2010: 15).

Arkin and Necdec (2015: 192) found that EMI lectures had an adverse effect on content learning due to increased workload and gaps in listening. The content check in this case was done using stimulated recall after the lectures had taken place. These findings should be taken with caution, as the students were recruited via voluntary participation and the lectures constructed for the study and so were not embedded in the curriculum. The researchers do not indicate when the interviews took place, whether straight after the lecture or whether there was a time-delay, which may affect the results.

Pulcini and Campagna (2012) paint an even bleaker picture, as the results of their survey in Italy suggest that due to language proficiency issues of both the students and the lecturers in this setting, “lessons are watered down” and lecturers have to deliver “simplified presentations of highly complex, academic contents” (Pulcini & Campagna 2012: 82). One lecturer explained in a personal comment that,

“[t]here is a big language problem as most foreign students do not have a level adequate for attending the course and this is forcing me to reduce the amount of information that I can transmit compared to the same course in Italian” (2012: 82).

The investigation by Suviniitty (2012) was an attempt to link lecturers’ English language proficiency with student comprehension. She recorded 21 EMI lectures in Finland and collected student feedback immediately after the recorded lecture, which contained questions on their and their lecturer’s English skills and lecture comprehension. She included statements such as “I understood the contents of the lecture well” but did not ask any direct questions to test actual understanding (Suviniitty 2012b: 58), and then calculated a comprehension value for each student. 71% of the students agreed or somewhat agreed to the statement “I would have understood the lecture better in my native language” (Suviniitty 2012b: 81). The study showed no correlation between teacher proficiency and

student comprehension, but rather suggested that other features could influence comprehension. Unfortunately, what these features exactly are is not described in the dissertation and the author did not compare the findings to L1 lectures.

A broad mixed method study carried out in New Zealand compared the learning outcomes of mathematics students at secondary and tertiary level. The findings from the tertiary sector subjects, who were third year students, indicated that students were disadvantaged, as their test results were worse than those of L1 students. A clear issue identified was the poor English proficiency of the L2 speakers, as half of them were below the IELTS band of six. It appears that these students in the study had been able to cope with the first years of mathematics better, but in this subject, with complexity of academic content there also comes a complexity of language, for which they could no longer compensate, although they had already spent two years studying in the country. The results should be taken with caution, as the authors admit themselves that the L1 students were “very good students” (Neville-Barton, Pip, & Barton, Bill 2005: 66). The authors investigated five institutions in total and concluded that all EMI students were at a disadvantage due to learning issues (Neville-Barton & Barton 2005: 21).

6.4 Summary

This chapter presented a review of the findings in the literature on the question of whether lecturers implement different didactic strategies in the EMI classroom. Researchers have shown that in general EMI lecturers believe that they need to deliver at a slower rate, include more visual aids and reduce content. Interestingly, the study carried out by Airey (2015) pointed to a difference between perceptions of EMI delivery and actual practice.

There is little consensus among researchers concerning the atmosphere in the EMI classroom, as this is specific to the discipline and geographical context. However, there appear to be more studies suggesting a more traditional atmosphere. The research around translanguaging point to its usefulness, particularly for explanations when dealing with complexity, but this has little place in a multi-national EMI cohort. The use of questions is clearly useful to help content comprehension and research to date has shown that there are

differences in frequency depending on discipline. Although contrastive research is scant, the findings by Sanchez (2016) point to more questions being posed in EMI lectures.

Metadiscursive features assist students by drawing their attention to new phases or important sections and research suggests a more varied use of these features in the L1 classroom. Findings of research around the use of repetition and speed of delivery are inconclusive, with all contrastive studies to date resulting in different findings. The useful construct proposed by Dalton-Puffer (2013) for school settings, has been implemented in several investigations, predominantly in the context of CLIL secondary education, with findings indicating the variety and complexity of use, mostly unintentionally.

The previous section reports that research is inconclusive in the question as to whether EMI programmes have an impact on academic content. We note that the studies carried out in Spain had different results, although the studies used different methodologies and were not replicated. The investigations carried out by Klassen (2001), Gerber et al (2002) and Joe and Lee (2013) showed the same or similar results. Yet, those carried out by Neville-Barton & Barton (2005), Hellekjær (2010), Pulcini and Campagna (2012), Arkin and Necdec (2015) resulted in worse results in EMI. However, this is sometimes attributed to the language proficiency of the student or lecturer. In the case of Suvinniity's study of 2012, while a closer look into the link between lecturer's language proficiency and student comprehension was offered, indicating that other rhetorical devices are more significant, this study did not compare L1 and EMI lectures.

7.0 Academic literacy and learning in tertiary education (Academic Disciplines)

Literacy is much more than just the ability to read and write; literacy in the academy is likewise more than just being able to write to a good academic standard. Becoming literate in tertiary education is a process, and the challenges for students often begin right at the outset with the change from secondary to tertiary education. Depending on the type of university and on its location, at the beginning students are often confronted with a stark change in their lives, as they suddenly have to take responsibility for both the social and the academic aspects of their lives (Lowe & Cook 2003: 53). Students must adjust to the different formats for learning (from the classroom to seminars, lectures, tutorials, studios), learn to study independently and become accustomed to different literacy expectations. Van de Poel and van Dyk (2015: 53) suggest that there are many factors inhibiting integration into academia which are beyond the control of the HEI, including socio-economic, political and historical factors. Those within their control are emotional well-being, study skills, time management and academic acculturation. Yet these factors cannot be conveyed via a straightforward “how-to” course.

There have been several studies which have endeavoured to uncover how well-prepared students are for university and how much of a leap it is from secondary to tertiary education. For example, the study undertaken by Brinkworth and colleagues (2009) looked into the relationship between student expectations and actual experience of the first year of university as well as teachers’ perceptions. The study showed that successful transition depends on the “ability to make a rapid adjustment to a learning environment that requires greater autonomy and individual responsibility than students expect upon commencement”; moreover, it also indicated that students expected ready access to teachers and quick feedback, which does not corroborate with lecturers’ practice (Brinkworth et al. 2009: 168). Another survey conducted by Smith (2004: 84) revealed that 86% of students felt they were well or adequately prepared in note taking and contributing to seminar discussions. The researcher however also found that only 22% of students felt that they were well prepared for reading primary and secondary academic texts. The main finding was that it was the teaching format of the lecture which students found the most difficulty in adapting to (Smith

2004: 84–89). An investigation undertaken by Lowe and Cook (2003: 63) indicated that students expected that lecturers would dictate notes, while one third of the respondents expected similar teaching styles associated with school; the “relaxed and informal style of teaching at university was not expected”. Two thirds were concerned about their ability to cope with the academic demands prior to starting and half of this number then experienced such problems (Lowe & Cook 2003: 63). Furthermore, almost a third (31%) of students reported difficulty with adapting to a more independent study style and being responsible for their own learning (Lowe & Cook 2003: 73).

However, it is not just the explicit didactic practices and assignments which cause difficulties for students. Students also must quickly get used to the discourse of their discipline.

7.1 Academic Literacy(ies)

Academic literacy is a highly debated concept in the academic community in terms of what is it and how it can be defined. Wingate (2015: 6) postulates that academic literacy refers to the “ability to communicate competently in an academic discourse community” and this definition covers epistemological and sociocultural knowledge of the discipline, which occurs through discourse and interaction between lecturers and students. It is not, she claims, to be confused with linguistic competence. Likewise, Barton and Hamilton (2012: 3) suggest that academic literacy is not just a skillset to be learned and put down on paper in assignments, rather it is social and is located in discourse and interaction. This view is similar to the position held by van de Poel and van Dyk (2015: 167), who suggest that the written assignment is just the final outcome of a whole process involving a range of academic skills – use of databases, critical reading and engaging with the literature, writing in the appropriate formal style and adhering to formal requirements. Mastering this skill set does not happen overnight.

Academic literacy should not be confused with English for Academic Purposes (EAP), or any academic purpose course for any L1. EAP is normally situated with language instructors and mostly focusses on academic writing, e.g., the writing of seminar papers and theses. EAP, as Turner (2010: 19) suggests, is a stable anchored term which is rooted in a

pedagogic tradition, but at the same time it is one which is often side-lined in the academy due to the perception by some content instructors of EAP being less prestigious. This situation is made worse as content lecturers feel they are merely responsible for teaching subject matter and so language is often taken for granted in all disciplines (e.g., Turner 2010). Wingate (2015: 9) points out that even if content teachers are aware of the literary conventions of their discipline, they still feel it is not within their remit to teach these. At the same time, and problematically, EAP views academic language as one homogeneous whole, so that courses offered span many disciplines. The perceptions of what EAP and disciplinary teachers consider “acceptable” can also be contentious.

Lea and Street (2006) further posit that all too often academic literacy is reduced to deficits and propose three perspectives to address this. Firstly, the study skills model sees literacy with a focus on “surface features” and assumes the transferability of skills to different contexts. The second perspective, coined “academic socialisation”, points to students’ ability to acclimatize to stable disciplinary discourses. Thirdly, “academic literacies” refers to “meaning making, identity, power and authority” in the discipline (Lea & Street 2006: 368–369). In the plural there is rather a holistic view of literacy, taking account of social and cultural practices, learning from the “perspectives of the different participants involved” (Lea & Jones 2011: 381). Lea and Jones (2011) also indicate that although students nowadays are digitally native, they have to engage with a wide range of texts and practices in different media, which requires them to “make meaning laterally across modes” (Lea & Jones 2011: 383). They further state that this is changing the status of knowledge and the way in which diverse texts are being brought into the academy, and that the onus now lies on universities to pay more attention to the multimodal challenge, the way students access, read and integrate texts (Lea & Jones 2011: 390).

As it is in the interest of universities to increase the retention rate of students, they need to address the many issues that lead to high attrition. One way to address these issues is to have a better grasp of the idea of disciplinary literacy and of the understanding and acclimatization that students must achieve to be successful, which the following section addresses.

7.1.1 Disciplinary Literacy

In the academy, there are considerable differences in the conceptualization of knowledge, often depending on the discipline. The notion of disciplinary literacy is crystallized by Kern (2000: 23–24), who suggests that “literacy is an elastic concept: its meaning varies according to the disciplinary lens through which one examines it”. Angelova and Riazantseva (1999: 93) also propose that every discipline has its own conventions, values, and practices. Kapp and Bangeni (2009: 588) observe that only by virtue of thinking, speaking and writing within the ideological framework can students be accepted members of an academic discipline, a view which echoes Airey’s (2011: 3) definition of disciplinary literacy. This he regards as the „ability to appropriately participate in the communicative practices of the discipline”. Gee (2009: 161) similarly describes discourse as “a socially accepted association among ways of using language and other symbolic expressions, of thinking, feeling, believing, valuing, and acting”. He later even postulates that one cannot teach anyone a discourse, rather it is just acquired (Gee 2009: 171). This understanding of the concept is further underscored by Wingate (2015: 8), who indicates that the idea of “discipline” is too broad for the literacy needs of most students, as the programme in which a student is studying usually represents only a small subsection of the discipline. Kern (2000: 23) goes further and construes literacy across the academies as a dynamic cultural process which is both public and private, social, and individual and goes beyond encoding and decoding language, as it involves creating and interpreting meaning. This view is reflected in the proposal put forward by Kuteeva and Airey (2014: 540), who state that literacy encompasses “knowledge construction, negotiation and dissemination using a wide range of semiotic resources” and this is influenced by academia, society and vocation, each of which has a local and international form. Becher (1995: 397) additionally takes the dynamics of change into the equation:

[it is] important and useful to be reminded in this way that disciplines, and their associated cultures, are not monolithic: indeed, one might argue that constant change—at least in terms of the development of the landscape of knowledge, as enquiry pushes out its frontiers—is an essential feature of academia.

There is dispute in the scholarly community about whether disciplinary skills are transferable or whether they are confined to the discipline. On the one hand, Becher (1994: 5) criticizes

the Higher Education Learning Outcomes (HELOs) approach as it does not account for disciplinary differences “arising from their epistemological characteristics”. In a similar vein, Neumann, Perry and Becher (2010: 408) suggest that ignoring differences impairs HELOs and the “intrinsic requirements for effective educational programmes in particular knowledge areas”. Jacobs (2015: 26-7) also questions whether interdisciplinary transfer can happen at all, as knowledge is so bound to the language of the discipline, and these are “sites of contestation” and thus dynamic. This idea is taken up by Clarence and McKenna (2017: 39), who suggest that academics should address this issue and adopt a dual goal of critically focusing on common literacies which are framed within the sociohistorical and sociocultural context. At the same time, students should be informed about the specificities of knowledge in their discipline from which “norms, values and textual practices emanate”.

Conversely, Young (2010: 118) suggests there is much commonality across the disciplines and that higher cognitive skills are transferable. He refers to a geography HELO which states that “students should develop competence in ... taking responsibility for their own learning, and in developing habits of reflection upon that learning”. This aim is clearly not limited to geography (Young 2010: 122).

In sum, disciplinary literacy is a complex but crucially informative construct; it goes beyond language, is elastic, dynamic, and encompasses a wide social network. Most scholars agree that interdisciplinary transferability is hardly possible. Furthermore, scholars have indicated that academic (as well as disciplinary) literacy goes beyond the written text, which calls for a deeper reflection on how disciplinary literacy can be conceptualised practically.

7.1.2 Disciplinary Literacy conceptualised

A much-cited typology of the central differences between disciplines is offered by Biglan (1973: 207), who differentiates between hard (e.g., chemistry, engineering), soft (e.g., humanities, economics), pure (e.g., physics, sociology) or applied (e.g., engineering, business administration) disciplines. The most fundamental difference is the extent to which there is agreement within the discipline with regard to what should be the central research focus and how vocationally oriented it should be. In the hard disciplines, for example, there is

strong consensus, and in the applied disciplines practical implications of research predominate. This typology is a useful overview, which is used as the basis for much academic discussion and investigation, yet it fails to take into consideration interdisciplinary subjects (e.g., Sports Science). Furthermore, disciplines may change over time; for example Neumann, Parry and Becher (2010: 407) suggest that linguistics has moved from soft pure to hard pure as computer-related methods have developed. Notwithstanding this, the typology is used as guidance for much of the research into disciplinary literacy. Although an older model, Kolb (1981: 243) offers a typology to shed light on what is valid knowledge in the disciplines and suggests that one can examine knowledge depending on (a) how it is reported, (b) the inquiry method used and (c) the evaluation methods which undoubtedly is still valid today. I will use this framework as a starting point for the following literature review on how disciplinary literacy can be conceptualized.

Academic writing is an important aspect across the academy, as such it is an explicit tangible output of Kolb's first category "how it is reported", and so sheds light onto differences in disciplinary literacy. Smeby (2000: 53) reviewed the reasons why it generally takes students in the humanities and social sciences longer to complete their Master and Doctoral theses than those in the natural sciences. He conducted interviews with faculty members and students and reviewed curriculum plans and other written material to glean a picture of what differentiates research training in Norway. The investigation indicates that soft fields are characterized by less hierarchical cumulative knowledge and more scholarly disagreement. Furthermore, interpretation and synthesis are essential skills, which are harder to master than the structured interpretative rigour that hard disciplines require. He found that in the soft fields, PhD coursework was thesis related, supervision had to be negotiated and work was individual. This compares with hard/soft fields like economics, where general research training was given, supervision was partly directed but projects were individual. The main difference in hard fields is that the supervision was more directed and normally involved collaboration (Smeby 2000: 63). Although the focus of the study was Norway and the number of interviews was limited, the study does indicate that challenges that students face in producing their thesis are mainly due to the structure (supervision).

Students also use different strategies for research and information seeking across the disciplines. Whitmire (2002: 631) suggests that students are "indoctrinated into the

research processes of their academic disciplines through course assignments and lectures”. Her wide survey indicated that students in the soft and pure disciplines engaged in more information-seeking activities (Whitmire 2002: 634).

Another explicit manifestation of differences in disciplinary literacy is recognizable in the number of academic citing conventions (e.g., APA, MHRA) available which students and academics are required to follow, depending on their discipline. Additionally, there are university specific conventions. Yet, using references is more than just following these rules. As Hyland (1999: 342) points out, citing is a vital rhetorical tool for persuading the reader, justifying arguments, and indicating innovative thoughts. He adds that:

The embedding of arguments in networks of references not only suggests a cumulative and linear progression, but reminds us that statements are invariably a response to previous statements and are themselves available for further statements by others (Hyland 1999: 343).

There are also disciplinary differences, for example the question whether citations are integrated into the sentence with a reporting verb with the author’s name, which is a “significant rhetorical choice” and signifies more value placed on the reported author than the message, which happens when the author is introduced in brackets at the end of the sentence (Hyland 1999: 344). Hyland reviewed 80 research articles in 80 disciplines and interviewed one academic from each discipline to review the different ways knowledge is negotiated and confirmed. This survey revealed that soft disciplines (e.g., sociology, marketing) used more citations than hard disciplines (e.g., physics) and found there were more non-integral and non-subject citation forms in science papers. What is particularly revealing is that Hyland classified the verbs into research (e.g., observe, state), cognition (e.g., believe, conceptualize) and discourse (e.g., discuss, state) acts; by using different verbs, authors indicate if they subscribe to the views of the author or create a new position. The soft disciplines used discourse activity reporting verbs more frequently and only humanities and social science papers used counter-factive verbs (e.g., overlook, fail) to indicate unreliability (Hyland 1999: 347-352). He concludes that:

Citation in the hard disciplines is therefore a means of integrating new claims into current knowledge while drawing on it as supporting testimony, situating the new work in the scaffolding of already accredited facts [...]. In the humanities and social sciences [...] the fabric of established understandings has a wider weave [...] [i]n soft domains, on the other hand, old ground is re-crossed and reinterpreted rather than suppressed (Hyland 1999: 354).

In the soft disciplines, the higher frequency of reporting verbs points to their discursive nature and the often qualitative nature of the enquiry, which connects to the epistemic nature of the field (Hyland 1999: 359-60).

Between Kolb's typology categories "inquiry method" (e.g., case studies, experiments) and "evaluation", there is often a blurred line, as the former are often part of the evaluation method; as such, these will now be discussed together. The summative assessment differences across the academies are enormous, ranging from seminar papers more prominent in the humanities to project-based assessment often associated with the social sciences. Iannone and Simpson (2016: 792) reviewed student perceptions and preference of their assessments in education (soft) and mathematics (hard) and found that those in education prefer the project and the essay, whereas in mathematics, students prefer closed book exams. They conclude that students display "distinct epistemic beliefs and these appear to be one of the factors influencing their perceptions of assessment, and these are grounded in disciplinary differences" (Iannone & Simpson 2016: 798). Looking into the influence of disciplinary assessment on student learning, Jessop and Maleckar (2014) reveal that in keeping with the hard/pure expectations, they generally have two more formative tasks than those students in the soft/applied, notwithstanding this, all disciplines in the survey displayed similar learning benefits from the examinations. Students in the humanities perceived their assessment as less appropriate and in professional courses students frequently failed to grasp the goals and standards of assessment (Jessop & Maleckar 2014: 704). Interesting insights could be gleaned from focus group discussions and interviews with content and ESP lecturers in Spain, where Fortanet-Gómez (2011: 7-8) showed that the concept of written assignment (*trabajos*) on first sight was considered to be aligned across the disciplines by the lecturers, but on discussion it transpired that they were conceptualised in very different ways from a two page financial review to a twelve page business plan.

Teaching has already been discussed at length in the context of differences in pedagogic practices in EMI and L1 contexts (see Chapter 6): (e.g., Airey 2015; Björkman 2009; Cots 2012; Dafouz, Hüttner & Smit 2016; Dafouz & Núñez 2009; Gotti 2014; Sert 2008; Tatzl 2011; Thøgersen & Airey 2011) and improvements in student understanding by lecturer use of different rhetorical devices (e.g., Dafouz & García 2008; Jenkins & Mauranen 2019; Suviniitty

2012a;). Neumann (2010: 136) observes, however, that there has been scant research into differences in teaching practices across the disciplines; moreover teaching is not considered in Kolb's typology, although as postulated by Whitmire (2002: 631) teaching "indoctrinates knowledge". Didactic practices naturally influence how knowledge is disseminated and constructed and so inevitably inform literary disciplinary differences. Of the few investigations in this area, Smeby (1996: 74–76) looked into the differences in the amount of time spent preparing and actual teaching and found that more time is dedicated to preparing and delivering lectures in soft pure disciplines, which he put down to "language and paradigm status". Hativa (1997) carried out a survey to find out attitudes and perceptions towards teaching by university teaching staff. As part of this, she discovered that more recent knowledge is presented to students in soft pure/applied fields, particularly in the social sciences (Hativa 1997: 11). Further insights can be gleaned from Gee (2009: 163–168), who describes discourse and teaching practices at law school (soft/applied). In this context, lectures are not the typical dissemination of knowledge, rather right at the outset students learn by virtue of adversarial and competitive interactions with peers and the lecturer. Prior to this, students have to read legal briefs in a way to note important arguments for the case, yet this reading skill is not taught and so the students have to teach themselves. These rhetorical and reading skills are presumed and this ensures that the student "(..) adopts a world view, accepts a set of core values, and masters an identity often without a great deal of critical and reflective awareness about these matters" (Gee 2009: 167).

Knowledge and learning will be discussed at length in Chapter 7.2, however in the context of disciplinary literacy, the description of learning styles put forward by Kolb (1981: 240-3), although older, still offers value in showing how different learning styles often depend on the discipline, which he defines as:

- abstract reflective = natural sciences and mathematics
- abstract active = science based professions (engineering)
- concrete active = social professions (education, law)
- concrete reflective = humanities and social sciences

These categories intend to inform educators how the "forms of knowledge in different fields can be differentially attractive and meaningful to individuals with different learning styles"

(Kolb 1981: 243). Yet, this model disregards the context of learning. The investigation carried out by Ventura and Moscoloni (2015: 89) looked into the differences between student learning styles over the academic years and across disciplines by carrying out a survey of over 300 first, third and fifth semester students in the disciplines of engineering and psychology. The results indicate that although students display similar learning styles at the beginning of tertiary education, in later semesters disciplinary differences were apparent, with psychology students displaying increased “intuitive, reflective, verbal and global” learning styles in contrast to the increased “active, visual and sequential” learning styles of engineering students (Ventura & Moscoloni 2015: 92). The assertion that there are disciplinary differences in learning styles contradicts the idea that individuals have their own learning styles, and that personal interests, abilities and background knowledge have a bigger impact (Ventura & Moscoloni 2015: 92). This view is in accord with that of other scholars (e.g., Kapp & Bangeni 2009: 591), who suggest that with time, students align more with the culture and literacy of the discipline.

As can be seen, there are substantial differences in academic writing and style, reporting, assessment, teaching practices and learning styles across the disciplines, which can account for the ingrained epistemic stance of key stakeholders such as lecturers and researchers, which perpetuates their disciplinary paradigmatic knowledge.

7.1.3 Disciplinary literacy in the social sciences

The social sciences include a broad number of subject areas such as anthropology, archaeology, economics, geography, history, law, politics, psychology, and sociology. According to Biglan’s typology, social sciences belong to the “soft” and “applied” category. Becher (1995: 400) remarks that due to the outside influence of the applied disciplines, they are deemed as inferior by the pure disciplines, as the pure disciplines see themselves as impenetrable to extra-academic concerns. Kuteeva and Airey (2014: 545) also point out that the boundaries for the social sciences are blurred, as some, for example economics, are closer to the hard sciences due to their hierarchical knowledge structures.

Neumann, Parry and Becher (2010: 408) reviewed research findings of knowledge and socially related studies to uncover similarities and differences between hard/soft and pure/applied. Zooming in on soft/applied (social sciences), they illustrate that this area focusses on the accumulation of knowledge and this knowledge is not validated as extensively as in the pure disciplines. They also indicate that this field aims to improve vocational practice by reviewing practices and procedures and that this is reflected in assessment, which is often project-based, and peer assessed, where marking rubrics can be ambiguous. Formative assessment is common and a requirement (Neumann, Parry & Becher 2010: 409). The authors describe that due to the practical importance, the knowledge base is “more eclectic, and their implicit emphasis – shared with soft pure knowledge – is on the enhancement of personal growth and intellectual breadth”. Furthermore, practitioners are often invited as guest speakers to share practical insights (Neumann, Parry & Becher 2010: 410). This study also indicates that students are required to develop an expertise in oral and written expression and master problem-solving with practical skills in the focus (Neumann, Parry & Becher 2010: 413). In the early study, Biglan (1973: 205) indicated that there is a more personal commitment to students in the social sciences, where there is an emphasis on educating the „whole student“, although he does not offer an explanation of what he means by the “whole student”.

Corporate Communication (CC) is a function within a business organisation alongside other functions such as production, finance, accounting, human resources, and logistics. It is a primary function within any business, which means that it has a direct impact on business success in comparison to secondary functions (e.g., human resources) which are support activities. CC first appeared in organisations in the 1950s and it is often split into the two sub-disciplines *Marketing* and *Public Relations*. Kotler and Armstrong (2020: 25) define marketing as “the process by which companies engage customers, build strong customer relationships, and create customer value in order to capture value from customers in return” and public relations is concerned with building relationships with the organisation’s publics in order to build a good reputation and trust. CC is a discipline often taught within business administration degrees but there are also entire degree programmes devoted to the discipline.

As presented earlier, there are a number of specific areas of knowledge within the discipline of the social sciences, so for the purposes of this dissertation, I will focus on marketing. There is little scholarly review of the epistemological question of marketing knowledge. One of the few articles to reflect on this is offered by Rossiter (2001), who firstly examines what marketing does not encompass; marketing knowledge does not refer to practical skills (strategic and operational marketing) but rather is independent of practical implementation. Furthermore, it has nothing to do with the individual's ability in performing marketing, i.e., doing a good job. Rather, Rossiter (2001: 13-19) proposes that this knowledge covers a broad area from an understanding of marketing concepts (e.g., business strategy, product, and pricing strategy), the structural frameworks (e.g., the 4Ps of the marketing mix), strategic principles (best course of action depending on context) and research principles. Although the marketing discipline has changed dramatically over the past 10 years and constitutes a new field, namely digital marketing, these four areas proposed by Rossiter are still valid today, as I can bear witness to in working and teaching in the profession for over 20 years.

Madhavaram and Laverie (2010: 197) suggest that marketing academics are more competent in research than teaching, which they put down to the focus on research skills rather than teaching skills in most doctoral programmes. The authors conceptualize pedagogic competence in the marketing discipline to encapsulate content knowledge as well as course, classroom, and student management, and propose a framework for doctoral students to gain competencies in all of these areas. However, these insights should be taken with caution, as particularly at universities of applied sciences, marketing is taught by both practitioners and academics, and nowadays universities offer comprehensive didactic training courses for all teaching staff, at least in the Austrian context.

In the field of Corporate Communication teaching, there has been a shift in pedagogic practices due to the changes in the global and digital economy and the burgeoning student population. It is fundamental that students know how to think critically and creatively to solve problems, collaborate in teams, use rhetoric to aptly construct an argument, and enact their social-emotional skills (Vanada 2016: 17). The "studio" format is used, i.e., group project problem-solving tasks are assigned, as this helps students to learn from their own experiences rather than from formal teaching (lecturing); the learning environment is

designed so that students can actively engage in creative work under the guidance of an instructor that uses a learner-centered approach rather than a teacher-centered approach (Sawyer 2017: 106). Case studies are also used more frequently nowadays, as they offer the ideal method for practicing creative problem solving. Case studies are often implemented in groups, which further enhances the students' social skills and connects students with the business community.

7.1.4 Literacy and learning in EMI

Literacy and learning through the medium of another language (LX) is indisputably different from what it is in the L1 (e.g., Bailey & Butler 2003; Cummins 1980; Dalton-Puffer 2013; Gee 2009; Jacobs 2015). An important contribution to the conceptualization of this insight was made by Cummins (1980: 177), who first proposed the distinction between Cognitive Academic Language Proficiency (CALP) and Basic Interpersonal Communicative Skills (BICS), or common language proficiency. CALP is different from BICS in that it is closely related to literacy skills, which take longer to develop and affect education success. Bailey and Butler (2003: 9) similarly describe academic language as the discourse used in the classroom, in contrast to informal everyday speech, and identify "proficient" students' needs to have the ability to negotiate meaning with fewer opportunities than in social settings. Another comparable idea is proposed by Gee (2009: 168), who distinguishes between Primary Discourses, i.e., those established early in life, and Secondary Discourses, i.e., those that are acquired later in life in the framework of churches, schools, offices, etc.

There are some scholars who have conceptualized commonalities of discourse across disciplines, particularly in the secondary education sector (e.g., Bailey and Butler 2003; Dalton-Puffer 2013), but insights can be gleaned from these studies for the tertiary sector. Bailey and Butler (2003) propose that the Academic Language Construct (ALP) can provide the proficiency required for pupils in the US, based on teacher expectations and actual use in the classroom and curricula based on implicit and explicit evidence. This construct is manifested in verbs commonly used to describe expectations across the disciplines, such as compare, explain, identify, and recognize (Bailey & Butler 2003: 16). Another construct to align disciplinary differences with that of language pedagogy is offered by Dalton-Puffer

(2013) in her construct of Cognitive Discourse Functions (CDFs). She explains that CDFs could be described as a reflection on Searle’s Speech Act Theory (Searle, Kiefer & Bierwisch 1980), in that the CDFs enable subject specific thought processes to be accessible for learning, and describes them as “observable analogues of thought processes” (Dalton-Puffer 2013: 231). An overview of the types and functions can be reviewed in Table 7.1. Similar to the construct offered by Bailer and Butler (2003), the CDFs are verbs and are useful as they can be implemented for transdisciplinary formulation of specifications respective of context. As such, the aim when implementing them is to transcend the gap between the disciplines and foster a common understanding of student academic literacy issues.

Table 7. 1: List of CDF types and underlying communicative intentions (Dalton-Puffer, 2013)

<i>Function Type</i>	<i>Communicative Intention</i>	<i>Label</i>
<i>Type 1</i>	I tell you how we can cut up the world according to certain ideas	CLASSIFY
<i>Type 2</i>	I tell you about the extension of this object of specialist knowledge	DEFINE
<i>Type 3</i>	I tell you details of what can be seen (also metaphorically)	DESCRIBE
<i>Type 4</i>	I tell you what my position is vis a vis X	EVALUATE
<i>Type 5</i>	I give you reasons for and tell you cause/s of X	EXPLAIN
<i>Type 6</i>	I tell you something that is potential	EXPLORE
<i>Type 7</i>	I tell you about sth. external to our immediate context on which I have a legitimate knowledge claim	REPORT

In CLIL contexts, Dalton-Puffer (2013: 242) also proposes that CDFs might shed light on which “cognitive-linguistic demands” students are under. Language is thus deeply ingrained in construing our experience of the world and making it possible for us to share these ideas with others. As she succinctly asks, “what else should teaching be about but stimulating minds to accommodate new meanings and alternative cognitions about the world in addition to the ones that are already there?” (Dalton-Puffer 2013: 229).

Jacobs (2015: 35–36) also reflects on the 2001 Integrating Content and Language in Higher Education (ICLHE) conference, where ICL was understood as “providing access to knowledge through language”. It was also understood that knowledge differs from one discipline to the next. Yet this knowledge also changes as students’ progress within the discipline, as stated in the findings presented earlier by Ventura and Moscoloni (2015) and Kapp and Bangeni (2009). Jacobs also points to the differences when academics refer to the C of ICLHE; it can mean subjects, modules, disciplinary content or practices or knowledge forms and structures (Jacobs 2015: 24). Airey (2011: 2) reminds us that the onus is on

content lecturers to “disambiguate the communicative practices of the discipline for their students” and this is even more important in EMI settings. Furthermore, Kuteeva and Airey (2014) point out that the so-called hierarchical disciplines such as the natural sciences predominantly opt for English as a medium of instruction. They conclude that choosing EMI is bound by the disciplinary “knowledge-making practices” and there is no “one-size fits all” remedy (Kuteeva & Airey 2014: 548).

Some researchers have zoomed in on disciplinary differences in academic literacy when studying in the EMI classroom. Roothoof (2019) interviewed STEM and humanities EMI lecturers to shed light on whether they differ in their focus on content or language, their methodology and their beliefs about code-switching. She found that both disciplines saw a focus on content as more important than language, but the humanities lecturers claimed they changed their didactic practices. The lecturers from both disciplines took a mostly hard line on “English only”; just a few STEM lecturers would allow code-switching in exceptional cases (Roothoof 2019: 10). The research by both Airey (2012) and Aguilar (2015) points to the compatibility of EMI when teaching physics; the insights gleaned from the latter’s interviews with lecturers indicated that this was particularly with content as the focus (Aguilar 2015: 729). Gürtler and Kronewald (2015) similarly noted that EMI fitted the natural sciences particularly well. These findings correspond with actual practice, as EMI predominates in the natural sciences as reported by Maiworm and Wächter (2002b, 2008; 2014). At the same time, it could be noted that this is a self-fulfilling prophecy; the more programs are offered in English, the more it is accepted, and the more lecturers become used to it, and so it becomes associated with success in those disciplines.

7.2 Knowledge and learning

Scholars from diverse disciplines define knowledge according to their *weltanschauung*; there is a plethora of theories and concepts endeavouring to define knowledge. For example, according to (Flowerdew 1994: 8), linguistic theory informs us that there are at least five types of knowledge which will be called upon in the comprehension process: pragmatic, semantic, syntactic, lexical, phonological. Eraut (2000: 114–115), on the other hand, classifies knowledge into two types; (a) codified knowledge, which is shaped by professional

bodies and refers to skilled behaviour, and (b) personal knowledge, which refers to the cognitive resource and includes skills, process, experiential experience and is explicit and tacit. These two examples indicate how very differently knowledge can be defined.

Learning is a complex, multifaceted phenomenon depending on multiple factors (Dunn, Beaudry & Klavas 2002). Psychological aspects include the individual's cognitive, conative, and affective capacity. Individual factors include the physiological dimension, which typically includes visual, aural, read/write and kinaesthetic styles, often described using the VARK acronym (Drago & Wagner 2004: 7). However, this does not take into account context. Chew, Jones and Turner (2008: 41–42) summarize Vygotsky's Cultural Historical Theory, which does take into account social and cultural interaction in knowledge development, which he explains is related by words and language. The Vygotskian "Zone of Proximal Development" refers to those areas which are too difficult for a learner to manage alone and where educators are needed. The implication, Vygotsky posits, is that learners' thinking is improved working with a skilled instructor or facilitator rather than constructing knowledge alone.

7.2.1 Learning models

In constructing didactic practices to link knowledge with learning, scholars have endeavoured to propose theoretical models as guidelines for educators. Leider and Jarvenpaa (1995: 266–269) describe how learning models can be classified as falling into objectivism, constructivism, collaborativism, and socioculturalism. Objectivism is described as the traditional learning model, where the goal is to transfer knowledge from the expert to the learner and which assumes that the instructor is in control of the pace of learning, and typically is found in the lecture theatre. On the other hand, the constructivist model suggests that knowledge is created by each learner, with each learner having a different perception of it, controlling the pace and the role of the expert as mediator. Closely resembling the constructivist model is the collaborative model, which assumes that learning happens in a collective, through discussion and idea generation. Finally, in contrast once again, the tenet of the sociocultural model is that knowledge is grounded in context – the historical and cultural background of the learner – and that there is "no one external reality

(..) and constructivism and collaborativism force the minority culture into adopting the understanding derived by the majority” (Leidner & Jarvenpaa 1995: 269).

Without a doubt, the most renowned model of knowledge is the Taxonomy of Learning proposed by Bloom and colleagues in 1956. Bloom et al.’s *Taxonomy of educational objectives* (1956), was later revised by Anderson, Krathwohl and colleagues (2001). The original taxonomy was one-dimensional with a continuum representing cognitive complexity, including the following six categories: Remember, Understand, Apply, Analyse, Evaluate and Create. This model assumes that as one proceeds in academia, one proceeds "up" the continuum, as this is a development towards more cognitive complexity. The revised two-dimensional taxonomy (see Table 7.2) reflects changes in society and curriculum (Anderson *et al.* 2001: 5). The second dimension encompasses knowledge, which is divided into four categories and further differs from the original dimension in that it goes from the concrete to the abstract. The CDF construct proposed by Dalton-Puffer (2013) and described at length in Chapter 7.1.3, builds on this and Dalton-Puffer offers more “functions”, but does not differentiate between “concrete” and “abstract”. Notwithstanding this, both models offer a comprehensive understanding of student literacy issues.

Table 7. 2: Overview of the two-dimensional taxonomy (Anderson *et al.* 2001: 28)

The knowledge dimension	Remember	Understand	Apply	Analyse	Evaluate	Create
Factual						
Conceptual						
Procedural						
Metacognitive						

The authors also offer an overview, summary, and critique of some other scholarly alternative learning frameworks. These are categorized into unidimensional and multidimensional, and the authors summarize that these alternatives differ from their original proposal in terms of description (verbs instead of nouns to title categories). The alternatives also make knowledge a separate dimension, elevating "synthesis, create or generate" to the top category and asserting the hierarchical nature of the framework. However, the authors claim that none offer empirical evidence to validate their models. Anderson and colleagues postulate that the revised taxonomy of 2001 incorporates some

improvements, although these were gleaned independently of the literature review and so as such, validate the revised taxonomy (Anderson *et al.* 2001: 259–286). This learning model is a generic one, which can be viewed as an advantage in that it is universally applicable, or as a disadvantage, as it does not take into account the context or discipline.

For economic reasons, universities are encouraged to enrol more students, yet the ability of those students often presents instructors with the problem of how to align their teaching methods to such a diverse student group with diverse learning styles. The concept of “Constructive Alignment” as presented by Biggs and Tang (2011), is a tool for lecturers to try to close the growing gap within the ever increasing diverse student population. To illustrate this, the authors present a picture of two very different students; Susan, the ‘academic’ and Robert the ‘non-academic’ who have different levels of engagement in the academic learning process. Engagement abilities for Robert include memorizing and note taking, but anything above that (describing, explaining, relating, applying, theorizing) is beyond him under normal teaching circumstances. The authors propose that by utilizing Constructive Alignment and problem-based teaching the gap between them narrows. They claim that “[g]ood teaching is getting most students to use the level of cognitive processes needed to achieve the intended outcomes that the more academic students use spontaneously” (Biggs & Tang 2011: 7). The authors call for a constructive alignment of objectives, methods, and assessment as a remedy for closing the gap (Biggs & Tang 2011: 97-100). In other words, students construct meaning from their learning activities and the teacher/lecturer makes a conscious effort to link the planned learning activities with the learning outcomes and clearly communicates how the achievement of those outcomes will be measured.

These models present possibilities for lecturers to understand student stages and styles of learning. However, they are not a panacea for academic success and do not offer quality assurance. To this end, Higher Education Learning Outcomes (HELOs) may offer some guidance.

7.2.2 Higher education learning outcomes

The outcome based approach emerged in the mid-1980s as a result of an emerging critical review of the effectiveness of higher education funding; the focus shifted from the traditional teacher-centred model of education to how much graduates had learnt by graduation, what they “learn, achieve, become” (Tam 2014: 159). Caspersen and colleagues (2014: 195–196) indicate that HELOs are not only a useful tool for teaching, learning and assessment, but also a tool for management and governance. HELOs are a central feature of the Bologna process, as a ministerial London Communiqué highlights that they ‘move towards student-centred higher education and away from teacher-driven provision’ as a significant outcome of the Bologna Process (London Communiqué 2007: 2):

Learning outcomes are statements of what the individual knows, understands and is able to do on completion of a learning process. The achievement of learning outcomes has to be assessed through procedures based on clear and transparent criteria. (ECTS Users' Guide 2015: 10)

Additionally, the introduction of the so-called Dublin Descriptors, presented in 2003 and adopted in 2005 in Dublin, was part of the reform. These descriptors provided HEI guidance about student achievement expectations on completion of each tertiary education cycle, thus providing comparability and compatibility. The Dublin Descriptors are the cycle descriptors for the Qualifications Framework of the EHEA and they offer:

generic statements of typical expectations of achievements and abilities associated with awards that represent the end of each of a (Bologna) cycle or level. The descriptors are phrased in terms of competence levels, not learning outcomes, and they enable to distinguish in a broad and general manner between the different cycles. A level descriptor includes the following five components: knowledge and understanding, applying knowledge and understanding, making judgements, communication, lifelong learning skills (ECTS Users' Guide 2015: 69).

The following exemplifies the Dublin Descriptors, which describe the qualification which all students at the end of the first cycle (Bachelor level) should master:

- have demonstrated knowledge and understanding in a field of study that builds upon their general secondary education, and is typically at a level that, whilst supported by advanced textbooks, includes some aspects that will be informed by knowledge of the forefront of their field of study;
- can apply their knowledge and understanding in a manner that indicates a professional² approach to their work or vocation, and have competences typically demonstrated through devising and sustaining arguments and solving problems within their field of study;

- have the ability to gather and interpret relevant data (usually within their field of study) to inform judgements that include reflection on relevant social, scientific or ethical issues; - can communicate information, ideas, problems and solutions to both specialist and nonspecialist audiences;
- have developed those learning skills that are necessary for them to continue to undertake further study with a high degree of autonomy (ECTS Users' Guide 2015: 8).

As Adelman (2015: 4) indicates, the descriptors are made up of operational verbs, concrete nouns, are declarative and never subjunctive statements. Although HELOs and the Dublin Descriptors have sometimes been hailed as a panacea for quality assurance, there are critical voices, too. Adam (2006: 3) describes learning outcomes as the "fundamental building block of the Bologna educational reforms" but suggests that there is still an inadequate understanding of how to use and implement them, which threatens the full realization of the EHEA (at the time of writing). Entwistle (2005: 70) suggests that it is becoming increasingly difficult to make meaningful comparisons between learning outcomes even within the same subject area and at the same level. Furthermore, writing meaningful and measurable learning outcomes is not an easy task where context has to be taken into account. This difficulty is further emphasized by Caspersen and colleagues (2014: 196), who similarly criticize the general nature of the HELOs, implying that they cannot be valid across disciplines due to the considerably different concepts and contexts. Stanny (2016: 8) also points to a semantic issue that arises in some disciplines, where a verb describing a HELO in the lower end of Bloom's taxonomy may appear higher up in another discipline. Further critical voices suggest that learning outcomes are too prescriptive, too complicated to write and that higher education should ultimately be open ended (Adam 2006: 14–15).

Sin (2014: 1833) conducted a comparative study (England, Portugal and Denmark) of the perception and value of learning outcomes from the point of view of lecturers and students. Her interviews indicate that there is a gap between academic practice and student experience. The author suggests that her research raises the question as to whether learning outcomes are more useful for curriculum designers and whether this means that students do not benefit fully from student centred learning. She cynically asserts that "[l]earning outcomes appear as a convenient means to prove and evaluate graduate employability" (Sin 2014: 1834).

7.2.3 Literacy and learning in the lecture theatre

As Felder and Silverman (1988: 674) appropriately assert, just as there are different learning styles, teaching styles and methods vary. Although tutorials, seminars and practical sessions are becoming more popular, with studio classes becoming even more popular in certain disciplines (particularly in the social sciences), lectures remain a pillar of tertiary education. Lecturing is still the major teaching form at university and is likely to remain so. A lecture can last from 40 minutes to half a day, but is typically one to two hours long, can be delivered to a small group or to an auditorium of hundreds of students. It is a “cheap” method for the dissemination of knowledge (Edwards, Smith & Webb 2001: 1–4).

Lectures are generally formal and are delivered via one-way communication to impart knowledge and disseminate information. Nowadays PowerPoint is the main tool for visualizing the main aspects of a lecture. Hansen and Jensen (1994: 246) describe lectures as “extended pieces of discourse that are delivered by one person to a group of people”. Every lecturer has a different lecturing style; some read from scripts, some speak from notes or an outline, some deliver memorized speech, and some are more interactive than others. However, in most cases, formal rhetoric is chosen. Lectures are predominantly delivered in a structured way, often incorporating what Young (1994: 165) refers to as different phases: a macro structure consisting of the discourse structure phase, conclusion and evaluation phase. This structure, when combined with what Hansen (1994: 134) describes as topic divisions, helps students with their listening and note-taking.

Morell (2004: 326) describes lectures as a “social event where the lecturer can enhance participation and facilitate comprehension.” She investigated the different discursive features of interactive and non-interactive lectures and found that the interactive ones had more discourse markers, questions, and negotiation of meaning, which increased student participation (Morell 2004: 335). She describes this interaction as “personalisation” – a method to get closer to the students. Furthermore, she states that:

lecturers who are conscious of their students’ linguistic and communicative competence, and who value and promote critical thinking will more than likely make use of these linguistic aspects. These are also lecturers who believe that their task is not only to transmit information, but also to help their students to understand, analyze, relate, compare, synthesize, create and question, which is accomplished through interaction.

(Morell 2004: 335)

Kettunen (2011: 57) highlights that in the lecture theatre learning is often individual, where students are passive and just listen and take notes. However, according to Lynch (2011: 85), time has moved on from the “notion of the lecture as a non-collaborative monologue.” In other research investigating multimodal perspectives across different lecturing styles, Bernad-Mechó and Fortanet-Gómez (2019) showed that rhetorical style lecturers make more use of “kinesic and paralinguistic resources as organizational metadiscourse, which also enhances their engagement with the audience” (Bernad-Mechó & Fortanet-Gómez 2019: 336).

As indicated earlier, the main tasks for students in the lecture is to listen and take notes. This note taking has also been a subject of academic enquiry, in order to find out what constitutes good note taking (Chaudron, Loschky & Cook 1994). Clerehan (1995: 140) compared the lecture notes from a Commercial Law lecture taken by L1 and L2 speakers of English at a university in Australia. She found that the L2 students took fewer notes (a mean result of 232 words compared to 438 of the L1 students) and that there were notable differences in the quality of the student notetaking (in terms of organisation and layout). They found that L1 students grasped the “top-level structure” of the lecture, which was indicated by some of the rhetorical devices used, more comprehensively than students whose first language is not English. Methods to stimulate listening, better notetaking and as such improved assimilation are essential. Formative methods to facilitate that are often referred to as Classroom Assessment Techniques (CATs).

7.2.4 Classroom assessment techniques and the Muddiest Point

As previously discussed, lectures are still the most popular pedagogic practice in tertiary education although they might not be the most opportune method for knowledge sharing. A way to try to improve or make the most out of the situation is for instructors to introduce Classroom Assessment Techniques (CATs). These are an ideal way for instructors to get a quick picture of student progress and offer formative feedback. Angelo and Cross (2012: 4) describe CATs as being an approach which is “learner-centred, teacher-directed, mutually beneficial, formative, context-specific, ongoing, and firmly rooted in good practice.” CATs are simple tools for collecting data on student learning with the goal of learning from them

and improving didactic methods (Angelo & Cross 2012: 25). However, there does appear to be some confusion regarding the causal relationship between CATs and learning in the literature, and it is unclear whether CATs are meant to have a direct effect on learning or a direct effect on teaching (Simpson-Beck 2011: 130).

There are dozens of different ways that instructors can implement CATs, varying them according to time and context but by far the simplest and according to Angelo and Cross (2012: 154-158), the most efficient, is the Muddiest Point. Mostellar is awarded the accolade for being the academic to invent this original CAT which he coined the 'Muddiest Point' in his 1989 paper. In this paper he describes how he used different methods in his statistics class to help student learning, firstly by requiring students to note the key point, the most important idea and what the students would like to know more about. The students appreciated these techniques, but one suggested they were limited as they did not provide the lecturer with the feedback about what they still needed. So, the student suggested the inclusion of the question "what was the muddiest point in the lecture" i.e., the part of the lecture the students were unclear about (Mostellar 1989: 6).

The Muddiest Point CAT allows instructors to uncover what students find the most confusing or unclear about a class or lecture. At the end of the lecture, cards can be distributed, and students are invited to name the most confusing, least understood or the 'muddiest' part of the lecture. This process is anonymous, and students generally write a few words or just a sentence describing it. Lecturers can then review and explain the "muddy" areas at the next opportunity. However, Angelo and Cross (2012: 158) recommend using it with caution, as it causes students to focus on negative aspects of the lecture and is as such demotivating for lecturers. However, it is a quick feedback device, encourages students to pay more attention during the lecture, and leads to introspection.

This investigation aims to discover any differences in the content delivered in EMI compared to lectures in a L1, and for this reason this particular CAT was the inspiration for the title of the dissertation.

7.3 Summary

This chapter started by outlining the challenges students face when transitioning from secondary to tertiary education in general and then specifically focused on academic literacy. Researchers are generally in agreement that academic literacy goes beyond the written thesis and rather requires students to engage holistically with the discipline. In the literature it is clear that disciplinary literacy is highly complex and transferring knowledge across the disciplines is difficult.

When examining how disciplinary literacy is conceptualised, this chapter outlined how researchers have identified considerable differences in disciplinary writing, reporting, assessment, and teaching. The exploration of disciplinary literacy in the social sciences revealed that importance is given to vocational knowledge with a more intense requirement of student competency in oral and written expression. Specifically in marketing, understanding concepts, frameworks, strategy and research principles are at the fore.

The literature revealed that literacy and learning in EMI can be researched and understood using the constructs offered by Bailey and Butler (2003) and more recently Dalton-Puffer (2013). The language content dichotomy continues to predominate, although a recent research agenda is emerging around ICLHE.

Scholars have offered knowledge and learning models as an aid to provide a construct for educators to bridge knowledge and learning. Of those, the most renowned is indisputably Bloom's *Taxonomy* and Biggs and Tang's *Constructive Alignment*. Nowadays the latter construct is particularly useful when teaching in the heterogeneous student population which predominates in the current tertiary education landscape. A further aid was the introduction of HELOs to refocus attention to learning rather than teaching. There is still some controversy around HELOs and the Dublin Descriptors in particular, as some scholars suggest they are too prescriptive and disregard differences in disciplines.

Finally, this chapter engaged with how lectures are typically delivered and took a closer look at aids to help student learning in the lecture theatre, commonly referred to as CATs, of which the *Muddiest Point* as construed by Mostellar is the most renowned.

8.0 Theoretical framework of analysis

Brumfit (1997: 90) defines applied linguistics as “the theoretical and empirical investigation of real-world problems in which language is the central issue” and in this seminal paper positions this discipline as a science. Cook (2003: 5) similarly states that it is the “academic discipline concerned with the relation of knowledge about language to decision making in the real world”. In simpler terms, applied linguistics is about the uses and users of language (Spolsky 2005: 30). Heine and Narrog (2015: 8) even suggest that applied linguistics is deserving of its own discipline due to the uniqueness of its methods of enquiry and its foundations.

Around 30 years ago, Spolsky coined the particular research interest in the study of the relationship between language and education institutions/stakeholders as *educational linguistics*, postulating that it provides “the essential instruments for designing language education policy and for implementing language education management” (Spolsky & Hult 2008: 2). As discussed at length in Chapter 4.1, Spolsky describes language policy as being present in all speech communities as well as in the practices, beliefs, and management activities of stakeholders. As such, this dissertation, with the focus on EMI in tertiary education, is firmly situated in the field of educational linguistics. So far, the literature review has reviewed language policy and management (Chapter 4.1) and language beliefs and practices (Chapter 5.1.1) in relation to EMI. However, there are other areas which this literature review has discussed, which also offer valuable insights for this dissertation, such as the wider context (globalisation/ internationalisation, Chapter 2.1) and the impact of academic disciplines on EMI (Chapter 7.1.4).

A framework encapsulating all of these aspects can be found with the ROAD-MAPPING framework (see Figure 8.1), created by Dafouz and Smit (2016; 2020), which is a useful conceptual structure for investigating EMI or EMEMUS (English-Medium Education in Multilingual University Settings). The authors suggest that the acronym EMEMUS (or EME for short) is a preferential term to EMI, as it is “conceptually wider in the sense that it is inclusive of diverse research agendas, pedagogical approaches and of different types of education” (Dafouz & Smit 2020: 3). ROAD-MAPPING is a “theoretically grounded framework

that addresses (..) the inherent complexity and diversity of EMEMUS” (Dafouz & Smit 2020: 11).

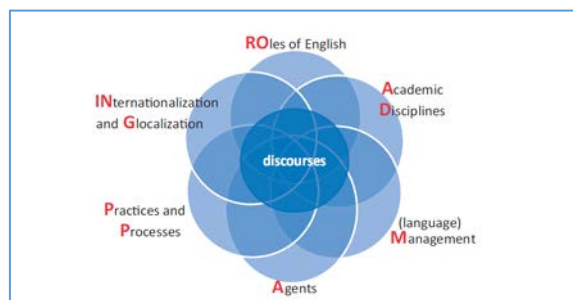


Figure 8. 1 ROAD-MAPPING framework (Dafouz & Smit 2020: 47)

The framework, as can be viewed in Figure 8.1, follows a sociolinguistic perspective, as it “views languages as the means to socialisation and the development of social practices” (Dafouz & Smit 2020: 43). I posit that the framework captures the epistemological stance of phenomenology, which aims to present “a detailed account of human existence” (Zahavi 2019: 1). The phenomenological tradition highlights that at any one time one only sees (an object) from one perspective, although there may be many perspectives which are not immediately apparent, and these other perspectives are vital to understanding the whole. Thus the aim of phenomenology is to “offer a proper account of reality and objectivity” (Zahavi 2019: 14). Finlay (2014: 174) recounts five iterative processes that characterise a phenomenological investigation. First, the researchers should “embrace the phenomenological attitude”, i.e., researchers should be cognisant of their familiarity with a phenomenon. The second process involves “entering the lifeworld through rich descriptions”, in the course of which researchers should “strive to be fully present to their participants (or to the transcript or text) and what is being described” (Finlay 2014: 177). The third process, “dwelling the horizons of implicit meanings”, refers to the importance placed on not just superficially reporting on the qualitative data gathered, but rather, reflecting on meanings derived from the data and the role of the researcher in the process. Fourth, “explicating the phenomenon holistically and dialectically” requires a rich portrayal of the findings, for example by “providing quotations from participants to make transparent the evidentiary base of any analytical claims” (Finlay 2014: 190). Finally, the process involves “integrating frames of reference”, which suggests that the researcher is informed by different perspectives, for example linking the analysis with psychoanalytic, discursive, or

critical theory analysis (Finlay 2014: 193). An example of a linguistic study informed by a phenomenological approach is that described by Cammarata and Tedick (2012), who used this approach for their investigation into the experiences of immersion teachers. They describe how they used the phenomenological approach of “bracketing” to remain true to the text; “bracketing during the data-collection phase involved self-introspection by the interviewer prior to the first interview to ensure scientific openness to the lived experience (..) by making visible personal assumptions and biases (..) and help neutralize their potential during data collection” (Cammarata & Tedick 2012: 256). Furthermore, during data analysis they engaged with the data iteratively by meticulously reviewing the whole text and then parts of it so as “to isolate emerging experiential constituents” and then by the help of the method of *imaginative variation*, they modified themes/parts of the data to see if the phenomenon remained unchanged (Cammarata & Tedick 2012: 257).

The five aspects of the phenomenological approach as presented by Finlay (2012) point precisely to the robustness of the ROAD-MAPPING framework. For example, due to the recommendation to view all dimensions, familiarity and the phenomenological attitude is given. Furthermore, using the codes from the acronym as a starting point can facilitate the required rich portrayal considering all perspectives (see section to follow). I would even suggest that this framework could offer the proposed method for the ‘phenomenon of EMI’, as many scholars of phenomenology lament that a precise methodology does not exist (e.g., Zahavi 2019). The additional aspects, such as fully “embracing the phenomenological attitude” and “bracketing”, might be useful additions to enrich the researcher’s methodology during an investigation using the ROAD-MAPPING framework.

As can be seen in Figure 8.1, the ROAD-MAPPING framework is comprised of six dimensions, which have all been addressed in the literature review so far. Starting with the “RO” in the *Roles of English*, the authors explain that the role that English plays has to be contextualised, both historically and with regard to the role that other languages have in the multilingual setting (Dafouz & Smit 2020: 47-48). The insights gleaned in Chapter 4 (EMI background and policy) point to the complex and multifaceted grounds on which EMI is justified and introduced, highly dependent on different stakeholders in the macro, meso and microenvironment, but also on the historical roles that languages play in the particular society (Baldauf 2005; Dimova, Hultgren & Jensen 2015; Wilkinson 2012). This is

compounded by the fact that EMI practiced in one institution may be very different to EMI in another institution in the same town, same institution, or indeed same department. As described in Chapter 6 (didactic practices) the role of the L1 can be conceptualised as having no place at all, or as adding value to the lecture (Jiang, Zhang & May 2016; Karakas 2016; Tan 2011; Tarnopolsky & Goodman 2014). The discussion in Chapter 2 (terminology) details the different roles English has when it is used as a medium of instruction, a lingua franca, but in each setting, there is a different balance and a different level of prestige, as English is often in competition with the local language. As Dafouz and Smit (2020: 48-9) explain, “language roles need to be described via their interrelatedness with the respective context”. They further offer a summary of factors relevant for *Roles of English*, including societal, institutional, pedagogical, and communicational.

The second dimension of the framework, *Academic Disciplines* (AD), was explored at length in Chapter 7 (Academic Literacies), where the focus was placed on how students have difficulty in acclimatizing in higher education as well as the complexities arising out of how literacy is defined differently across disciplines (Brinkworth *et al.* 2009; Evans & Morrison 2011; Lowe & Cook 2003). The literature review describes how academic literacy is conceptualised in the social sciences, where this investigation is situated, and in EMI in general (Aguilar 2015; Airey 2012; Neumann, Parry & Becher 2010; Sawyer 2017). This dimension draws attention to the centrality of the issue of language across disciplines in the L2 and to the need to develop “disciplinary discourse conventions for which there is often little or no explicit provision” (Dafouz & Smit 2020: 52).

Moving on to “M” for *Language Management*, Smit and Dafouz (2020: 52) suggest that there are three aspects that should be considered: policy type, communication functions and language chosen. Turning first to policy type, Chapter 4 dived deep into how EMI policy is put into place, at times top-down, sometimes with explicit documents describing the policy, with all possible degrees of implementation in between. The second facet concerns the myriad of decisions management take in terms of wider language policy, e.g., university physical signage, website language, language of administration, etc. Thirdly, language matters concerning the status of English in coordination with the L1 and perhaps minority language, whether management address the type of English, i.e., as a lingua franca, or whether English acts as lip service for multilingualism.

Dafouz and Smit (2020: 54-5) argue that the 'A' for the *Agents* dimension calls for an iterative approach due to the complexity of the dimension; there are many stakeholders involved in shaping EMI at both the macro (global, national) and micro (institutional) level, with different agendas and beliefs. Chapter 5 explores the stakeholders "lecturers" and "students" at the micro-level, as this investigation focusses on the impact of EMI on learning and content outcomes.

The 'PP' *Practices and Processes* dimension is described by Dafouz and Smit (2020: 56) as including "meaning-creating activities (..) and long-term changes, such as the scope and scale of internationalisation". Chapter 6 addresses those practices in the EMI classroom, with the literature review shedding light on the different teaching styles adopted (e.g., Dafouz & Sánchez García 2013; Dearden & Macaro 2016; Thøgersen & Airey 2011) and different (or indeed the same) discourse strategies employed by EMI teachers (e.g., Mauranen 2009; Morell 2004; Suviniitty 2012a). While these practices are discussed with regard to how they impact student learning outcomes, the findings in the literature to date remain inconclusive (e.g., Dafouz, Camacho & Urquia 2013; Gerber *et al.* 2005; Joe & Lee 2013; Klassen 2001).

Dafouz and Smit (2020: 57-8) posit that the former dimension can offer a window into the practices of the agents in the internationalisation process, however, the last dimension is fully dedicated to "ING" *internationalization* / "G" *Glocalization*. The review in Chapter 3 pointed to the different conceptualisations of internationalisation of HEIs, with tensions around the philanthropic and economic aims. The review discussed a recent development, namely the internationalisation of the curriculum, which the founders (Crowther *et al.* 2000) professed could ease these tensions and put the original idea back to the top of the agenda. Although the authors name part of this dimension "Glocalization", they do not pinpoint a definition of this term, but suggest that it indicates the objectives of HEIs to improve rankings and at the same time, meet the local needs of the stakeholders. The rapid growth of EMI courses globally and the underlying issues surrounding implementation due to the speed of implementation is documented in depth in Chapter 4.

The framework is an ideal tool to "analyse the dynamic, multi-layered and diverse nature of EMEMUS" (Dafouz & Smit 2020: 59), with the useful acronym ROAD-MAPPING

providing novice researchers with a helpful reminder to consider their investigation holistically and to reflect more deeply on how each dimension interacts with the other parts. Although there is some overlapping of the dimensions (e.g., internationalisation is referred to in both the “P” and the “ING” dimensions), which could at first cause some confusion, the authors acknowledge that this “inevitably implies grey areas, which may be interpreted as rendering the framework imprecise” (Dafouz & Smit 2016: 411). This overlapping nevertheless points to the very nature of the complexity of EMI, and as the authors remind us, investigating EMEMUS should be “flexible and dynamic” (Dafouz & Smit 2020: 59). Discourse is at the centre of all of the dimensions and this, as an analytic starting point, is invaluable, as it provides “a locus of co-construction” (Dafouz, Hüttner & Smit 2016: 402).

In their book, the authors dedicate a chapter to advising researchers on ways in which the framework could be used (Dafouz & Smit 2020: 71–102). They illustrate its use by taking examples from the wide research interest of EMI beliefs and classroom discourse. They suggest that the framework can be used as support when designing the research, whilst analysing data and/or as a structure for discussing findings (Dafouz & Smit 2020: 76). Although still relatively new, the framework has already been used in various research contexts. For example, in her PhD. dissertation, Komori-Glatz (2017) used the framework not only to zoom in on the “PP” dimension, but also used it as a structural guideline for the literature review. Furthermore, she positioned key questions her research aimed to answer alongside the dimensions, further facilitating a structured methodological approach (Komori-Glatz 2017: 251-278). She further points to the value of the framework in that “ROAD-MAPPING uses discourse as the access point to highlight various dimensions of English-medium education in multilingual university settings while also allowing the researcher to concentrate on one in detail Komori-Glatz (2017: 250). While the central focus of her dissertation investigation was the *Practices & Processes* dimension, the interplay of the other dimensions holistically informed the study. The researcher reviewed how EMI MA students at the WU in Vienna construct disciplinary language to achieve their team goals. The findings of this emic study indicate that “it is important for students to learn how to use their diversity as a resource rather than a challenge” and suggest that students should exploit the opportunities for socialising to nurture teamwork (Komori-Glatz 2017: 292). In her reflection, she states “[t]he conceptual framework of ROAD-MAPPING thus illuminates

the multi-layered and multifaceted nature of the international university and reveals the tensions and synergies between various stakeholders and the resources and demands they bring to the MMLS (Multilingual and Multicultural learning space)” (Komori-Glatz 2017: 290). By contrast, Dafouz, Hüttner and Smit (2016: 127) chose “A” as the “point of entry” in their project investigating EMI lecturer beliefs across four countries. They were, however, also informed by the “ING” and “AD” dimensions. The authors state that “with its dynamically conceived dimensions metaphorically pivoting around the discourses by which EMEMUS is co-constructed, the framework provides a conceptual basis as well as a methodological frame for analysis” (Dafouz, Hüttner & Smit 2016: 140). Ngo (2019) used four dimensions of the framework as a structure for the literature review and to describe the context of the investigation. In her reflection she states that the usefulness was that it enabled her to zoom in on one dimension but at the same time recognising “the dynamic and holistic interaction of surrounding factors” (Ngo 2019: 188). In an upcoming volume of collected articles, Dafouz and Smit demonstrate how the framework has been applied in designing research, analysing EMI practices, to synthesize EMI themes, to describe the context in a specific country or region, to analyse HEI policies and for shedding light on professional EMI development (Dafouz & Smit forthcoming). In that volume for example, Hüttner and Baker (forthcoming) outline arguments in favour of including highly internationalized and multilingual Anglophone universities within EMEMUS, while also suggesting the usefulness when comparing diverse HEI contexts (in this case, Austria, Thailand, and the UK). In this instance, the dimension RO served as the analytical starting point and the authors demonstrated how they were able to come to a meaningful interpretation of policy texts and participant perceptions of their multilingual university experience.

The framework will be used in this investigation to help situate the context, as each dimension will be explained and explored in relation to the object of investigation in turn in the next chapter. This study will zoom on *Academic Disciplines* (AD), *Agents* (A), and *Practices & Processes* (PP), with view to informing *Management* (M) and the *Internationalization* (IN) policy. This investigation will further be enriched by consideration of the learnings from the epistemological tradition of phenomenology whilst collecting and analysing data.

PART 2

9 The research context

This investigation was conducted place in Vienna Austria at the University of Applied Sciences for Management and Communication (UAV), where I work as a faculty member in the Department of Communication. The UAV is an ideal site to review and probe these research questions, as it is the leading University of Applied Sciences in Austria in this discipline.

To gain a better picture of such universities in Austria compared to traditional Research Universities (RUs), this chapter first offers an overview of the key similarities and differences between these two Higher Education Institutions (HEIs) and then continues to describe the current position and standing of EMI in Austria. The chapter then goes on to describe the UAV, utilizing the ROAD-MAPPING framework as a point of access.

9.1 Universities of Applied Sciences in Austria

Prior to the Bologna reform with the introduction of three cycles in higher education, Austria was a country with a long tradition of the one-tier system, with students being awarded a ‘Magister’ or ‘Diplom Ingenieur’ at the end of their studies, which was equivalent to a Master’s level second cycle degree. The University Studies Act and the Fachhochschul-Studies Act (FHSA) were passed in 1999 and 2002 respectively, providing a legal foundation for the implementation of the three cycles and the ECTS credit system (Pechar & Pellert 2004: 317).

Universities of Applied Sciences (UAS) are predominantly European tertiary education institutions that have their roots in the 1980s and which flourished due to restructuring of vocational institutions. They are positioned differently to Research Universities (RUs) and are termed differently locally; for example, in German speaking countries they are referred to as *Fachhochschulen* (FHs), in Dutch speaking countries as *Hogescholen* and in Finland as *Ammattikorkeakoulus*. UASs are generally smaller, more numerous and more regional than RUs (Lepori & Kyvik 2010: 298). Furthermore, UASs have a more vocational character and

focus on teaching rather than research, although this divide is becoming increasingly blurred, with UASs in recent times engaging more frequently with “use-inspired” research (Lepori & Kyvik 2010: 296). However, this picture is not uniform across Europe; for example in the Netherlands, the *Hogescholen* do not have a research mandate at all (Baaken & Davey 2012: 50). Additionally, UASs often do not have the authority to grant PhDs.

Further key differences between RUs and UASs in Austria in particular are that the former are still shaped by a broader cultural education, with a focus on research where teaching is often side-lined. Thus, the core roles of RUs in Austria are for the “Entwicklung der Wissenschaften, die wissenschaftliche Berufsvorbildung und die Bildung durch Wissenschaft” [development of science, professional scientific training and education through science] compared to the primacy of UASs for „die Ausbildung auf Hochschulebene und die Berufsorientierung“ [university level education and career orientation] (Roithmayr 2014: 141). Feucht and Friesl (2014: 79) capture the main differentiating factors as follows:

Zu den Stärken der FH zählen insbesondere die hohe Anwendungsorientierung der Ausbildungsinhalte die Möglichkeit des berufsbegleitenden Studiums sowie selektive Aufnahmeverfahren und wesentlich geringere Drop-out Raten als an Universitäten.

[The strengths of the UAS include in particular the high vocational orientation of the content, the possibility of studying part-time as well as the selective admission procedures and significantly lower drop-out rates than at universities; my translation]

The issue which still occupies RUs in Austria is this high drop-out rate; it is estimated that every second student who starts a degree at an RU in Austria does not finish their degree (Kroisleitner 2015) and in 2020 this figure remained at 52% (vienna.at 2020). This is partly due to the open-access system in many study programmes, where many students enrol in the first semester and do not pass the challenging exams after their first phase.

Furthermore, students at RUs can and do enrol in several study programmes to find their ideal course, with no intention of completing their studies. Due to the stringent application procedures at UASs in Austria, the drop-out rate is very low as those students who are prepared to go through the rigorous admissions procedure generally are keen to continue studying. Furthermore, since the cohort sizes are smaller than at RUs, students become more familiar with their institution and issues which often lead to drop-out can be identified faster and possibly resolved with faculty personally.

The FHSA also facilitated another major change, namely to the amount of time spent studying in Austria. At RUs students sometimes study for years for various reasons mostly due to working part of full-time as well. In contrast, the FHSA stipulate that the programmes at UASs must be conceptualised so that they can be finalised within a prescribed timeframe (e.g., six semesters for Bachelor degrees) (Brünner 2004: 62). Another noteworthy change facilitated by the FHSA was the opportunity to study at tertiary level for those without the school leaving certificate - the 'Matura' in Austria - for those individuals who had previously qualified through the apprenticeship education system (Brünner 2004: 21). UASs are obliged to undergo accreditation according to the FHSA. This obligation now plays to UASs advantage, as this quality assurance is widely recognised in academia and amongst professionals in the fields. Another particularly valuable difference in UAS education is the compulsory internship (Brünner 2004: 33), which benefits both the student, with valuable work experience often leading to employment, as well as employers, as they can vet potential employees.

In comparison to RUs, the UAS sector is young and comparably small, and despite substantial growth since the first UASs were formed in 1994, 25 years later in the academic year 2019/2020 there were 61,271 students at UASs in Austria and 281,626 at RUs, which represents 22% (Statista.com). Yet, the UASs do ease the burden on universities and are very popular due to the high employability rate after graduation; across Austria per study place there are on average 2.7 applicants (Schmid 2014: 97).

In the early years, between 1993-1996, the academic environment was rather pessimistic as to whether the new UASs would deliver on their promises and the founders were not fully trusted to succeed and meet the legal mandate (Jungwirth 2014: 19). This pessimism has since been proven insubstantial. Now in 2021, there are 21 UASs in Austria (source: [österreich.gv.at](https://oesterreich.gv.at), retrieved 7.2.2021) offering 698 study programmes (see FH Guide). And as Brünner (2004: 3) indicates: "(...) mit der Schaffung des Fachhochschul-Bereiches sei eine nicht mehr wegzudenkende Bereicherung der österreichischen Hochschullandschaft gelungen"[with the creation of the university of applied sciences sector, an indispensable enrichment of the Austrian university landscape has been achieved; my translation].

9.2 EMI in Austria in 2020

As discussed in Chapter 4.5, Austria was ranked number nine on the leader board with regard to the number of ETPs on offer in Europe (Wächter & Maiworm 2014: 20). To gain an up-to-date picture of the status quo of EMI programmes on offer in Austria, I conducted my own online research in September 2020. To do this, I firstly used a Google search based on the string, “EMI programmes in Austria” and reviewed the website *Studium.at* that claims to offer applicants an overview of all study programmes in Austria. I very quickly realised that this is an unreliable source as the information pertaining to my university was wrong in both instances (information about BA and MA programmes). Therefore, in order to get an accurate picture, I checked the website of every RU and UAS and recorded all ETPs. Some university websites offer a ‘check’ button for EMI “englischsprachige Programme / englischsprachiges Studium” [English-language programmes / English-language studies] but for the most part each program had to be checked in turn for the language of instruction. I only selected those taught entirely in English and omitted English language, literature and linguistics programmes.

Overall, I found that since 2014, both types of universities now offer more EMI Bachelor programmes (see Table 9.1). There are still four times more Master programmes than Bachelor programmes at both types of universities and more EMI programmes in RUs. This is not a reflection of the number of HEIs – at the time of writing I counted eight RUs (compared to 21 UASs), however, the RUs are significantly bigger than the UASs. The University of Economics in Vienna (WU), for example, boasts around 23,000 students, compared to around 3000 students at the UAV (Jahresbericht 2019); the TU Wien has around 30,000 students, compared to around 4000 at the FH Technikum (these universities are competitors on the HEI market in Vienna and so comparable).

Maiworm and Wächter reported in their 2007 (p.17) and 2014 (p.65) surveys that 80% of all ETPs in Europe were at Master level. The data from my survey indicates that this is almost identical in 2020 – 195 programmes are at Master level which represents 81% of the total number of EMI programmes.

Table 9. 1: Overview of number of BA and MA EMI offered in Austria (Sept 2020)

	Bachelor	Master	Total
Univ.Applied Science (UAS)	19	78	97
Research University (RU)	27	117	144
Total	46	195	

Studycheck.at (September 2020) reports that there are 1,892 study programmes and so the EMI percentage is approximately 13%. Although the surveys were conducted differently, Wächter and Maiworm (2014: 40) reported that 9.4% of all programmes were offered as ETPs (which in absolute numbers represents 225 programmes). While this would represent a small amount of growth in 6 years, this report of growth should be taken with caution due to the different method of data collection.

At Bachelor level there are more EMI programmes offered in the social sciences than in any other field, where the number of EMI courses is negligible (see Table 9.2). At Master level, there is a more even distribution in the areas, yet notably, EMI Master's degrees in the natural sciences are plentiful. There are several courses in pure physics and chemistry, which are traditionally not offered at UAS (for a full overview of all courses see Appendix 1). This mirrors the findings of the Wächter and Maiworm survey; in 2014 they reported the following split in the main subject areas: engineering 18%, sciences 23%, social sciences 36% (Wächter & Maiworm 2014: 20).

Table 9. 2: Number of BA and MA EMI split by academic/scientific areas offered in Austria (Sept 2020)

	Bachelor	Master	Total
Social Science	33	75	108
Natural Science	5	58	63
Humanities	1	12	13
Engineering	4	32	36
Computer Science	3	17	20
Total	46	194	

Wächter and Maiworm (2014: 20) similarly looked at the spread of disciplines over the two cycles and noted that there were more Bachelor programmes in the social sciences / business and law (42%) and that there were more programmes in the natural sciences at Master level (26% compared to 11% at Bachelor level). Dimova, Hultgren and Jensen (2015: 3–4) report a similar split; most Master's programmes are in business and economics (28%),

engineering and technology (21%), social sciences (14%) and the natural sciences (9%) although a direct comparison between the three surveys is problematic due to the different classification of the programmes in the surveys.

Table 9. 3: Number of BA and MA EMI split by academic/scientific areas & HEIs offered in Austria (Sept 2020)

	UAS		RU	
	Bachelor	Master	Bachelor	Master
Social Science	15	41	18	34
Natural Science	1	8	4	50
Humanities	0	5	1	7
Engineering	2	20	2	12
Computer Science	1	4	2	13
Total	19	78	27	116

9.3 The University of Applied Sciences for Management and Communication

The focus of this investigation is the University of Applied Sciences for Management and Communication in Vienna (UAV). I have been working as an ‘Academic-Expert, Lecturer, International Coordinator’, in the Department of Communication (DoC) since May 2016. It is a prerogative of UASs to employ staff who have professional experience in the field, so having worked for over 12 years in Sales and Marketing positions for various international companies and being a L1 speaker of English, the university deemed me an ideal candidate for this position although I had not had any teaching training before I took on the position. At the outset, my role was to assist with the preparation for the accreditation of the BA programme in *Corporate Communication* (CC) which was launched in September 2018 and was based on exactly the same curriculum as the German taught cohort *Kommunikationswirtschaft*. Since then, I teach in various modules of this programme and that of the sister programme in the department, *Marketing and Sales*. The position also involves advising and approving outgoing students’ courses for their semester abroad and taking care of any other international related activities of the department, for example in November 2019, the university hosted its first ‘International Week’ which I organised. Additionally, I represent the department at various international events. With the review of the curriculum, I am also responsible to ensure that the fourth pillar of the university’s strategy is implemented in the department, namely ‘Internationalisation’ (the other three being digitalisation, sustainability and business strategy).

In order to paint a complete picture of the object of the “multi-layered and diverse” context of this investigation (Dafouz & Smit 2020: 59), the following section describes the object of enquiry using the six ROAD-MAPPING dimensions as points of access.

9.3.1 Roles of English (RO)

As described at length in the previous section, EMI continues to grow in tertiary education in Austria, mostly driven by internationalisation strategic objectives, including providing a policy and ensuring its visibility, improving the quality of teaching and students’ language proficiency (Maiworm & Wächter 2002: 42). This is no different at the UAV, where it is the strategic aim to offer at least 20% of all modules in English, coupled with the launch in 2018 of the EMI BA programme *Corporate Communication* (CC) and the MA programme *Entrepreneurship* in the Department of Management. At the same time, the EMI modules are programmes which play a part in the internationalisation strategy; they are counted as key performance indicators (KPIs) but also at a practical level, as they allow the possibility to welcome incoming students without having to offer a plethora of extra courses.

An ESP module called *Business Communication* is given the status of a *Common body of competence (CBC)* which means that it is a module which all students at the university have to attend, so it is part of *all* curricula at the university, further underscoring the importance of English language proficiency. This importance is driven primarily through the requirement of the globalised business place for business administration students to be able to carry out their profession in English. The focus in these modules is therefore on ESP which includes business presentations, negotiations, sales pitches etc.

Notwithstanding this, from an administrative point of view, German remains the language of meetings and all correspondence throughout the university and 80% of all modules are still taught in German.

9.3.2 Academic Discipline (AD)

The UAV is the only UAS in Austria where the academic focus is entirely on business related subjects, as such it is situated firmly in the “soft-applied” category (Biglan 1973). As

described in Chapter 7, disciplinary literacy is complex, goes beyond language, and as Airey (2011: 3) states, concerns the “ability to appropriately participate in the communicative practices of the discipline”. In Chapter 7, I suggested that one can investigate it via teaching and assessment, professional and academic writing and learning styles, and as such I will zoom in on these areas for this description.

Neumann, Parry and Becher (2010: 409–413) describe the relevance in the soft-applied discipline of up-to-date, vocational practices, with a focus on formative, project-based assignments emphasising personal growth and rhetorical competency, which is reflected in study programmes at the UAV.

An der FHWien kommen Lehrmethoden und –konzepte zum Einsatz, die unserer Mission von einer praxisorientierten Hochschulausbildung entsprechen, und zwar vor allem integrierte Lehrveranstaltungen (auch mit Fallstudien und Planspielen), Projekt und Praxisprojekte (als „die“ Methode zur Herstellung von Praxisbezügen).

(FHWien der WKW, Bericht zur Selbstevaluation, Februar 2021)

[At UAV, teaching methods and concepts are used that correspond to our mission of a vocational university education, namely above all integrated courses (also with case studies and business games), projects and practical projects (as "the" method for establishing practical relevance) my translation]

Naturally, these skills come gradually, and the CC study programme is construed to deliver the basic disciplinary skills (e.g., modules in Marketing, PR, Advertising, Business Administration, etc.) in the first three semesters. During these modules, lecturers start to introduce mini-case studies and the professional external lecturers share up-to-date disciplinary practices. In terms of academic writing skills, students are required to write a Bachelor thesis, and have three preparatory modules before that to prepare them. In this way students in this discipline face a dual challenge of producing robust academic written work while also meeting a high standard of professional written work (e.g., press releases, web-site texts, etc.). This example from the UAV’s Bachelor programme in Corporate Communication further shows this:

Informed by the needs of business, the structure of the degree program is designed to:

- Promote the acquisition of core competencies,
- Stimulate lateral thinking, a flexible approach to problems and the acquisition of operational competence,
- Ensure optimal skills transfer into business practice.

(Curriculum, BA Corporate Communications, V 2.0, 2018)

As described earlier, the EMI cohort of CC is a mirror image of the German curriculum, and no additional language support is afforded to students within the programme. However, there are two modules in the curriculum which deal with English language proficiency, namely *Business Communication 1* (2nd semester) and *Business Communication 2* (4th semester) which are part of the *Common Body of Knowledge*. However, in co-ordination with the Competence Centre for Business English, the content is adjusted to the higher requirements of the English cohort, for example in the 4th semester module, students are required to review academic papers which the students in the German cohort do not cover. In the first year of implementation of the programme, an extra-curricular course for EMI students was offered by the university but after a year, it was disbanded as there was very little interest. This lack of interest among the students might be explained by the robust application process involving a computer-based test to rank students according to their intellectual, mathematic, and language skills; moreover, before the Covid-19 pandemic, students were also required to present a marketing idea and answer questions in an interview to determine their suitability to attend the programme. In addition, the English proficiency of the EMI cohort is reviewed by the admissions panel. The 34 students who are ranked the best according to the computer-based test and the presentations/interview are selected to join the cohort. As such, the students are ‘best performers’ of the applicants. For this reason, it can be assumed that the students simply do not believe they require this extra support, coupled with the well-known fact that students are reluctant to take on any extra-curricular work without due incentive.

9.3.3 Language Management (M)

The UAV is firmly seated in the business arena, where English has become a general requirement in light of globalisation (Kankaanranta & Louhiala-Salminen 2017: 311). Outside of the applied linguistic research community, ELF as a concept is hardly understood and so it may come as a surprise that the UAV recognises the difference and relevance of ELF, as this excerpt from the BA in the CC curriculum exemplifies:

Due to the English-language courses and the increased proportion of English-language modules, more international teachers will teach at FHWien der WKW. English-language modules are taught by teachers based in an international setting. **These can include experts with English as a native language, but also specialists with an international**

background. Here, we are not only thinking of specialists from abroad, but also people in Vienna with many years of international professional experience or work experience at international universities. In this context, English *must be understood as the lingua franca* that enables the exchange between students, teachers, and researchers in the academic landscape. This means that both guest teachers and professors who teach in English as well as in German are welcome.

(Curriculum, BA Corporate Communication, Chapter 9, sub point 3 “International teaching staff”, my emphasis)

This laudable objective is a reality as the overview of the nationalities of EMI lecturers in Table 9.4 exemplifies:

Table 9. 4: Overview of CC study programme nationalities of EMI lecturers (academic year 2019)

	Number of Lecturers								Number of lecturers	Percentage NS	Percentage NNS
	Austria	Australia	Bulgaria	Ethiopia	Germany	Italy	United Kingdom	United States			
Semester 1	3	1	1		2	1	1	1	10	30%	70%
Semester 2	2	1	1	1	2		2	1	10	40%	60%

The UAV prides itself on the high number of ‘practitioner’ lecturers who can deliver the latest developments in the business disciplines; two thirds of all lecturers are such external lecturers. I am personally responsible for recruiting external lecturers for the programme and make a point to all new lecturers that they are not expected to teach with ‘native level English’ but rather by using ELF, underlining the pedagogical role of English in the EMI context. This point is also emphasized in the first week of the study programme in the first semester during the student two-day introductory workshop where students undertake team-building activities and learn how the university functions. During this workshop, I also explain to students the concept of ELF and the communicational role of English in the EMI classroom. Nevertheless, students are advised to avoid code-switching as much as possible, as there are students in the cohort who do not speak German.

9.3.4 Agents (A)

The ‘agents’ or stakeholders relevant for this investigation are mainly the EMI lecturers and students. As can be seen in Table 9.4, the lecturers are a diverse group of individuals, some are external professionals who choose to teach in order to complement their work as consultants in the industry, others work for international organisations, have time and are keen to impart their knowledge to young people. There are others still who are ‘internal’ i.e.,

work full or part time for the university. Before the EMI cohorts were introduced, internal lecturers who were to teach in the EMI programme were offered the chance to attend the *Academic Teaching Excellence, English as a Medium of Instruction* course offered by the British Council. The course outline can be viewed in Table 9.5.

Table 9. 5: Overview of EMI lecturer preparation course

Programme Outline

	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5
9-12.30 (with coffee breaks!)	Welcome and Introductions Conceptualizing EMI: what are the challenges? What are the different EMI settings? Observation of EMI lecture Observation of EMI seminar	Debrief on article read for homework. Observation of online lecture: NS tutor; NNS tutor to mixed students. Focus on pronunciation; intonation; discourse markers etc. Preparation for first practicum	Setting up brief group tasks in lectures; reducing tutor talk time Assessing student needs: student participation culture or language? Student elicitation: what might impede student contributions?	Seminars (observation or reading of transcripts) Creating an interactive learning community: rules of engagement Brainstorming: collating; feeding back; moving on	Supervisions and tutorials: observe video (or read two transcripts) Oral feedback strategies & language needed Written feedback strategies & language needed
12.30	Lunch	Lunch	Lunch	Lunch	Lunch
13.30-17.00 (with coffee breaks!)	Modification of language input: focus on lexical items; focus on explanations Modification of interaction: in lectures; in seminars; in supervisions Marshmallow Challenge Self-study: article on EMI	First practicum Micro teaching: lecture Peer and tutor feedback	Second practicum Micro teaching: lecture Peer and tutor feedback	Third practicum Micro teaching: lecture Peer and tutor feedback	Fourth practicum Micro teaching: lecture Peer and tutor feedback Concluding thoughts Course evaluation

As such, it is apparent that the university was aware of the extra challenges that teaching in English would pose for lecturers. Such courses have since been extended to include training in areas such as *Multicultural Classroom, Competent & Confident: Get Comfortable Teaching Content in English*, which were offered in the summer semester 2021, to both internal and external lecturers.

The second main group of agents in this investigation are the students in the full-time EMI programme. The goal of the university was to have a multi-cultural cohort with at least 20% non-German speakers; in the first three intakes, this has not quite been reached as out of around 35 students approximately five per cohort fit this category. The students are thus mostly Austrian with ambitions to work in international organisations. The focus group investigation serves to shed light on their perceptions of the content learned, their motivations for joining the programme as well as their impressions of teaching practices experienced.

Naturally, there are a lot of periphery stakeholders at the institutional level who indirectly have an impact on this investigation. Academic Experts are responsible for the recruitment of external lecturers and as specialists in their areas, take the responsibility for curriculum development in the modules they are responsible for. My role as academic expert is slightly different as I have more of a bird's eye view of all of the modules for the whole programme and I also have a voice in lecturer selection, having the responsibility from the EMI/International perspective.

The Academic Board (*Kollegium*) meets three times per semester and is represented by the director, six study programme directors, six representatives of teaching and research staff and four student representatives. The board has many quality assurance roles, including election of management and deputies, overseeing, and approving any changes or new study programmes, the strategic further development of teaching, research and internationalisation activities and generally dealing with complaints. The study programmes are revised every five years and any changes have to be approved by the board; any changes in language of instruction would likewise have to be approved by the board. Naturally, decisions on any new programmes or language policy are also reviewed by the Executive Management and the Chief Executive Officer, who has an interest in ensuring the internationalisation strategic goals are met.

Other agents at the macro level will not be relevant for this investigation. These agents include the Ministry of Education in Austria, employers and the Erasmus organisation.

9.3.5 Practices and Processes (PP)

At the UAV the “meaning creating activities” (Dafouz and Smit 2020: 56), can be conceptualised in terms of didactic practices and the significance of internationalisation.

High-quality teaching is a top priority at the university and this importance is manifested in many ways. For example, both internal and external staff are offered a plethora of voluntary training programmes, ranging from courses offering short deep dives into such topics as, for example, *Designing Rubrics*, *Virtual Presentations*, *Team and Learn online with Zoom*, *Constructive Alignment*, to more intensive programmes covering five days, e.g., *Hochschuldidaktik* [Higher Education Teaching Practices]. Students evaluate the

lecturing practices of all modules every semester and those lecturers who do not fare well are told where the issues lie, and if there is no improvement, the lecturers will be replaced. All internal teaching staff are encouraged to participate in partner university *International Weeks* to gain experience teaching in the international environment. However, this is also a KPI of each department, as the number of teaching units taught abroad is tracked with the view to reaching a given target. External lecturers have to go through an approval process before they are allowed to teach at the university, involving achieving a certain number of points for relevant experience. Notably, those who teach in English and are classified as a NS are given an extra point, although this runs against the ELF policy as described earlier. Another target concerns the number of teaching units of lecturers from HEI from abroad, and internal lecturers are encouraged to accommodate these guests within the modules.

The university does not coerce any lecturer to teach in the English-taught programme or English-taught modules; on the contrary, the lecturer should feel comfortable and confident in doing so. To this end, lecturers are offered one-to-one coaching by an English language teaching professional. However, as most of the courses are still taught in German, this has not been a problem for any lecturer to date, as there are still plenty of courses where they can teach in German.

All lecturers are autonomous in deciding how they deliver the content of their module as they see fit if the learning outcomes as described in the module descriptions are met at the end of the semester. In this way, lecturers can choose if they prefer to teach more formally in the traditional lecture setting, or to utilize small group activities e.g., case studies to impart knowledge. Naturally, with the vocational focus, the use of case studies and real-life examples is welcomed by the students and university management alike.

9.3.6 Internationalization and Glocalization (ING)

As discussed in Chapter 8, the dimensions PP and ING are very close, and *Internationalisation* could be discussed from the *Processes* viewpoint, too. However, it will be addressed here.

A decision was made to create a mirror image of the German-taught programme, as this was deemed less risky in terms of re-accreditation. UASs are required to report any

significant changes in the curriculum to the quality assurance body; with just the change in instruction medium, the full process of accreditation is not required. However, a thorough needs analysis was carried out before the decision was made and it was clear that the programme would be just as popular and over-subscribed as the German-taught cohorts. At the time of the launch of this programme, a further curriculum change was implemented for the full-time German-taught cohort in that all students from 2018 are now required to spend one semester abroad. The implication of this was that the university would be required to accept more incoming students, and so having more programmes taught in English served to solve this additional need, as most incoming students cannot attend modules in German.

The launch of the degree programme Corporate Communication was a key element of this *Internationalisation* strategy, as described in Chapter 3.3, and EMI programmes are often crucial for universities' internationalisation activities. This is no different for the UAV. The BA programme Kommunikationswirtschaft [Corporate Communication] was launched in 2000, and up until 2018, there were three cohorts taught in German, each with approximately 35 students. One is called the 'full-time' cohort, where the classes are timetabled during the day from Monday to Friday and the students typically come straight from high school. The second cohort is part-time; the classes are timetabled from 18:30-21:45 from Monday to Friday with more mature students who normally work during the day. The third cohort was originally called the *Block* cohort, which was a mixture of the previous two; the classes are time-tabled on Monday and Thursday during the day and on Tuesday and Wednesday evening, as these students can work (mostly part-time) or dedicate their whole time to their studies. It was decided that this third model would be switched to the "English-taught" cohort (ETC), as it is often internally referred to. All three cohorts are over-subscribed with over approximately 300 students applying at the beginning of the application process (registration online) per cohort of around 35 students.

With the launch of the programme there was a genuine desire for the ETC cohort to be multi-cultural and to achieve the goal of 20% non-Austrians, and so a communication campaign to target applicants from abroad was conceived. This involved attending student recruitment fairs in the Netherlands, Hungary and in the Czech Republic, and creating social media advertisements in these target areas.

Another key aspect of the UAV internationalisation strategy is the value given to international research co-operations. The department has two full-time and two part-time members of staff who are researchers and are encouraged to co-author papers with international partners and attend conferences abroad. Furthermore, short-term mobility is encouraged greatly both for teaching staff and support staff.

9.4 Summary

This chapter commenced with a discussion of the differences between RUs and UASs in Austria highlighting that UAS are mainly different due to their vocational focus, smaller cohort sizes, prescribed timeframe for studying as well as the requirement to partake in a mandatory internship. RUs, as the name implies, have more of a focus on research and are mostly larger in size.

The focus then shifted to a review of EMI in Austria, as the last survey carried out by Wächter and Maiworm was in 2014. The small-scale desk-top internet research I undertook showed that EMI is still more prevalent in RUs and at Master level. There does appear to be some growth overall in ETPs, although the method of data collection is different and so this comparison should be considered with caution.

The final part of this chapter took a closer look at the UAV using the ROAD-MAPPING framework as a point of access. The framework was used to shed light on the importance placed on English teaching within the UAV as well as a description of the type of EMI modules offered. Insights were shared regarding how the UAV disciplines are conceptualised in teaching, with an explanation of the rigorous admissions process candidates have to pass to be accepted on the programmes. The UAV recognises officially that the English used in the EMI programmes is ELF and does not expect native speaker proficiency, while also offering various courses to support lecturers when required. The lecturers are mostly freelancer practitioners. Students of the EMI cohorts are predominantly Austrian, although there is a concerted effort to recruit international students.

10 Research approach of this investigation

This chapter commences with a recapitulation of the research questions and elaborates the aims and objectives. It then discusses the methodological options and choices taken. Finally, the steps taken in the pilot study undertaken in the summer semester of 2020 and lessons learned from it are detailed.

10.1 Research aims and questions

The overarching research question for this investigation is as follows:

How does EMI affect academic performance in corporate communication content classes in the BA programme at a university of applied science?

The following are supporting sub-research questions:

RQ1: To what extent are student learning outcomes in EMI and in L1 medium courses different?

RQ 2: To what extent are lecturing practices different in EMI and L1 in business studies?

RQ 3: What is the relationship between learning outcomes and lecturing practices?

These research questions and the investigation ensuing from it will fill a gap in the research into HELO in the EMI classroom. The findings in my literature review confirmed that to date research has been inconclusive as to whether learning content through another medium of instruction other than the L1 affects learning outcomes (see Chapter 6.3). The empirical design of this investigation will investigate whether if there is a direct link between lecture delivery in the L1 and EMI and student learning. The empirical study is divided into two parts – a contrastive analysis of L1 and EMI lectures which involves conducting a pre-and a post-test of lectures delivered on the same topic by the same lecturers in both languages. These lectures are additionally analysed linguistically with a focus on questions posed, CDFs utilized, and other rhetorical devices implemented. By virtue of a rich qualitative analysis of

interviews with lecturers and focus groups with students, additional perspectives will be captured to facilitate a robust and in-depth phenomenological enquiry.

To the best of my knowledge, this will be the first study to directly compare content learning outcomes of EMI lectures to those of L1 lectures, with an attempt to identify lecturing practices which may have helped or hindered learning. Furthermore, the study will shed light on beliefs about teaching in the EMI classroom compared to actual practices.

This study will help university managers' design training programmes to help lecturers in developing optimal language and rhetorical strategies for delivery which optimizes student learning. Furthermore, the scientific contribution will add to the growing body of studies using the ROAD-MAPPING framework for assisting in EMI investigations. This project uses ROAD-MAPPING in a unique way, in that it serves as a structure for reviewing the context as well as as a guide for first-cycle coding. Furthermore, by analysing natural language in use in the lecture theatre, specifically the use of CDFs, questions and repetitions, and by endeavouring to link those practices with student learning, the investigation will add to the understanding of the value of educators being aware of linguistic choices in teaching. A thorough review of the types of CDFs used in the context of business education at tertiary level is novel, as this is the first time a direct connection with student learning is presented.

10.2 Research design

As a faculty staff at the UAV, I was in the fortunate position of having direct access to a considerable amount of data and had some difficult decisions to make about which data would best serve my research questions.

As this phenomenological approach aims to capture the experience of the phenomena of EMI in tertiary settings and the impact on content learning outcomes, a mixed-methods approach was selected. The mixed-methods approach, using both qualitative and quantitative data collection methods, is sometimes regarded as problematic, as these traditions stem from different epistemologies and are underpinned by different research paradigms. However, a distinct advantage of using a mixed methods approach is that it enables a researcher to gain a better understanding of the research problem at different stages and to view it from different angles and perspectives (Riazi 2016b: 189). The enquiry

is founded on an inductive approach, or bottom-up design, as hypotheses were not predefined (Trochim & Donnelly 2022). Qualitative methods offer an effective way of explaining observed behaviour, and some of the most well-known tools for assessing these are interviews and focus groups, which were implemented in this study. In this particular case, lecturers were interviewed to probe their beliefs and perceptions about EMI lecturing, and at the same time to determine whether these corresponded with actual practice. Furthermore, students' perspectives were included through the implementation of focus groups, with a particular focus on their impressions of lecturing practices and their impact on their own learning.

Many researchers in educational linguistics have used the discourse analysis of natural language in classroom settings as a method for various linguistic enquiries. Although discourse analysis is generally categorized as a qualitative method, this is a disputed topic in the applied linguistic research community; for example, when discourse analysis is used to measure frequency of occurrences, it could be argued that the method is then more quantitative in nature, as instances are often tracked numerically. Gee (2014: 20–21) proposes that the main aim of discourse analysis is to enquire about the relationship between language and context, bearing in mind that interpretation has to be done with due consideration of participants' identities and contextual roles. Contrastive linguistics is normally concerned with the analysis and description of the similarities and differences between languages and generally focusses on describing new or partially recorded features of grammar, lexis or semantics (Enghels, Defrancq & Jansegers 2020: 10).

Applied linguistic researchers in the field of EMI have used contrastive discourse analysis in their studies of natural language in classroom or lecture theatre settings to review the frequency of types of questions posed (e.g., Chang 2012; Dafouz & Sánchez García 2013), the use of discourse markers (e.g., Dafouz & Nunez 2010; Martín del Pozo 2016), and repetition (e.g., Dafouz & Llinares 2008; Thøgersen & Airey 2011). Speed of delivery has also been a subject of enquiry (e.g., Aguilar & Rodríguez 2012; Arkin & Necdec 2015; Thøgersen & Airey 2011) as has pragmatic features (e.g., Gotti 2014; Sánchez García 2016) as well as the use of CDFs (e.g., Dalton-Puffer *et al.* 2018; Doiz & Lasagabaster 2021). Having a mirror image of an L1 programme in English, being delivered at the same time by the same lecturers, offered an

ideal opportunity to conduct a contrastive discourse analysis. The selection of which types of discursive aspects under analysis will be elaborated at length in Chapter 11.1.

In EMI, content learning outcomes have been the subject of some enquiry, although not at the fore as language learning outcomes. Different authors have measured content learning outcomes in a variety of ways. A comparison of exam grades coupled with questionnaires was undertaken by Dafouz, Camacho and Urquia (2013), who advised caution in interpretation when they state that assessment is “only one aspect of the complex set of variables that configure student performance in any educational setting” (Dafouz, Camacho & Urquia 2013: 234). Also investigating learning outcomes, del Campo et al. (2015) used a paired design, matching students in the different LOIs as closely as possible in terms of entrance grades and other demographic data. To best answer the research question on content learning outcomes in EMI compared to L1 instruction, I needed to consider an investigation with a suitable methodology to isolate noise from external factors such as age, gender, conscientiousness, and overall academic ability. The experiment conducted by Joe and Lee (2013), who implemented a pre- and a post-test to isolate what students had understood and learnt in a medicine lecture in South Korea was considered suitable for part-replication, as a pre- and a post-test. As Rogers and Révész explain a quasi-experiment does not require a control group but includes a comparison group. The most common type of design is the pre-test/post-test control group design where the x is the intervention (2019: 134-5) as can be seen in Figure 10.1.



Figure 10 1 Quasi Experimental Design, adapted from Rogers & Révész (2019: 135)

The decision was made to design an identical test or quiz in German and English based on the lecture content. The independent variable for the present study is learning in EMI whereas the dependent variable is the content recall of the lecture.

My literature review further informed me of several studies undertaken to link rhetorical devices to improved learning outcomes (Sánchez García 2016; Suviniitty 2012a) and as such my aim was to uncover relationships between improved post-test results and

rhetorical devices used by the lecturer. These lectures where the pre- and post-test experiment was conducted were analysed linguistically to explore if there were any differences in content and lecture delivery style and whether this difference may have had an impact on the post-test results and hence student learning. Finally, grade data covering all of the modules in the entire degree programme for the students graduating in summer 2021 were analysed and statistically complement the findings.

In this study, the data collected is reviewed through the triangulation of multiple data collection methods. Triangulation overcomes the limitations of one data collection method by using another data collection method in conjunction and thus increases the validity and reliability of the findings. Furthermore, to increase the internal validity (plausibility) of the study, a mixed-method component design was used. Caracelli and Greene (1997: 22) explain that this combination of different method components occurs during discussion of the findings. For example, statements made by the four lecturers in the interviews are compared to their actual practice lecture to review if there was a mismatch between their teaching beliefs and their practices. Furthermore, relevant statements uttered by the students in the focus groups are used to shed light on the comparison of the overall grades of the entire degree programme in an attempt to offer some explanation to the data. To further increase the reliability (consistency) of the study, direct quotations are used in the presentation of the findings.

Table 10.1 presents an overview of the research questions and the corresponding data which will assist in answering them.

Table 10. 1 Overview of research questions and data

Research Question	Data set	Data analysis
To what extent are student learning outcomes in EMI and in L1 medium courses different?	Multiple choice / short answer test at the beginning and end of the lecture. 161 (GTC)/118(ETC) pre- and 153(GTC)/99(ETC) post-tests ***** Overview of grades for the whole cohorts (German and English taught) or semester 1-6 ***** Focus group discussion with 4th and 6th semester students to glean insights into student perceptions of learning achievements	Descriptive analysis of data using SPSS Statistical analysis of data using SPSS Qualitative analysis (Transcription, coding Atlas Ti, analysis)
To what extent are lecturing practices different in L1 and EMI in the BA degree program of Corporate Communication?	Transcription and Analysis of L1 and EMI lectures 2nd Semester (February 2021) Module: Online Communication; PR ***** Semi-structured interviews with 11 lecturers who teach in the EMI program (but mostly have experience of teaching in their L1)	EMI and L1 : approx. 720 mins of lecture. Both: Analysis of themes
What is the relationship between learning outcomes and lecturing practices?	Review of transcribed lectures to identify possible features which may have an impact on the learning outcomes.	Thematic content analysis

Prior to commencing the pilot study in January 2020, ethical clearance was sought from the University of Vienna's ethics commission. A detailed description of the research questions and design was submitted with explanations of steps taken to ensure anonymity and safety of data. This description further detailed the participants involved in the study.

10.3 Pilot study and preparation

In order to establish whether data collection procedures were viable, I conducted a pilot study in February 2020. There are only a few lecturers who deliver the same content in both languages at the UAV. The lectures in the module Online Communication which are delivered by anonymised lecturer 1 were used for the pilot study. These lectures are held just once a year, always at the beginning of the summer semester in February. Lecturer 1 is a senior researcher at the UAV and very open to research investigations. I prepared the pre- and post-test questions in collaboration with the lecturer and based them on the content taught in the lecture. I then printed them out to conduct the test in paper form. My original intention was to pair the tests anonymously, so I coded the pre-test as 1 and the first student in the first row as 1, so this student got the test 1.1. The post-test which this student completed was 2.1 etc. I recorded the lecture using a video recording device and as back-up I audio-recorded on my smart phone. I was present throughout the lecture to ensure that the recording worked. In retrospect, the video recordings were not necessary for this investigation as the audio recording on the smart phone was of a very high quality and the transcription could be done using this recording.

For the pilot study the transcript was only analysed superficially, however, the analysis was sufficient enough for the researcher to use it as guidance for defining the actual investigation. A sample of the data reviewed can be found in Table 10.2.

Table 10. 2 Excerpt from analysis of pilot study lectures, February 2020

Content	English	German	Comments
	19,354 words "ok" 423 times	12,041 words "ja" 374 times	
What do people do with new media?			
What does new media do with people?	Start at 2.01	Start at 3.53	
Example of working at Facebook	3.58-5.45	5.36-7.02	
Is the internet a medium?	6.24	12.22	Lecturer spends 5 minutes in the German cohort sharing an example political parties, long explanation of what is behind it.
First mentions 1 st order and 2 nd order media	7.43	13.34	
Have you ever read about the Arpanet?	10.26	18.37	
Timothy Berner Lee	11.52	22.00 approx	
Video example	13.56-16.10	Ends 25.28	
Student should note about first use of internet	Approx. 3 mins 21.42	3 minute pause – start at 30.34	

I extracted the answers to the pre- and post-test of the lectures in German and English into the SPSS software with view to doing a statistical analysis. However, this analysis was quickly deemed unnecessary due to the small size of the pilot study. So, I transferred the data to Excel and was able to do an adequate analysis for the pilot study, an excerpt of which can be viewed in Table 10.3. Due to the small data set, no sophisticated statistical analysis was attempted.

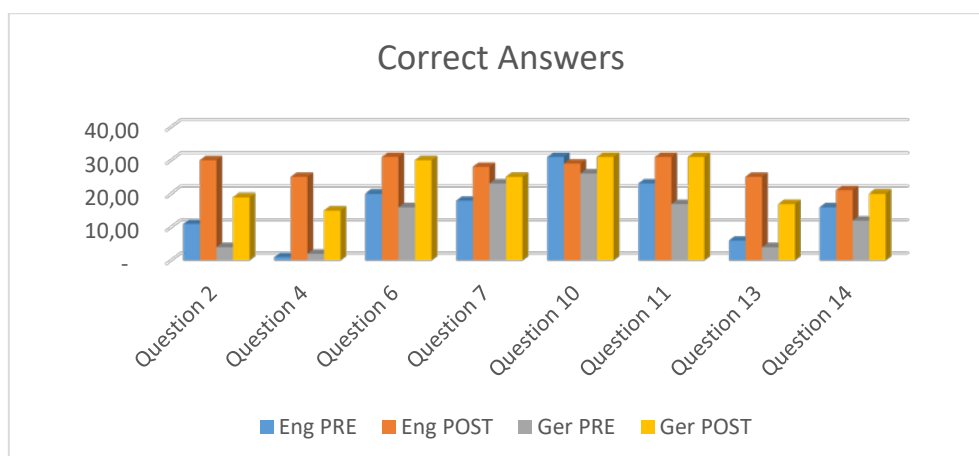
Table 10. 3 Excerpt from analysis of pre and post-test, February 2020

	Eng PRE	Eng POST	Ger PRE	Ger POST
Number of Correct Answers	11,00	30,00	4,00	19,00
% Increase		273%		475%
Number of Correct Answers	1,00	25,00	2,00	15,00
% Increase		2500%		750%
Number of Correct Answers	20,00	31,00	16,00	30,00
% Increase		155%		188%
Number of Correct Answers	18,00	28,00	23,00	25,00
% Increase		156%		109%
Number of Correct Answers	31,00	29,00	26,00	31,00
% Increase		94%		119%
Number of Correct Answers	23,00	31,00	17,00	31,00
% Increase		135%		182%
Number of Correct Answers	6,00	25,00	4,00	17,00
% Increase		417%		425%
Number of Correct Answers	16,00	21,00	12,00	20,00
% Increase		131%		167%
Total Number of Correct Answer	126,00	220,00	104,00	188,00
		175%		181%

The analysis helped me to filter out the questions, which were either too easy or too long; I noted that for the actual data collection I would have to avoid open questions as far as possible, which took too much valuable lecture time to answer. An overview of the questions posed in the pilot study can be reviewed in Appendix 2. My learning from this was that for the actual test the necessary open questions would be posed with the requirement for the students to note just three key words as an answer. Similarly, I noted that question eight was too easy and question thirteen was too susceptible to guessing. Questions three and five were too close to each other. Furthermore, I noted that I should delete the request for demographic data from the post-test.

The pilot study indicated that although the English-taught cohort (ETC) knew more correct answers in the pre-test (N=126), the German-taught cohort (GTC) answered more questions correctly. However, in the post-test there is a large gap in the number of correct answers; the number of correct answers in the ETC is 220 compared to 188 in the GTC.

Table 10. 4 Pilot pre- and post-test results



I conducted one interview in July 2019 with an external lecturer who had decided to quit teaching to concentrate on her full-time career in the marketing profession. She had taught at the UAV for several years and had taught in the summer semester 2019 for the first time in the ETC so this was deemed an excellent opportunity to gain some valuable insights while the experience for her was still fresh. It was a semi-structured interview and was a useful guide for the interviews in summer semester 2021 and there were no changes necessary (see Appendix 8). I did not carry out any focus groups, as I did not consider this necessary for the pilot study as I am well practiced in conducting this type of research.

The pilot study was undertaken in February 2020 and the plan for the actual investigation was to be exactly one year later. The Covid-19 pandemic struck in early 2020 and at its peak in March 2020 saw 167 countries implementing country-wide closures of education institutions, impacting over 82% of global learners (Unesco 2021). This was no different in Austria and I was forced to re-consider my plans due to the continuing online teaching in summer semester 2021. The main difference was that lectures were held online, and I was forced to conduct the investigation in this online format including the lectures, focus group discussions and interviews. Despite the challenges, however, this situation allowed me to be more efficient in my data collection which will be discussed at length in the following chapters. The following chapter explains the exact steps taken in the contrastive part of the data collection and Chapter 12 describes the qualitative study.

11 Main study - contrastive methods

As described earlier, contrastive linguistics is normally used when comparing similarities and differences between languages (Enghels, Defrancq & Jansegers 2020: 10). The contrastive methods used in this investigation encompass three different data sources. Firstly, a pre- and post-test are carried out on four lectures taught in German and the same four lectures taught in English. Secondly, the four lectures where the pre-and post-tests were conducted are utilized for a linguistic analysis comparing and contrasting the use of rhetorical devices. Finally, a comparison is offered of the actual grades from all the modules of the graduating classes of 2021.

11.1 Procedure and data set – lectures

Although the pilot study was carried out with just one lecture and lecturer, the decision was made to conduct the actual study with all of the lectures that were taught in English and German by the same lecturer who I had at my disposal in summer semester 2021 so that I would have a larger data set. As such, I approached the additional three lecturers at the end of the winter semester to see whether they would give their consent for this detailed analysis. Fortunately, the lecturers were all interested in my research and open to this investigation. Indeed, they showed a fervent interest in finding out if a detailed investigation would show that they delivered their lecture differently in English.

Once I had their commitment, I requested them to send me their PowerPoint slides, which is a guide and indication of the content they planned to cover in their lectures. This information served to inform my first draft of a content test. This test draft was further revised with input from the course lecturers. Following Hansen and Jensen (1994), I included *global* and *detail* questions. The aim of the *global* questions is to find out if students understand the main points of the lecture, and the *detail* questions aim to see if the students could extract important details (Hansen & Jensen 1994: 248). A mixture of such questions contributes towards the content validity of the investigation. Here follow some examples from the lecture on *Online Communication*:

Global Question:

Do you think that the growing flow of information increases or decreases social inequality?

- a) Increases (correct answer)
- b) Decreases

Detail Question:

Devices which store, transmit and receive information are referred to as:

- a) First-order media (correct answer)
- b) Second-order media
- c) Third-order media

The complete tests of all four lectures in English can be reviewed in Appendices 4-7. Once the lecturers had agreed on the question content and number, I translated them into German and likewise requested their approval. Additionally, at the end of the post-test, an evaluation survey to capture students' perceptions of how the lecture was delivered was included. For these attitude questions, a seven-point Likert scale was used.

All the lectures were delivered online via the video conferencing tool *Zoom*. The professional *Zoom* account offers a feature where the video and audio can be recorded and saved in the cloud provided by the university. The surveys were conducted using *Microsoft Forms*, which creates an Excel spreadsheet of the data.

I joined the online session at the beginning of the lecture and the lecturer introduced me. I was invited to explain my research and my request. The first step was to obtain ethical approval, which was done by copying and pasting a link with the participant information sheet and consent form [*Einverständniserklärung*] into the *Zoom* chat. Students were requested to agree to the recording of the lecture. I made it very clear that the object of analysis was the lecturer and not the students, and anything they said would not be analysed. The approval took less than a minute and was naturally not anonymised. Subsequently, I explained my research verbally and added a link to the pre-test to the chat. In order to ensure anonymity, I requested that the students to use the same 'code' in their pre- and post-test, which I requested them to create by combining the first two letters of their hometown and the first two letters of one of their parents. This was done to try to

avoid students forgetting which code they had selected. The time taken for the pre-test ranged between four and six minutes and I could observe in real time how many students had completed the tests. I left the session and re-joined at the end of the lecture to be present for the post-test, which took a little less time to complete than the pre-test. I did not deem it necessary to be present throughout, as the lectures were being video recorded. Furthermore, I did not want to impact lecturer or student behaviour due to the observation phenomenon reported as the Hawthorne Effect (Riazi 2016a: 132).

After video and audio recording the lectures, I used auto-captioning software to produce a first-draft transcript. This is a controversial matter in the research community, as some researchers argue that transcription has to be done by the researchers themselves so that they engage more with the data and do not omit or overlook anything. Bokhove and Downey (2018) challenged this view in their investigation by comparing manual and an automated transcription using the software *Turnitin* and found that it produced a “reasonable first version of the transcript”, which saved a substantial amount of time (Bokhove & Downey 2018: 10). A similar study was replicated by Da Silva (2021: 5), who found his experience of the method “overwhelmingly positive”; compared to the normal transcription time ratio of 5:1 for manual transcription, the amount of time saved was significant, as it was cut down to 3:1. As I am a new researcher and very open to new methods, I decided to test this. The professional *Zoom* account provides an automated transcript using voice recognition technology free of charge. However, I soon discovered that this service is only available in English and so for the German lectures I used the paid commercial internet provider *Happyscribe*. I was very happy with the first drafts from both *Zoom* and *Happyscribe*; they naturally needed further editing, but the automated transcript technology certainly saved a considerable amount of time.

I listened to the lectures again and corrected mistakes in the auto-transcription (first draft) and then listened to the lecture for a third time, adding any notable discursive features, which were coded using an adaption of the VOICE transcription codes (see Table 11.1). As my investigation focusses on lecturer discourse, details of non-verbal aspects (e.g., facial expressions) and overlaps were not required, and only significant instances of stress and intonation were noted. Grammar mistakes and inaccuracies were not corrected. All

participants were allocated pseudonyms in the transcripts. As proposed by Gee (2014: 143), being scrupulous in detail in this way is important to ensure validity in discourse analysis.

Table 11. 1 Transcription Codes

Description	Code
Rising intonation	?
Falling intonation	.
Emphasis	CAPITALS
Repetitions	Transcribed as repetitions
Laughter	@@@
Uncertain transcriptions, intelligible speech	???
Non-English speech	e.g., German <L1de> bei der Firma <L1de> or Bold

Following aspects noted in transcription: Fast, Slow, Loud, Soft

Following disregarded: Overlaps, Lengthening

The process of deciding on codes to use when analysing the lectures was challenging. I implemented the coding process as advocated by Saldaña (2013), who describes the first-cycle coding as a heuristic, iterative, cyclical exercise (Saldaña 2013: 7). As I was contemplating the first-cycle codes, I had my research questions in mind and reviewed which code types would be the most useful.

The top-down codes drew on insights from my literature review. Of central importance were the findings that scholars have linked improved student content understanding and assimilation to certain didactic practices and lecturer discourse strategies. Young's research (1994: 174–175) looking into the macro-structure of lectures showed that when students are aware of the patterns in lectures as highlighted by the lecturer, this “greatly assist(s) students”, as the schema help them to predict and so understand where the content fits in. The construct of Cognitive Discourse Functions (CDFs) conceived by Dalton-Puffer (2013) aims to “highlight how disciplinary thought processes are handled in classroom talk” (Dalton-Puffer 2013: 232). It also seeks to provide insights into educational practice and “communicat[ion] across subject boundaries” as well as into how “cognitive development is scaffolded” (Dalton-Puffer 2013: 242), which I considered would be highly relevant in my analysis. These labels offer a useful heuristic tool for analysis. An overview can be seen in Table 11.2.

Table 11. 2 List of CDF types and underlying communication intentions (Dalton-Puffer 2013: 234)

Label	Subcategories	Communicative Intention
Classify*	Compare, contrast, match, structure, categorize, subsume	I tell you how we can cut up the world according to certain ideas
Define	Identify, characterize	I tell you about the extension of this object of specialist knowledge
Describe	Label, identify, name, specify	I tell you details of what can be seen (also metaphorically)
Evaluate	Judge, argue, justify, take a stance, critique, recommend, comment, reflect, appreciate	I tell you what my position is vis a vis X
Explain	Reason, express cause/effect, draw conclusions, deduce	I give you the reasons for and tell you cause/s of X
Explore	Hypothesize, speculate, predict, guess, estimate, stimulate, take other perspectives	I tell you something that is potential
Report	Inform, recount, narrate, present, summarize, relate	I tell you about something external to our immediate context on which I have a legitimate knowledge claim

***Note: the code used in this data set is CATEGORIZE as CLASSIFY was re-labelled by Evnitskaya and Dalton-Puffer in 2020 as this has a larger semantic range and includes CLASSIFY and COMPARE (Evnitskaya & Dalton-Puffer 2020: 2)**

My literature review also showed that when lecturers use questions as part of their discourse, student content learning is improved. Investigations reviewing the use of questions have been undertaken by many researchers (e.g., Bamford 2005; Chang 2012; Dafouz & Sánchez García 2013; Gotti 2014; Morell 2004; Suviniitty 2012a) and findings have been conclusive that the use of questions is highly significant in lecture comprehension. The investigation undertaken by Dalton-Puffer (2007) at school level reviewed frequency and use of the following types of questions: *Display* (where the lecturer has primary knowledge, student secondary), *Referential* (referring to subjective experiences), *Open* (longer answers), *Closed* (yes/no answers). She also adds a general category which she describes as those questions where some kind of specific information is sought, e.g., facts, opinions, reasons or explanations (Dalton-Puffer 2007: 97–100). This was a useful typology of questions which I also decided to use as codes.

The insights offered by Young (1994), and Dalton-Puffer (2007, 2013) serve as a substantial enough framework for my heuristic analysis of lectures and so I integrated these into my first-cycle codes (see Table 11.3). The codes were considered along with the guide proposed by Saldaña (2013: 83) to structure the codes. Following this, he suggests that *Structural* codes help to segment data and are often the foundation work for later more detailed codes, which seemed an optimal category for analysing the different phases of the lecture. *Taxonomic* codes are highly relevant when an index of themes in the data is sought

(Saldaña 2013: 159), and *Descriptive* codes offer a method for keeping an inventory of topics (Saldaña 2013: 88), which proved to be useful for designating the codes.

Table 11. 3 First-Cycle Codes, April 2021

Code Type	Parent Code	Child 1	Child 2	Child 3	Child 4	Child 5	Child 6	Child 7
Structural Codes/Simultaneous Codes	Macro Marker (M1M)	Discourse Structure Phase (M1M-DS)	Main Content Phase (M1M-ContentP)	Interaction Phase (M1M-Inter)	Example Phase (M1M-Ex)	Conclusion Phase (M1M-ConclP)	Evaluation Phase (M1M – Eval)	
Taxonomic Codes	Cognitive Discourse Function (CDF)	Classify (CDF – C)	Define (CDF – Def)	Describe (CDF – Des)	Evaluate (CDF – Eval)	Explain (CDF – Expl)	Explore (CDF – Explr)	Report (CDF – R)
Descriptive Codes	Discursive Aspects/ Questions (DAQ)	Referential (DAQ-Ref) Unknown info/experience	Display (DAQ-Dis) Check if students know material	Rhetorical (DAQ-Rhe) No response expected	Indirect (DAQ-Ind) Action required e.g. thumbs up	Closed (DAQ-CI) Yes/No Answers	Open (DAQ-Op) Various info sought	Student (DAQ-St)
Descriptive Codes	Discursive Aspects/ (DA)	Metatalk (DA-Meta) Talk about talk	Repetition (DA-Rep)	Paraphrasing (DA-Para)				

Notably, in addition to the five categories of questions proposed by Dalton-Puffer, I added the codes for rhetorical questions, as researchers have shown these to be highly significant in lecture comprehension (e.g., Suviniity 2010). Although rhetorical questions could be categorized as Display questions, I decided to mark these types of questions separately to see the frequency and relevance in the lectures under review. Additionally, questions posed by students were noted, as interaction questions often require a lecturer to repeat, explain, and paraphrase content, which inevitably leads to better comprehension. It is for this reason that I added a further parent category, namely the Discursive Aspects. While coding the lectures, I also added the coded utterances of Confirmation, used when lecturers congratulated or confirmed a student answer, and Emphasis, used when lecturers placed particular importance on content. Furthermore, I coded a sub-category to REPORT, DESCRIBE AND EXPLAIN as Example, as in these particular lectures the content was dotted with examples throughout and there were not particular lengthy “M1M example phases”, and so this code was made redundant. As proposed by Dalton-Puffer and Bauer-Marschallinger (2019: 42), utterances were not coded according to specific keywords, but rather when the utterances were intended to communicate the cognitive function. It further transpired that the code “Metatalk” was not comprehensive enough to capture important aspects and insights that this category could reveal. After reviewing my literature once again and particularly the study by Dafouz and Núñez (2010: 219), a decision was made to replicate some of the categories used by them in their investigation:

Openers	Formal Beginning of a class
Sequencers	Mark particular positions within a series
Topicalisers	Indicate introduction of new topics / topic shifts
Prospective Markers	Refer forwards to future topics
Retrospective Markers	Refer backwards to previous topics
Closing Markers	Indicate the formal closing of the lecture
Recapitulation Markers	Summarise the main ideas in the lecture

The validity and reliability of codes was checked in the following manner. I discussed my first cycle codes with my dissertation supervisor, and these were tested by coding the Lecture delivered by Lecturer 1 in German and in English. To increase the reliability of measures, it is advised that several raters apply the first-cycle proposal and then calculate the ratio of those items agreed upon to those in disagreement (Chaudron 2012: 24). Saldaña (2013: 35) suggests that this inter-coder agreement should be around 80-90%. As such, I co-coded with a PhD candidate to carry out this inter-rater reliability check. After explaining my research area and questions and top-down codes, we coded the first 15 minutes of a lecture, then she coded a further 30 minutes of lecture independently, and additionally she coded one interview and the first part of a focus group discussion. Thereafter we looked at similarities and differences in our coding. Here follows an extract from our discussions about some of the differences and how we aligned:

Researcher: I coded the following section as CDF - Def and interrater as CDF - Des for example in this excerpt

“Okay, there are a couple of terms and you’ve covered last semester, but I just want to draw your attention to those terms, erm again, because they are important er for the relationship between PR and media. We know, you know the gate keeping function. Erm, that content er, delivered in mass media is filtered information and journalists or editors they act as a gatekeeper so they decide erm what’s what will be covered in the news, what will be in the paper or what will be erm talked about on er radio or shown on TV.

Interrater’s response: I’m definitely okay with CDF-Def here - seems the better choice now.

There were only a few passages where there were discrepancies between mostly DEFINE and REPORT, but we were able to agree and align following our discussions. Although the procedure for the interviews and focus groups will be described at length in the next sub-chapter, a similar process of inter-rater reliability checking was carried out for that data. The interviews were more based on in-vivo codes and the similarity between the interrater and the researcher was quite astounding (around 95%); many parts were highlighted by both of us, but naturally named as different codes as noted here:

Researcher: You noted the following codes:

*International background of students as reason for EME (now coded as ING- Int. Background)

** English vs content/ topic of course as reason for EME (now coded as ING -discipline reason EMI)

*** International atmosphere/ student body as reason for EME (now coded as ING - English as a motivation)

Some codes were co-defined; the full list can be reviewed in Appendix 9. Frequently, CDFs overlap and were double coded. If there was a shift in the monologue indicated by a sequencer, this was also seen as a potential end point for a specific CDF.

The qualitative data software used for my qualitative analysis of lectures was Atlas ti (version 9). To begin this process, I added the codes into the software tool and then grouped them according to the top-down groups. After that, the documents were uploaded, and considerable time was spent coding. Once this had been done, I carried out a first analysis and noticed that more codes had been applied to the German lectures than to the English. To ensure that I had not overlooked codes or oversimplified the coding, using the *float* function, the GTC and ETC lectures were reviewed side-by-side on my monitor to see if there were any discrepancies in my coding. This was done to rule out the possibility of inconsistent coding. Some differences were noted and eliminated. This exercise turned out to be very useful, as I marked key terms in the documents at the same time, which made it possible for me to navigate the documents better whilst analysing the data.

Data was collected in February, March, and April 2021. Lectures in the second semester module *Online Communication* were selected for analysis, as this is the only module where the lecturers teach in both the English and German cohorts. There are three lecturers that share the teaching of the theoretical component of this module in both cohorts. It then came to my attention that one other lecturer teaches the same content in English and German, however in a different study program. Specifically, the module *Public Relations* is situated in the second semester, and although the full-time cohort of *Kommunikationswirtschaft* [Corporate Communication] is a German-taught cohort, this particular module is taught in English as part of the IaH strategy to increase the number of modules taught in English. In the other BA degree programme *Marketing and Sales*, the module *Public Relations* is taught in the fourth semester in German. As both of these modules are taught by the same lecturer and there are few instances where this happens, I deemed this a good opportunity to enrich the data set. Thus, the corpus consists of lectures from four lecturers, as can be seen in Table 11.4. The full data set of lecturers amounts to 805 minutes, of which 333 minutes is in English and 365 minutes is in German, with a total

number of 96,897 words. The level of English proficiency is self-reported, taken from questions posed at the beginning of the qualitative interviews.

Table 11. 4 Overview of lectures recorded

Lecturer	Profile	Topic	Duration	Words	Words / min
Lecturer 1	German native speaker / > 15 years teaching experience	English – Online Communication	111	16,135	145
		German– Online Kommunikation full-time cohort	99	15,621	157
Lecturer 2	German native speaker / > 1.5 years teaching experience	English – Visual Communication	73	10,997	150
		German – Visuelle Kommunikation / full-time cohort	78	11,736	150
Lecturer 3	German native speaker / > 1.5 years teaching experience	English – Framing & Priming	74	11,211	151
		German – Framing & Priming full-time cohort	93	12,832	137
Lecturer 4	German native speaker / > 5 years teaching experience	English – Media Relations full-time cohort, BA degree Corporate Communication [Kommunikationswirtschaft]	75	7,983	106
		German – Media Relations / full time cohort BA degree Marketing & Sales	95	10,382	109

The students participating in the lectures comprised a good mix of male and female students, however in every group there were more females participating, which reflects the typical ratio of male: female in the general degree programme, and their age ranged from 18 to 35 years. Table 11.5 provides a detailed view of the participating students. The pre- and post-test results of students who were L1 speakers of English (English test) or not L1 speakers of German (German test) were removed and there were several students who did not participate in the post-test, as some had left the lecture early. Additionally, there were a few students who participated in the post-test but not the pre-test and so these results had to be eliminated as well.

Table 11. 5 Participating cohorts**Online Communication – Introduction (lecturer 1)**

	English taught cohort	German taught cohort – full time cohort	German taught cohort – part time cohort
Number in Pre-test	N = 32	N = 38	N = 30
Drop-out numbers	7	11	
Number of valid tests	25	57	
Gender	7 male / 25 female	17 male / 21 female	6 male / 24 female
Age range:	18-35 years (m = 22.9)	18-30 years (m = 21.05)	19-32 years (m = 23.36)

Online Communication – Visual Communication (lecturer 2)

	English taught cohort	German taught cohort (full-time)
Number in Pre-test	N = 28	N = 33
Drop-out numbers	12	5
Number of valid tests	16	28
Gender	6 male / 22 female	6 male / 22 female
Age range:	19-35 years (m = 22.78)	18-30 years (m = 20.60)

Online Communication – Priming and Framing (lecturer 3)

	English taught cohort	German taught cohort (full-time)
Number in Pre-test	N = 28	N = 31
Drop-out numbers	6	3
Number of valid tests	22	28
Gender	6 male / 22 female	13 male / 18 female
Age range:	18-35 years (m = 23.14)	19-30 years (m = 21)

Media Relations (lecturer 4)

	English taught cohort	German taught cohort
Number in Pre-test	N = 30	N = 29
Drop-out numbers	10	5
Number of valid tests	20	24
Gender	14 male / 16 female	12 male / 17 female
Age range:	18-26 years (m = 20.76)	19-27 years (m = 21.89)

11.2 Procedure and data set – student grades

In order to facilitate a holistic picture of EMI student success, I obtained the student grades of all modules from semester one through to semester six from the students graduating in summer 2021. This includes both cohorts taught in German and the EMI cohort. In accordance with ethical considerations, the data was provided to me anonymously (all student matriculation numbers were omitted) and the data was secured on the UAV server. This additional data serves to enrich the findings and shed further light on this phenomenological investigation by virtue of a purely objective review of grades across all subjects and in all cohorts.

The students included in this data set are the first students of the new curriculum of Corporate Communication as well as the first graduates from the ETC. To recap, there are two cohorts taught in German and one taught in English, and the curriculum of the ETC is a mirror image of the GTC. The full-time German cohort is made up of 39 students, the part-time has 31 students (GTC n=90) and the ETC has 36 students. Particular caution must be taken when reviewing the data, as these results represent the final grades; students are entitled to three examination sittings according to the UAV legal framework. As such, we cannot discern from this overview how often students had failed or missed exams but have to assume that this occurred more or less equally across the cohorts.

The grades were downloaded anonymously and then converted into a *Microsoft Excel* spreadsheet. Thereafter, the data was transferred to SPSS for analysis. A non-parametric Mann-Whitney U test was used to see if the differences in average grades were statistically different. This test is used when the data is non-normally distributed, and the sample size is relatively small. The null hypothesis is that there is no difference in the grades between the 2 cohorts.

The findings will be triangulated through a comparison with other data: student focus groups, lecturer interviews and lecture observations. This step allows the combination of results when using mixed-methods enquiries and increases the construct validity of the research, facilitating a “fuller, more rounded account” and reducing bias (Gorard & Taylor 2004: 43).

12 Qualitative study – agents voices

Interviews and focus group discussions were conducted in order to probe the perceptions and beliefs of the key stakeholders (*Agents*) in this study, namely the lecturers and students. The aim was to discern their insights into teaching practices and attempt to establish if there is a link to learning outcomes. This chapter describes the methodology used in collecting this data and the steps taken to ensure anonymity, validity and reliability.

12.1 Procedure and data set – lecturer voices

This part of my study is qualitative in nature, as my aim is to understand underlying perceptions and beliefs of the lecturers and students. Qualitative investigations often offer new insights; it is my aim to go beyond describing the targets and to explore relationships, motives and principles underlying EMI (Dörnyei 2007: 259-260). I opted for semi-structured interviews with the lecturers, as I am an EMI lecturer myself and have a good overview of the phenomenon; I did not want to “limit the depth and breadth of the respondent’s story” (Dörnyei 2007: 136). The semi-structured interview guide can be found in Appendix 8.

After contacting lecturers and gaining informed consent for carrying out the interviews, the interviews were conducted in the summer semester 2021. Fortunately, the four lecturers who permitted the recording and analysis of their lectures also agreed to be interviewed. I particularly wanted to talk to them shortly after the lecture had taken place to see if there was anything fresh in their minds from the lecture which they wanted to address. The other lecturers in my data set met the principle of criterion sampling (Dörnyei 2007: 128); they were lecturers known to me with differing degrees of experience in teaching in the EMI classroom, different ages, and English proficiencies. Table 12.1 offers an overview of the lecturers interviewed.

Table 12. 1 Profiles of lecturers interviewed

Lecturer	Nationality	English Proficiency	EMI Experience
Lecturer 1	German	School English + Semester abroad + international researcher	>4 years
Lecturer 2	Austrian	School English + Semester abroad + Masters in NL	>1 year
Lecturer 3	Austrian	School English + Semester abroad	>1 year
Lecturer 4	German	Studied English Linguistics at PhD level	>4 years
Lecturer 5	Austrian	Studied English Linguistics at Master's level	>2 years
Lecturer 6	Austrian	School English + Semester abroad	>5 years
Lecturer 7	Austrian	School English + Semester abroad	>10 years
Lecturer 8	Austrian	School English + Semester abroad	>3 years
Lecturer 9	Austrian	School English + Semester abroad	>5 years
Lecturer 10	Austrian	School English + Semester abroad + several years working in England	New lecturer
Lecturer 11	German	School English + Semester abroad + international experience	>10 years

Due to the ongoing Covid-19 pandemic in summer semester 2021, I conducted the interviews via the video conferencing software *Zoom*. Interviews were transcribed both manually and using the automated techniques I described in the previous chapter. I used a qualitative encoding approach to assist me in moving from the descriptive codes from the first cycle coding to themes, this first step was supported by the analytic software *Atlas Ti9*.

The first cycle coding was primarily conducted top-down, based on codes developed from existing research. With my research questions in mind, I reviewed which code types would be the most useful. Top-down codes were modelled according to Dafouz and Smit's (2016; 2020) ROAD-MAPPING framework, to ensure that I was considering all aspects of EMEMUS, as this phenomenological study requires. The parent codes (see Table 12.2) were developed directly from the acronym and the child codes were informed by some of the themes which Dafouz and Smit suggest occur within those dimensions. These themes were selected based on the core research goals of the study. The aims described in the table refer to the particular RQ they should address.

Table 12. 2 First-cycle codes for Lecturer Interviews

Code Type	Parent Code	Child 1	Child 2	Child 3	Child 4	Aim of Initial Code
Hierarchical Code	Roles of English	Societal (Ro-S)	Institutional (Ro-I)	Discipline –General (Ro-Gen)	Discipline – Corp Comm (Ro-CC)	To elicit insights into lecturer's thoughts on the role English has in institution / impact on LO
Evaluation Code	Academic Disciplines	EMI Gen Negative Learning Outcomes (ADE-Neg)	EMI Gen Positive Learning Outcomes (ADE-Pos)	EMI CC Negative Learning Outcomes (ADE-CC-Neg)	EMI CC Positive Learning Outcomes (ADE-CC-Pos)	To uncover if lecturers believe EMI has an impact on LO
Evaluation Code	Language Management (in the lecture theatre)	Informal Eng Positive (LM-E-Pos)	Informal Eng Negative (LM-E-Neg)	Informal Ger Positive (LM-G-Pos)	Informal Ger Negative (LM-G-Neg)	To ascertain if lecturers believe that the formality of language has an impact on LO
In Vivo	Agents	"To prioritize and honour the participant's voice" (Saldana 2013:91)				To explore thought and belief theories on EMI teaching, workload, attitudes
Magnitude Code	Practices & Processes	Teaching style same as in L1 (PP – Same)	Teaching style different as in L1 (PP – Diff)	Not considered EMI Teaching (PP – unknown)	PP Use of L1 examples	To examine if lecturers believe that they adopt a different teaching style / believe in this necessity in EMI
Evaluation Code	Internationalisation & Globalisation	EMI improves lecturer career (ING-LNeg)	EMI unimportant lecturer career (ING-LPos)	EMI improves student career (ING-SNeg)	EMI unimportant student career (ING-SPos)	To explore the possibilities EMI opens for the Agents Lecturers/Students (this will throw light on informal LO / career advancement)

The code types were naturally different to those which I had selected for the review of the practice data, as my focus now was to shed light on lecturer perceptions and beliefs and less so on actual practice. Once again, I used coding recommendations from Saldaña (2013) but in this case used different codes for the very different data, considering that the use of Hierarchical, Evaluation, Magnitude and In Vivo codes would aid my analysis. Saldaña (2013: 83) proposes that Magnitude codes help to identify a code's "intensity, frequency, direction, presence or evaluative content", which I assigned to Practices and Processes in order to uncover the extent of similarities and differences in teaching style perceived. Evaluation codes "help assign judgements about the merit worth or significance of programs or policy" (Saldaña 2013: 119), which I deemed useful for shedding light on perceptions about the impact of EMI for career development. Sub-coding or Hierarchical coding helps a researcher when the parent code is too broad and can be "subcategorized into hierarchies or taxonomies" (Saldaña 2013: 78); it is an ideal code type to help classify utterances about roles of English at societal, institutional and/or disciplinary level. In Vivo coding on the other hand enables the researcher to use the language of the participant (Saldaña 2013: 7); this would help me shed light on what EMI means for lecturers in terms of workload and how amenable lecturers are towards it.

After coding the interviews, I found that I had added additional In Vivo codes which were not allocated to parent codes. As such, I reviewed all of these coded statements and attempted to place them in one of the parent groups. The codes in the parent group Agent were numerous due to the In Vivo technique; after first-cycle coding I had 25 individual

codes, many of which were linked to one quotation or passage and so had to be merged and refined. This phase of analysis is what Saldaña refers to as *Axial* coding (Saldaña 2013: 218), with the aim of removing redundant codes and finding the best representative codes. For example, I merged the codes in the PP parent group “belief EMI improves English” and “too late to improve English” to “Perceptions on language proficiency”. Here follow further examples of the removal and merging of some codes:

PP belief improves English + Too late to improve English > Perceptions on language proficiency

PP –ELF lecturers positive + OK not a NS > Perceptions of L2 as EMI lecturers

No challenge + PP easier to teach in L1 + more confident in Eng + prefers teaching in English > PP – prefers teaching in English

Exhausting + More Workload > PP more workload

PP Diff + PP Diff theories + PP diff terms > PP Diff

Faster in Eng + Faster in German > Speed of delivery

The codes which I selected in the first-cycle phase proved to be not comprehensive enough for this analysis. As the aim was to probe whether lecturers believed that EMI had an impact on the learning outcomes of the degree program in CC, my intention was to categorize statements into positive and negative impact on the learning outcomes by use of evaluative coding, in both languages of instruction. It became very clear to me whilst coding that this dichotomy was too simplistic and the review of the impact on L1 did not come up in the discussions at all. Furthermore, I had not given due attention to the fact that lecturers might perceive the learning outcomes to be the same. Lecturers also shared their beliefs on the general competencies of EMI students, often with regard to their engagement and interaction and in light of the cycle of education they are in. As such, I added the codes: less/more interaction and same content/same experience, and also gave some statements the dual codes when they overlapped.

The next stage involved identifying key themes emerging from the findings. I found the software unhelpful in this stage and reverted to pen and paper, noting down the most predominant codes and merging them into themes. As it was then very noticeable that the

themes were relevant to several dimensions of ROAD-MAPPING, I noted alongside the themes the other relevant dimensions and overlaps.

12.2 Procedure and data set – student voices

In order to shed light on student perceptions on lecturing practices and learning outcomes, I used focus groups as a qualitative research method to explore this particular area of my investigation. The use of focus groups enables the researcher to zoom in on a specific topic, with the focus on the group rather than the individual, which I considered would facilitate an open discussion without inhibitions. I deemed this an ideal method for tapping into the students' perceptions and for further facilitating the phenomenological enquiry, as this method would generate insights from a different angle.

My intention was to conduct three focus group discussions in summer semester 2021 with second, fourth and sixth semester students of the EMI cohorts. I recruited students by sending an email to each cohort with the explanation of my research and the request for volunteers to participate. Focus group discussions ideally last between one and two hours and the number of participants should be around 6-8 persons (Galloway 2019: 290). Recruiting students from the sixth semester cohort was immediate as they had finished their modules and were just revising for their final oral exam and so time was not an issue. It was more of a challenge to recruit students from the other cohorts, and so I decided to conduct one mixed focus group discussion of these second and fourth semester students. None of the participants use English as a first language. All had different motivations for studying in English, ranging from having attended a CLIL secondary school, spending time abroad at school and or just loving to speak English, having been immersed in it due to media from an early age. This finding resonates with the findings from Kankaaranta and Planken (2010: 400) with regards to motivations for studying in English. Most of them expressed their interest in studying CC first and the "icing on the cake" for them was that it was offered in English. Most participants were from the higher semesters and were female. The groups were highly homogeneous (see Table 12.3).

Table 12. 3 Data set of focus group participants

Description	Male	Female
Focus Group 1, 6 th semester students	1	5
Focus Group 2, 2 nd semester students	1	1
Focus Group 2, 4 th semester students	2	4

The moderator selected is a senior researcher at the UAV, but he researches in another field, and so although is an EMI lecturer himself, he is relatively unfamiliar with the field of educational linguistics and as such would be not susceptible to any bias. I know him to be sensitive, empathetic and a good listener, and as such he has the traits of an ideal moderator (Cyr 2019: 52). I prepared the question protocol with my research questions in mind and before the focus groups took place, conducted a briefing session via *Zoom* to ensure that he understood all of the questions so that the discussion would be guided in the appropriate direction. The moderator was concerned about whether he should elicit a response from all participants on all questions; I suggested that if he felt that students had answered fully and there was a consensus and that the topic was saturated, then he should not insist on a statement from everyone. The moderator started the focus groups by introducing himself and immediately demonstrated empathy by sharing his experience of studying in the medium of English just like the students. Due to the ongoing Covid-19 pandemic, the focus group discussions took place online using the conferencing tool *Zoom* and similar to the interviews, I used the free automatic transcription service to create an automated first draft transcript and then manually edited corrections.

Using the same ROAD-MAPPING framework as for the focus groups as for the interviews, I adapted the codes in each dimension as necessary (see Table 12.4) to address the research questions adequately.

Table 12. 4 First-cycle codes for student focus groups

Code Type	Parent Code	Child 1	Child 2	Child 3	Child 4	Aim of Initial Code
Hierarchical Code	Roles of English	Societal (Ro-S)	Institutional (Ro-I)	Discipline –General (Ro-Gen)	Discipline – Corp <u>Comm</u> (Ro-CC)	To elicit insights into student's thoughts on the role English has in institution / impact on LO
Evaluation Code	Academic Disciplines	EMI Gen Negative Learning Outcomes (ADE-Neg)	EMI Gen Positive Learning Outcomes (ADE-Pos)	EMI CC Negative Learning Outcomes (ADE-CC-Neg)	EMI CC Positive Learning Outcomes (ADE-CC-Pos)	To uncover if students believe EMI has an impact on LO
Evaluation Code	Language Management (in the lecture theatre)	Informal Eng Positive (LM-E-Pos)	Informal Eng Negative (LM-E-Neg)	Informal Ger Positive (LM-G-Pos)	Informal Ger Negative (LM-G-Neg)	To ascertain if students believe that the formality of language has an impact on LO
In Vivo	Agents	"To prioritize and honour the participant's voice" (Saldana 2013:91)				To explore thought and belief theories on EMI teaching, workload, attitudes
Magnitude Code	Practices & Processes	Teaching style same as in L1 (PP – Same)	Teaching style different as in L1 (PP – Diff)	Not considered EMI Teaching (PP – unknown)	PP Use of L1 examples	To examine if students believe that lecturers adopt a different teaching style / believe in this necessity in EMI
Evaluation Code	Internationalisation & <u>Glocalisation</u>	EMI improves lecturer career (ING-LNeg)	EMI unimportant lecturer career (ING-LPos)	EMI improves student career (ING-SNeg)	EMI unimportant student career (ING-SPos)	To explore the possibilities EMI opens for the Agents Lecturers/Students (this will throw light on informal LO / career advancement)

I experienced similar problems with my first-cycle code ideas as I had done with the coding of the interviews. As the codes were not rich enough to capture all the essential insights, I added the following codes:

- Roles of English – perceptions on language proficiency, harder in maths, 2nd cycle
- Academic Disciplines – better intercultural skills, better international skills, perceptions of EMI students, more workload, same experience, same workload, German cohort harder
- Language Management – lecturer proficiency affects content, studying in English easier
- Agents – motivations for studying in English
- Practices & Process – EMI lecturer not a NS, NS lecturers, Lecturer proficiency, ideal teaching style
- Internationalization & Globalization – impact on career

I used the overarching code FG to identify the group codes for the focus groups. Although the issue of native speaker and non-native speaker EMI teachers was not a topic in the guide for the moderator to address, the students discussed this topic actively, as it transpired this is an important aspect for them and is addressed in the dimension Practices and Processes. The guide which I prepared for the moderator can be viewed in Appendix 10.

13 Findings: contrastive investigation of lectures

This chapter discusses the findings of the contrastive investigation. It is divided into three main parts. Firstly, the results of the pre-and post-test of student knowledge are presented and discussed. Subsequently, the sub-chapter focusses on the linguistic analysis of the lectures with a view to uncovering the relationship between lecturing practices and the results of the post-test. To commence, an analysis is presented which reviews the code distribution in the lectures overall, regardless of lecturer, to see if there are any discernible patterns between the ETC and GTC. All areas of interest, including CDFs, the use of questions and other interesting features such as the use of paraphrasing and repetition are reviewed in detail. Subsequently, each lecture is analysed in turn, firstly by looking at the overall linguistic choices of the lecturers to see if there are any differences in rhetorical style in the different languages of instruction. Although the corresponding content passages for each post-test question are highly interesting, an in-depth review of this is beyond scope of this dissertation; nevertheless, one question is selected which is used to compare and contrast lecturers' discourse. To complement these findings, a multi-modal analysis is provided; not only is the passage deconstructed linguistically, but similarities and differences in visual aids are also reviewed, providing background information which could shed some additional light on these findings. Finally, an comparison of student grades of the first EMI cohort to graduate in 2021 with the GTCs is examined and discussed.

13.1 Findings of the pre- and post-tests

As described earlier, the pre-and post-test were carried out using *Microsoft Forms*. This program provides a feature which allows a download of the data into *Microsoft Excel*. Although the software also provides some graphical representation of the data, for an in-depth analysis, SPSS provides many more features for statistical analysis and for this reason the data was transferred to SPSS. In the first step the data was checked for irregularities. The results of those students who had participated in the pre-test but not the post-test or vice versa were discarded. Furthermore, results were discarded for those in the ETC who indicated that they spoke English as their L1, and likewise for those in the GTC who did **not** state that

they spoke German as their L1. All four versions of the tests (in English) can be viewed in Appendices 4-7.

In the first step of the analysis, students' degree of knowledge increase (i.e., the difference between the scores they achieved in the pre-test and the post-test) was assessed for statistical significance on a course level for both the ETC and GTC. For this purpose, a non-parametric Wilcoxon signed-rank test was considered more accurate than a paired-samples t-test due to the small group sizes and the non-normal distribution of the data. As shown in Table. 13.1, the increase in students' knowledge of the course content was highly significant in all four courses (for both languages of instruction) as well as overall.

Table 13. 1 Degree and statistical significance of students' knowledge increase

Course	Language of instruction	N	Pre-quiz mean score	Post-quiz mean score	Knowledge increase	Wilcoxon signed-rank test
Visual Communication	English	16	49.3%	83.3%	34.0 pp	$Z = 124.5, p < .01$
	German	28	51.6%	75.4%	23.8 pp	$Z = 322.5, p < .001$
Framing & Priming	English	22	44.4%	78.8%	34.4 pp	$Z = 210.0, p < .001$
	German	28	52.8%	81.0%	28.2 pp	$Z = 338.0, p < .001$
Online Communication	English	25	68.3%	86.0%	17.7 pp	$Z = 231.0, p < .001$
	German	57	67.4%	84.6%	17.2 pp	$Z = 1365.0, p < .001$
Media	English	20	32.2%	59.7%	27.5 pp	$Z = 190.0, p < .001$
	German	24	29.2%	64.6%	35.4 pp	$Z = 298.0, p < .001$
Overall	both	220	52.6%	78.0%	25.4 pp	$Z = 20454.5, p < .001$

After having established that a significant knowledge increase had indeed occurred within each of the eight student cohorts, the next step consisted of formally comparing the degree of knowledge increase between the ETC and GTC for each course. Thus, a series of Mann-Whitney U tests (i.e., the non-parametric equivalent of an independent-samples t-test) was conducted to assess whether students' knowledge increase in a course is dependent upon the language of instruction. This test also accounts for the differences in numbers of participants (in the *Visual Communication* lecture the attendance was poor and in the *Online Communication* lecture the results from both cohorts were included). The results, which are reported in Table 13.2, indicate that the difference in knowledge increase between ETC and GTC students is statistically significant only in the *Visual Communication* course. Furthermore, it is noticeable that the students fared better in the GTC of the lecture *Media Relations*.

Table 13. 2 Comparison of students' knowledge increase between language cohorts

Course	Language of instruction	N	Knowledge increase (KI)	Difference (KI _{EN} – KI _{GE})	Mann-Whitney U test
Visual Communication	English	16	34.0 pp	10.2 pp	$U = 327.0, p < .05$
	German	28	23.8 pp		
Framing & Priming	English	22	34.4 pp	6.2 pp	$U = 331.0, p = .65$
	German	28	28.2 pp		
Online Communication	English	25	17.7 pp	0.5 pp	$U = 727.0, p = .88$
	German	57	17.2 pp		
Media Relations	English	20	27.5 pp	-7.9 pp	$U = 182.5, p = .17$
	German	24	35.4 pp		

Likert-style questions were added to the end of the post-test to capture students' immediate evaluation of the lecture. Table 13.3 shows the five questions which were asked in both languages. The additional questions six and eight were only posed in the ETC. The ANOVA is significant for those that are in bold, which indicates that there is an overall difference in mean scores between the four groups. Looking at each question individually, it is apparent that all lectures were easy to follow, with the lecture *Media Relations* proving to be the most difficult, but still with the mean score of 3.8 (agree). The second statement, "some terms were difficult for me to understand", and the seventh statement, "the contents of the lecture were presented logically", showed similar results in all four lectures. The third statement with regard to the speed of speech indicates that the lecturer may speak too fast. However, when comparing the words per minute to the other lecturers (see Table 11.4), there are no significant differences between the lecturer of *Visual Communication* and *Priming & Framing*, while the lecturer for *Media Relations* spoke at a much slower pace in both languages.

Table 13. 3 Overall comparison of student satisfaction with lecture comprehension

Statement	Visual Comms		Priming & Framing		Online Comms		Media Relations		ANOVA
	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)	
Q1: This lecture was easy to follow.	4,70	0,55	4,64	0,56	4,61	0,58	3,80	0,88	F = 20.54, p < .001
Q2: Some terms were difficult for me to understand.	2,09	1,10	1,88	0,93	1,71	0,79	2,16	0,99	F = 2.93, p < .05
Q3: Sometimes the lecturer spoke too fast.	1,41	0,87	1,48	0,71	1,88	1,00	1,34	0,65	F = 5.35, p < .01
Q4: I prefer not to ask questions in the lecture.	3,00	1,28	3,18	1,21	2,84	1,19	3,27	1,23	F = 1.49, p = .22
Q5: The atmosphere in the lecture was relaxed.	4,80	0,55	4,72	0,50	4,52	0,67	4,23	0,89	F = 6.56, p < .001
Q6: I would have understood the lecture better in my native language. (EN only)	2,13	1,09	2,18	0,85	2,16	0,90	3,40	0,88	F = 9.18, p < .001
Q7: The contents of the lecture were presented logically.	4,82	0,39	4,68	0,47	4,65	0,51	4,30	0,63	F = 8.59, p < .001
Q8: I had to concentrate on the language so much that sometimes I missed some key information. (EN only)	1,56	0,96	1,55	0,86	1,56	0,82	2,25	1,52	F = 2.16, p = .10
Note: All items were measured on five-point scales (1 = strongly disagree; 5 = strongly agree)									

The question with regard to student interaction and their ease at posing questions was more critical, with the average mean score across all lectures being comparable. This question will be taken up at length in the discussion of the individual lectures, zooming in on the differences between the ETC and GTC. The statements pointing to the students' perceived ease at learning in the medium of English (Q6) showed that it was notably more of a challenge for those students in the lecture *Media Relations*, which correlates with the results of the post-test (Table 13.2); the students performed better in the GTC post-test. This result is certainly due to the fact that the students in the English-taught lecture were used to being taught in German and will be discussed at length in Chapter 13.2.5.

13.2 Lecture discourse analysis

This chapter discusses the findings from the linguistic analysis of all eight lectures. It starts by addressing the general findings of the lectures delivered in German compared to the lectures delivered in English collectively. Subsequently, a review of the differences between CDFs, questions posed, metadiscourse utilized and any other interesting rhetorical insights overall is given. The sub-chapters that follow address the contrastive analysis of the lectures *Online Communication*, *Visual Communication*, *Framing and Priming* and *Media Relations* in turn.

13.2.1 General findings – lecture discourse analysis

The main module under review is *Online Communication* which is worth six ECTS and has 60 teaching units assigned to it; of those 60 units, ten are scrutinized in this investigation. The rest of the module is delivered by an external practitioner lecturer. The lectures *Visual Communication* and *Framing and Priming* are part of the overall module called *Online Communication*. The following learning outcomes extracted from the module description are those which are relevant to the lectures analysed.

At the end of these lectures students are able to:

- Understand empirical usage habits and practices
 - Know key media technologies and the specifics of communication theory in online communication
 - Explain these on the basis of established as well as new scientific communication approaches and models
 - Recognize the relevance of online communication in the communication areas of marketing, PR and internal communication
 - Recognize the disciplinary and interdisciplinary differences among the aforementioned areas
 - Know the key areas of application for corporate online communication tools (e.g., website, social media, (micro)blogging, wikis)
- (Curriculum, Corporate Communication, Module *Online Communication*)

Naturally, these learning outcomes are also relevant to the remaining 50 teaching units, and the analysis later in the chapter will show how lecturers cover these in their class. The additional, fourth lecture reviewed is that in the Module *Public Relations* for which the following learning outcomes, which the lecturer presented at the start of the class, are relevant:

- Understand the nature of mass media and how journalists work
- Explain the relationship between journalism and PR
- Compare the determination hypothesis to the intereffication model
- Name and outline different tasks of Media Relations
- Write a press release

The following two passages in English and German serve to indicate how coding was conducted. These two passages were selected as they are the densest passages in all eight lectures in terms of the frequency and variety of rhetorical resources used. Additionally, this extract is particularly interesting, as it illustrates how complex spoken language is in the lecture theatre; many secondary CDFs, metadiscourse, questions and other rhetorical devices are used to support the main communicative intention. These complex CDFs were

also reported in the study by Doiz and Lasagabaster (2021: 63), who found that “EXPLAIN and/or EVALUATE substantiated REPORT (..)” frequently. The primary communicative function of this particular passage is to offer students definitions (DEFINE) of the different types of terms found around the communicative phenomenon of *Priming*. According to Chernov (2018: 36), priming is defined as “a change in a direction of evaluation or opinion about an object or an issue invoked by a certain message through activating a related concept to such an object or an issue”. In this extract⁴, the lecturer aims to outline nine different types of *Priming* that have been identified by scholars to date.

Extract 13.1 (Lecturer 3, *Framing and Priming*, ETC)

And priming, then to get from prime to priming, (TOPICALISER) it is the effects that occurs when you're exposed to a certain stimulus erm and then your brain responds in a in a specific sort of way with a with activating specific er schemes. (DEFINE)
 Those are just some terms, you should know about when talking about priming. (RECAP)
 Erm, that, I think, are quite important. Now there are different types of priming, of course there are types of everything, so there are also different types of priming. (EVALUATION)
 What about priming effect? (RHETORICAL) (CATEGORIZE)
 And I thought to best pitch to them with pictures I hope it's working fine with the chart. But let's have a look at it, (TOPICALISER) so there is semantic priming what what does it mean? (RHETORICAL) Well, if you think about a lion, then you would think about a tiger (EXAMPLE) so you're thinking about something in the same kind of family in the same group in the same word group yeah one in here in, so to speak, in the same in the same family of animals that's that's semantic priming. (REPETITION) (EXPLORE) (DEFINE)
 Erm, then we have (SEQUENCER) conceptual priming, so if you think about a lion you think about Africa (EXAMPLE) so it's it's it's a bigger concept of priming where you erm where you think about think about similar concepts like, if you would think about I didn't know a penguin you wouldn't think of Africa, but of maybe Madagascar, because of the movie @@@ but mostly of Antarctica. (EXAMPLE) (DEFINE)
 Erm, then there's (SEQUENCER) phonologic priming and I think that's the most basic and self explanatory erm term out there (EVALUATE), if you think about a lion you think about Ryan I don't know which Ryan exactly this one is but maybe you can help me out what's his last name. @@@ ? (OPEN, REFERENTIAL) But Ryan, something that the dead, the dead pool guy. (EXAMPLE) (DEFINE)
 Student: I think it's Ryan Reynolds.
 LECTURER 3: Ryan Ryan Reynolds yes. Of course, so and from the phonologic priming (SEQUENCER) is also the priming that it's most often used in in advertisement (REPORT) because it's just the most simple one (EVALUATE), and our brain reacts immediately to it (EXPLAIN), I mean rely on Ryan, Brian that that goes off really easily. (EXAMPLE) (DEFINE)

⁴ In all the extracts to follow, a colour coding is used to make the different types used more visible: CDFs are marked in blue, structural markers in red, questions in green and other resources in orange. It should also be noted that while the CDF is placed at the end of the stretch, it is valid from the start of the stretch where the last CDF finishes.



Figure 13. 1 Supporting visual aid in the ETC to exemplify phonologic priming

Extract 13.2 (Lecturer 3, *Framing and Priming*, GTC)

Genau, es gibt viele Arten von Priming. Ja, alles wird in kleine schöne Boxen gepackt so auch, die Arten von Priming erm ich dachte mir stell das einfach mal anhand von Bildern darin sich das bisschen besser vorstellen kann. (TOPICALISER) Erm also die zu Beginn, die die häufigsten Arten von Priming, die wir auch die wir auch in Marketing und Kommunikation in der Werbung am häufigsten sehen. (SEQUENCER) Und da haben wir zuallererst (SEQUENCER) das semantische priming und und das wäre wenn sie z.b. wenn ihnen das Bild von einem Löwen zeige, semantisches Priming wäre wenn sie sozusagen dann im nächsten Schritt sofort in einen anderen Tiger denken (EXAMPLE), also sozusagen semantisches Priming, dass wir uns in einer in einem dasselbe Attribute befinden (EXPLAIN), z.B. in diesem Fall der Gruppe der Großkatzen. (EXAMPLE) Ermm sozusagen, semantisches Priming, da denken sie, da wird da wird, eine und diesselbe Gruppe geprimt. (PARAPHRASE) (DEFINE)

Wir haben konzeptuelles Priming (SEQUENCER) wo sozusagen die ein und dasselbe Konzept geht und wenn wir sozusagen, dass Prime als Löwen haben, dann würden die nächsten Schritte Afrika denken, weil natürlich eine Löwen lebt in Afrika in der Savannah (EXAMPLE), erm und das ist sozusagen in in ein und dasselbe Konzept eingegossen. Erm phonologisches Priming eines der häufigsten vorkommen Primes, vor allem in in der Werbeindustrie in der Werbung (PARAPHRASE) ist (REPORT) einfach wenn Sie hier einen Löwen haben, denken sie automatisch an einem Möwe, also Löwe Möwe Möwe Löwe sehen (EXAMPLE) phonologische sprachlich ähnliche Dinge, die die hier geprimt werden können. (EXPLAIN) (DEFINE)



Figure 13. 2 Supporting visual aid in the GTC to exemplify phonologic priming

What is particularly striking about these extracts is how similar they are, which is a common feature of all the data in these parallel corpora. Here, the lecturer uses the same discourse pattern to deliver this content, in that with all types of Priming an example is offered, rather than a canonical definition. An alternative strategy could have been to present the definition and then elaborate with examples. A possible explanation for this intentional omittance of

canonical definitions could be that the lecturer believes that a more thorough understanding of the types can be achieved using colourful examples from everyday life. As the lecturer clicks through the types, a visual of the example is offered (see Figure 13.1 and Figure 13.2), but neither a written explanation nor a definition is given supporting her visual aids. At the end of both passages, Lecturer 3 stated that these definitions are available as a pdf on the online platform Moodle for students to review themselves, further indicating that this was an intentional didactic strategy:

Extract 13.3 Lecturer 3 English and German reference to canonical definitions

So those are the different types of priming erm you have a chart in your PDF where everything is explained in words, not just for pictures so for future reference.

Ich habe ihn auch hier im PDF noch mal noch mal die Erklärung mit Worten @@@ hinzugefügt, erm wo das vielleicht noch mal noch mal besser hervorkommt, als als wenn sie nur die Bilder vor sich haben.

Interestingly, at the end of the German lecture a student asks the following question „Könnten sie vielleicht, also geht es, dass man in einem Satz zusammengefasst, was der Unterschied von framing und priming ist?“ [Could you perhaps, is it possible for you to summarize in one sentence what is the difference between framing and priming?]. A possible reason for this is that the students might have found more explicit definitions useful and conceivably, that the vivid examples were not enough to achieve a thorough understanding. The students are challenged to undertake abstraction of the concept themselves which might be difficult due to the novelty.

Now turning to the total number of linguistic resources used in the ETC in contrast to the GTC, it is clear from Figure 13.3 that there is an even distribution of CDF realizations (ETC n=571, GTC n=634), which represents 10% fewer in the ETC. The difference in percentage in the frequency of use of questions and other discursive aspects is similar, with around 11% less in the ETC. There are clearly more metadiscursal structuring devices used in the GTC lectures (n=261) compared to the ETC (n=208), or 21% more, and this pattern of the use of more metadiscourse in the L1 is similar to the findings by Dafouz and Núñez (2010).

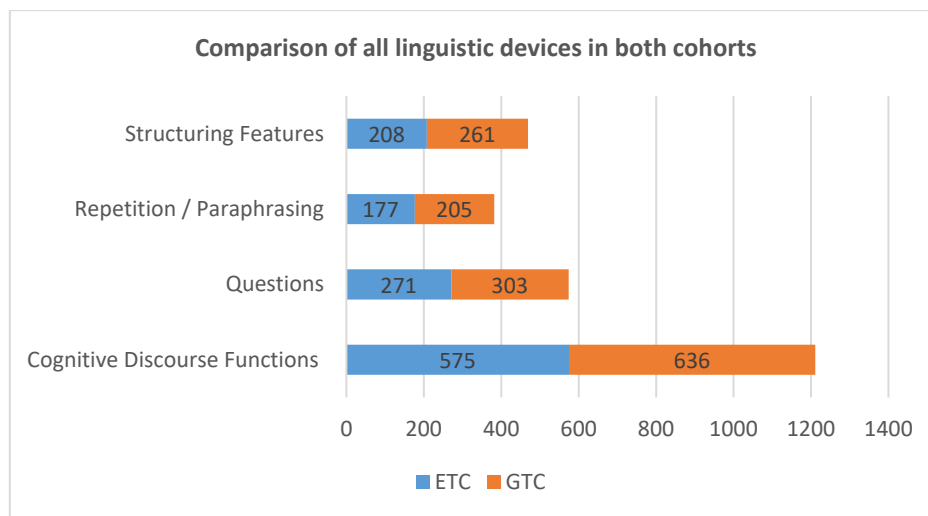


Figure 13. 3 Comparison of all linguistic resources used in both cohorts

On review of the overall CDFs used in both languages, the pie chart in Figure 13.4 shows that in all eight lectures in both languages the most frequently used CDFs are EVALUATE and REPORT.

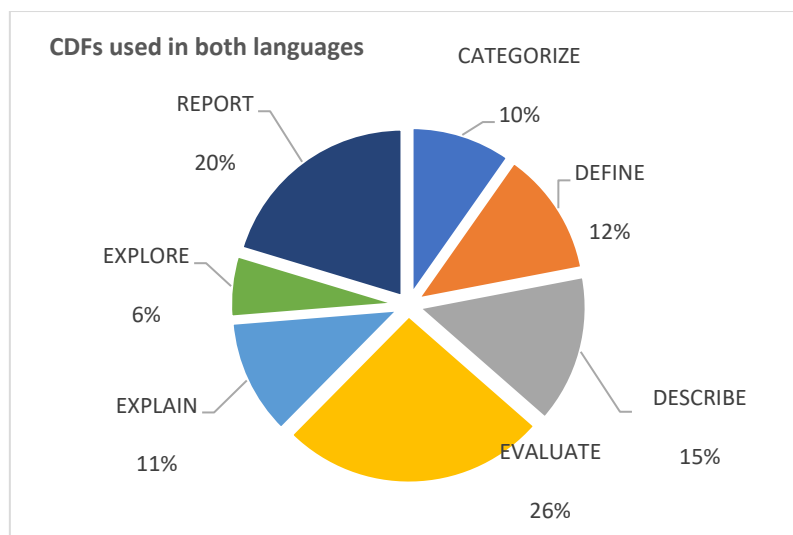


Figure 13. 4 Distribution of CDFs in both languages combined

The sequences used previously to exemplify how coding was undertaken shows that the CDF DEFINE was often used with others such as EXPLORE/EXAMINE and supported by examples.

In other sequences a similar pattern can be identified with a combination of other CDFS with REPORT and DESCRIBE:

Extract 13.4 Lecturer 4 (REPORT)

So jetzt zum an einem der Hauptaufgaben und eine sehr wichtige Aufgabe von der PR-Abteilung im Bereich Media Relations (EVALUATE, TOPICALISER) ist eben genau diese Beziehungspflege mit der Medien und Medien Vertreterinnen.

[So now to one of the main tasks and a very important task of the PR department in the area of media relations (EVALUATE, TOPICALISER) is precisely this relationship management with the media and media representatives]

Finally, EXPLORE was used with the fewest tokens in these particular lectures.

When contrasting the frequency of CDFs in the GTC with the ETC, there are 575 realizations of CDFs in the ETC lectures and 635 in the GTC, which represents a difference of 10%. Figure 13.5 shows that in the GTC there was more use of REPORT and EVALUATE whereas DESCRIBE, CATEGORIZE and EXPLORE was used more frequently in the ETC lectures.

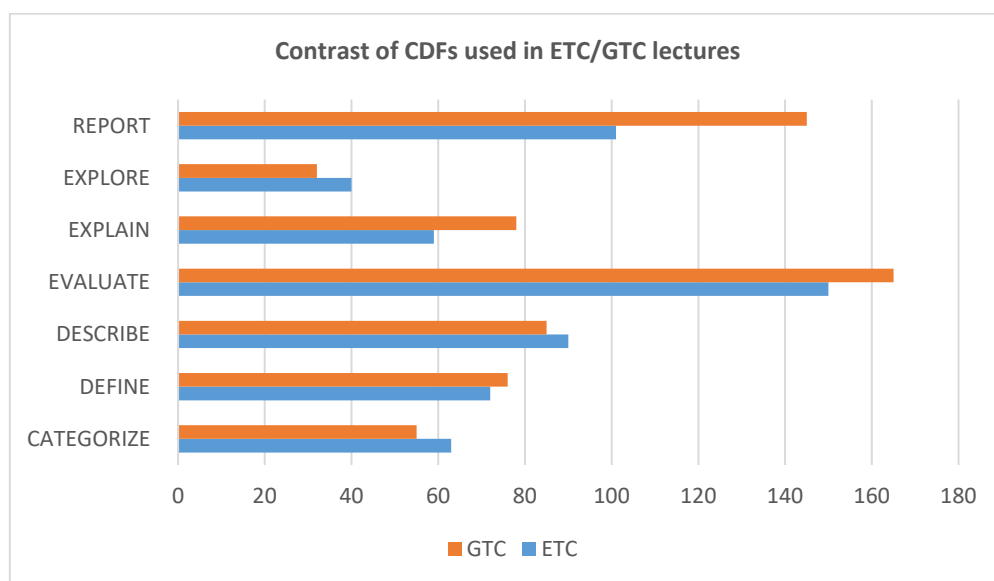


Figure 13. 5 Distribution of CDFs across both languages

There is also an interesting difference in the frequency of use of CDFs in total by the individual lecturers. Figure 13.6 indicates that Lecturer 2 was the only one to use more CDFs in her lectures delivered in English (+6%). Lecturer 1, 3 and 4 employed CDFs more in the GTCs with a difference of 13%, 22% and 18% respectively.

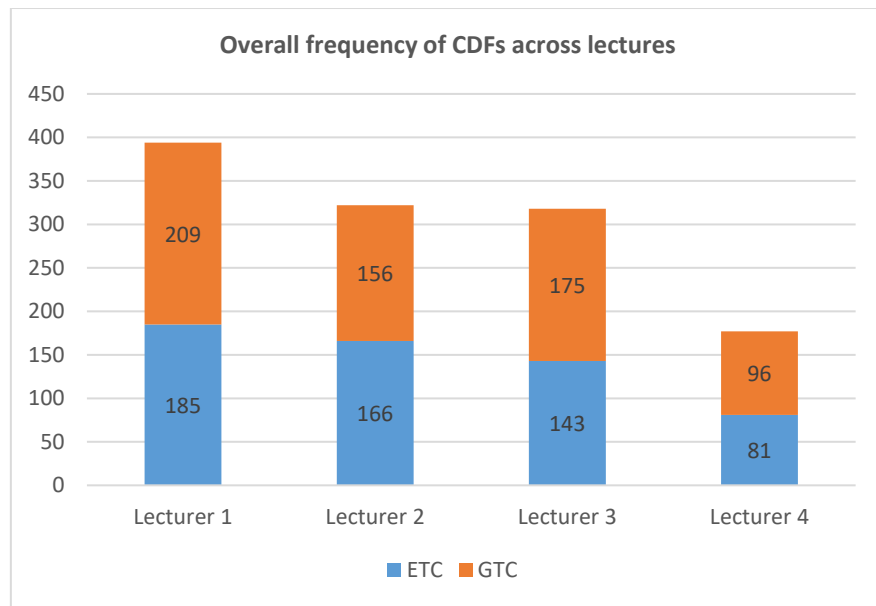


Figure 13. 6 Overall frequency of CDFs across lectures

A more detailed analysis of CDFs per lecture is presented in Table 13.4. For ease of reading, the dataset is colour coded in pink when values exceed 20%. What is striking is the similar, more frequent use of the CDF EVALUATE by all lecturers except for Lecturer 1.

Table 13. 4 Distribution of individual CDFs as percentages per lecturer

	Lecturer 1_De.	Lecturer 1_Eng	Lecturer 2_De	Lecturer 2_Eng	Lecturer 3_De	Lecturer 3_Eng	Lecturer 4_De	Lecturer 4_Eng	ETC	GTC
CATEGORIZE	15%	18%	9%	11%	1%	2%	7%	10%	11%	9%
DEFINE	13%	14%	10%	9%	14%	15%	8%	11%	13%	12%
DESCRIBE	10%	17%	21%	16%	12%	16%	11%	10%	16%	13%
EVALUATE	17%	14%	31%	29%	31%	37%	26%	27%	26%	26%
EXPLAIN	13%	10%	6%	8%	17%	9%	15%	20%	11%	12%
EXPLORE	6%	8%	6%	11%	3%	3%	5%	2%	7%	5%
REPORT	26%	19%	18%	15%	22%	17%	27%	20%	18%	23%
Totals	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Note: all values over 20% are colour coded pink for ease of reading

The findings of the total numbers across all lectures should be read with caution, as naturally lecturers use them with different frequencies. This is illustrated in Table 13.5, where the total number of CDF realisations is divided by the length of the lecture to indicate the number of CDFs used per minute.

Table 13. 5 CDF realisations per minute

	English CDFs	German CDFs	English Lecture Length (mins)	German Lecture Length (mins)	English CDFs/minute	German CDFs/minute
Lecturer 1	185	209	111	99	1,7	2,1
Lecturer 2	166	156	73	78	2,3	2,0
Lecturer 3	143	175	74	93	1,9	1,9
Lecturer 4	81	96	75	95	1,1	1,0

This table clearly shows that the Lecturers 2, 3 and 4 were almost identical in their use of different CDFs in English and German, whereas Lecturer 1 used fewer in English. Lecturer 2 and 3 use a similar number in both, and Lecturer 4 used fewer in both languages in comparison. Although this review by minute is interesting, the following analysis is carried out using total frequencies and not occurrences/minute, as arguably the aim of the lecture is to ensure the learning outcomes are met and it is irrelevant how long the lecture is, if it is delivered within the maximum timeframe available. Style, choice of language and individual preferences all play a role. So, if a lecture is slightly longer, and more devices are used, this aids the overall learning and as such the total number is deemed more relevant for the contrastive analysis.

Moving on to a more detailed view of the frequency of questions posed overall, it is clear that lecturers make use of *open*, *referential*, and *rhetorical* questions the most as indicated in the pie chart in Figure 13.7.

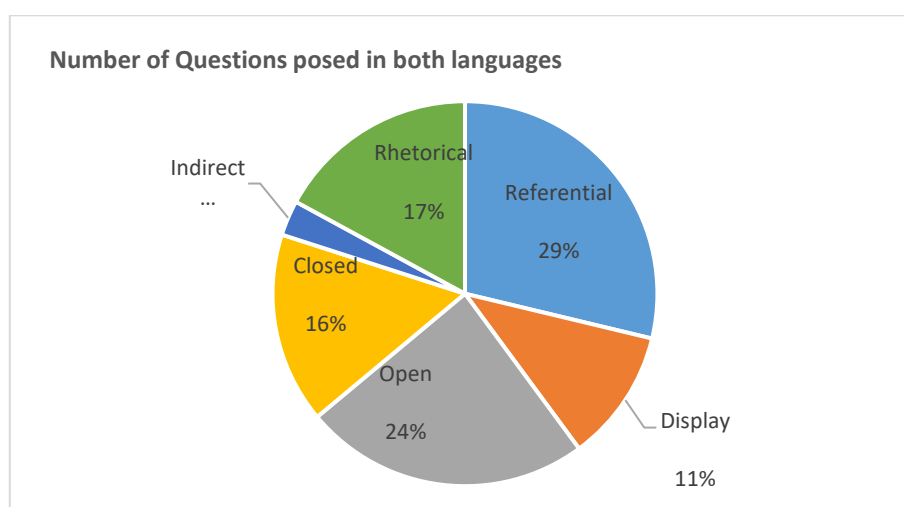


Figure 13. 7 Distribution of questions posed across lectures

When contrasting the questions posed in the different languages, the bar charts shown in Figure 13.8 indicate that *referential* questions were the most frequently posed, with a similar number of occurrences in both languages. Lecturers used slightly more *display* questions in the GTC. As reported by Dalton-Puffer (2007: 96), *referential* questions are more complex and this might explain why they are more frequent in this tertiary setting corpus in comparison to her findings in the CLIL context, where they were relatively equal in distribution, but notably included student and procedural questions, which explains this phenomenon.

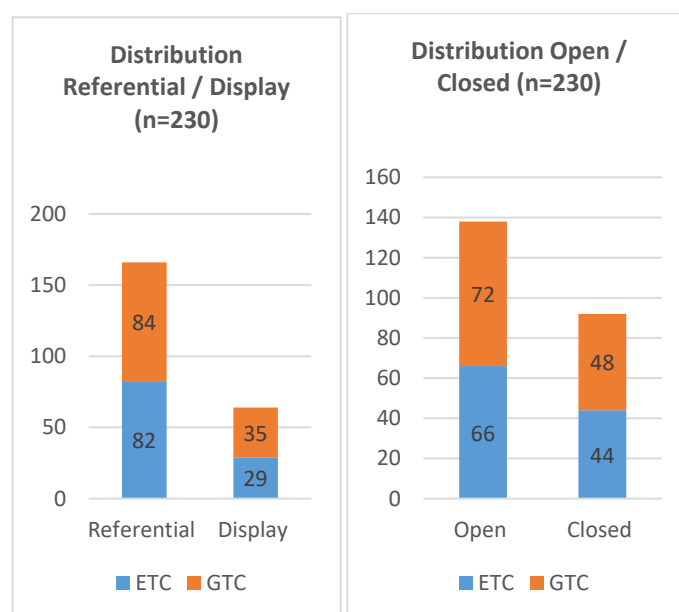


Figure 13. 8 Distribution over different question types across all lectures

Similar to Dalton-Puffer (2007: 96), a restrictive decision was taken when coding the *closed* questions to include only those requiring a yes/no answer or a meronym. The first important observation is that there are far more *open* questions posed overall in the GTC classes and Figure 13.8 indicates that when reviewing the double coding, *referential* questions predominated. *Open* questions make greater demands on teachers' intellectual capacity (Dalton-Puffer 2007: 97), indicating that this was not a desirable rhetorical strategy in the ETC lectures. Typically, *closed* questions in this corpus were around comprehension, e.g., "Ist das jetzt klarer geworden?" [Is that clearer now?] (Lecturer 4) or "Ist soweit alles gut?" [All good so far?] (Lecturer 3).

Lecturer 1's delivery was longer which we again see represented in the higher frequency of questions in both languages. Lecturer 2 posed more questions in the English lectures (18% more) with Lecturer 1, 3 and 4 posing 15%, 45% and 28% more in the GTC respectively (see Figure 13.9).

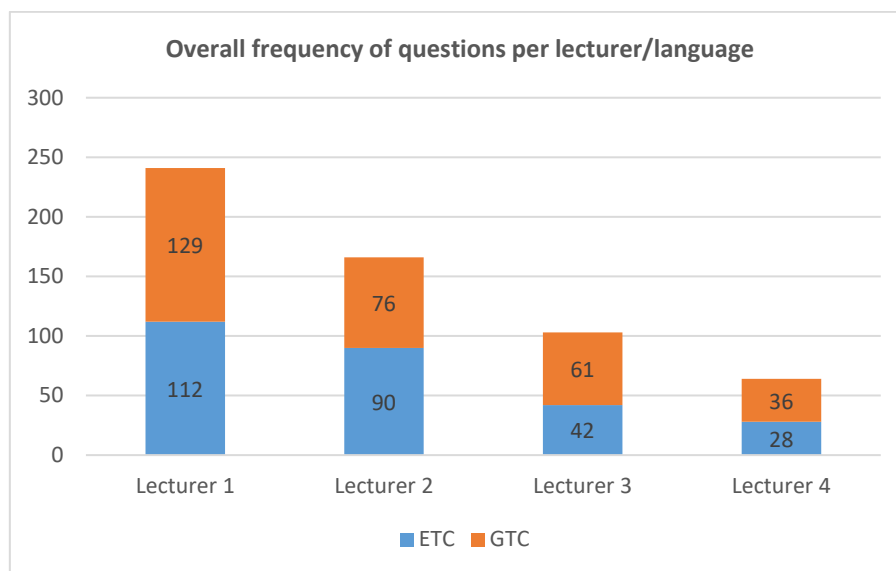


Figure 13. 9 Overall frequency of questions per lecturer and language

Table 13.6 below indicates that *referential* questions were the most popular to be asked by all lecturers apart from Lecturer 4. Table 13.6 also shows that *indirect* and *display* questions are the least frequent types to be utilized.

Table 13. 6 Distribution of question types as percentages per lecturer

	Lecturer 1 De.	Lecturer 1 Eng	Lecturer 2 De	Lecturer 2 Eng	Lecturer 3 De	Lecturer 3 Eng	Lecturer 4 De	Lecturer 4 Eng	ETC	GTC
Closed	14%	20%	13%	13%	15%	10%	28%	21%	16%	16%
Display	18%	14%	3%	8%	13%	14%	3%	0%	11%	9%
Indirect	2%	3%	3%	2%	5%	2%	6%	4%	3%	3%
Open	27%	23%	26%	32%	21%	21%	14%	11%	24%	23%
Referential	23%	28%	34%	38%	23%	17%	39%	32%	30%	30%
Rhetorical	16%	13%	21%	7%	23%	36%	11%	32%	16%	18%
Totals	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Note: all values over 20% are colour coded pink for ease of reading

Interestingly, Lecturer 2 was the only one **not** to use *rhetorical* questions in the English lecture frequently and poses a lot more *referential* question. Questions are also complex devices, often used in combination with structural markers and CDFs. For example, Lecturer 2 uses this *rhetorical* question as a marker and EVALUATION: “And so that also works with images we saw that before in the image superiority effect, right?” (EVALUATE, RETROSPECTIVE MARKER, RHETORICAL). On many occasions, *referential* questions were co-coded with the CDF EXPLORE:

Extract: 13.6

Lecturer 1, English

What might be aspects that that influence different aspects on how we use new media? (OPEN, REFERENTIAL, EXPLORE)

Lecturer 1, German

Erm und warum haben Nutzungsdauern denn so eine große Bedeutung? (OPEN, REFERENTIAL)
Warum glauben Sie das? (REPETITION OPEN, REFERENTIAL, EXPLORE)

[Erm and why do think that duration of use have such great importance? (OPEN,REFERENTIAL)
Why do you think that? (REPETITION, OPEN, REFERENTIAL, EXPLORE)]

When reviewing the frequency of types of metadiscursive devices used by the lecturers at the global level, the pie chart in Figure 13.10, clearly shows the most frequent linguistic choices are *sequencers* and *retrospective* markers. In both languages lecturers hardly made use of *opening* and *closing* markers and did not summarize the lecture content as indicated by the very low number of *recapitulation* markers.

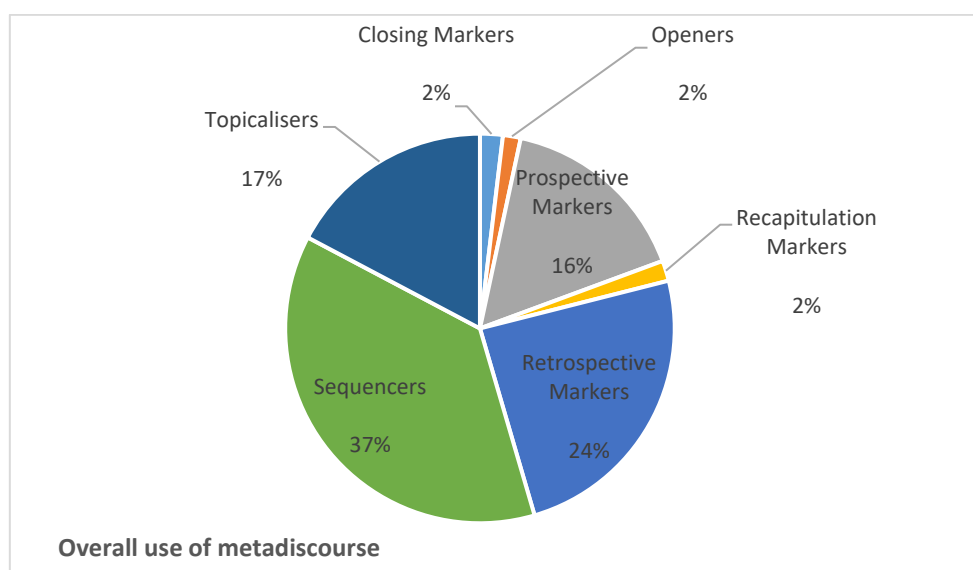


Figure 13. 10 Distribution of metadiscourse structuring across lectures

Generally speaking, as Figure 13.11 indicates, structuring devices were used 26% more in the German lectures, mostly in the form of *retrospective* markers, *topicalisers*, *sequencers* and *prospective* markers in that descending order. The low number of *closing* and *opening* markers was a phenomenon in both languages of instruction.

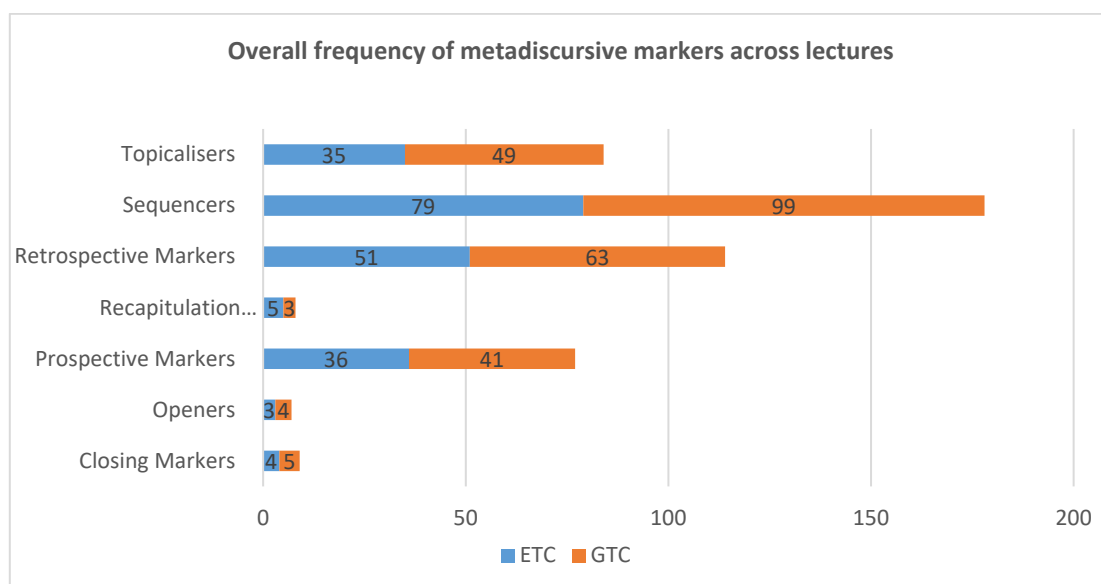


Figure 13. 11 Overall frequency of metadiscursive markers across lectures

In total numbers, Lecturer 1 used a similar number of structuring devices in both languages, Lecturer 2 used 16% less whereas both Lecturers 3 and 4 used significantly less in the English lectures. In many instances, the structuring markers were used consecutively in one sentence:

Extract: 13.7

Lecturer 1, English

This is why I actually showed you this whole thing (RETROSPECTIVE) because I'm also going to refer a lot to the numbers today (PROSPECTIVE). So, digital divide erm is something you heard about last semester pretty sure (RETROSPECTIVE).

Extract 13.8 Lecturer 3, English

I think I said it before (RETROSPECTIVE), if not I'll say it now (SEQUENCER)

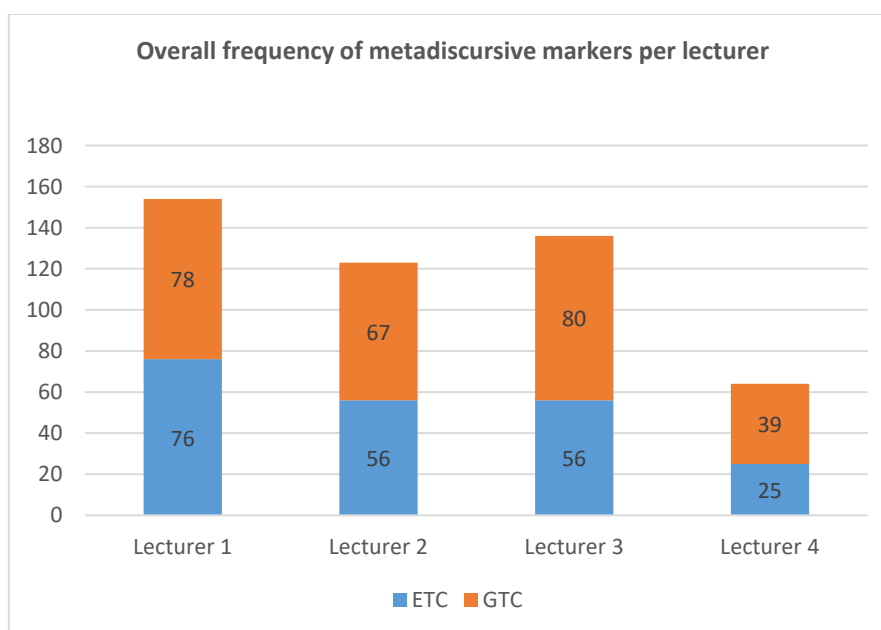


Figure 13. 12 Overall frequency of metadiscursive markers per lecturer and language

Prospective markers were used more frequently by both Lecturer 2 and 4, and Lecturer 4 and 1 made more use of *retrospective* markers. Lecturer 3 used *sequencers* in the English lectures with an extremely high frequency in comparison to the other structuring devices overall.

Table 13. 7 Distribution of discursive markers as percentages per lecturer

	Lecturer 1 De.	Lecturer 1 Eng	Lecturer 2 De	Lecturer 2 Eng	Lecturer 3 De	Lecturer 3 Eng	Lecturer 4 De	Lecturer 4 Eng	ETC	GTC
Closing Markers	1%	3%	3%	4%	3%	0%	0%	0%	2%	2%
Openers	0%	1%	3%	2%	1%	2%	3%	0%	1%	2%
Prospective Markers	10%	14%	25%	25%	10%	5%	21%	32%	17%	16%
Recapitulation Markers	1%	0%	0%	5%	3%	4%	0%	0%	2%	1%
Retrospective Markers	31%	41%	9%	13%	29%	13%	26%	24%	24%	24%
Sequencers	40%	32%	39%	32%	35%	55%	38%	24%	37%	38%
Topicalisers	17%	9%	21%	20%	20%	21%	13%	20%	16%	18%
Totals	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Note: all values over 20% are colour coded pink for ease of reading

On several occasions, lecturers combined questions with structural markers:

Extract 13.9 Lecturer 1, English

So why am I telling you all this? (OPEN, RHETORICAL) (SEQUENCER)

Extract 13.10 Lecturer 2, German

Also wir sehen auch schon wieder wie diese Frames wie bei Daniel Kahne...Was was ist eigentlich Sprache? (RHETORICAL) (TOPICALISER)

[So we also see again how these frames like Daniel Kahne's...Actually, what is language? (RHETORICAL) (TOPICALISER)]

Or the structural marker as a *sequencer* was combined with the CDF EVALUATE:

Extract 13.11 Lecturer 2, English

(..) und besonders spannend (EVALUATE) (SEQUENCER)

[(..) and particularly fascinating (EVALUATE) (SEQUENCER)]

The final discursive features under review are *repetitions* and *paraphrases*. The bar chart (Figure 13.13) indicates that once again these linguistic devices are used more frequently in the GTCs.

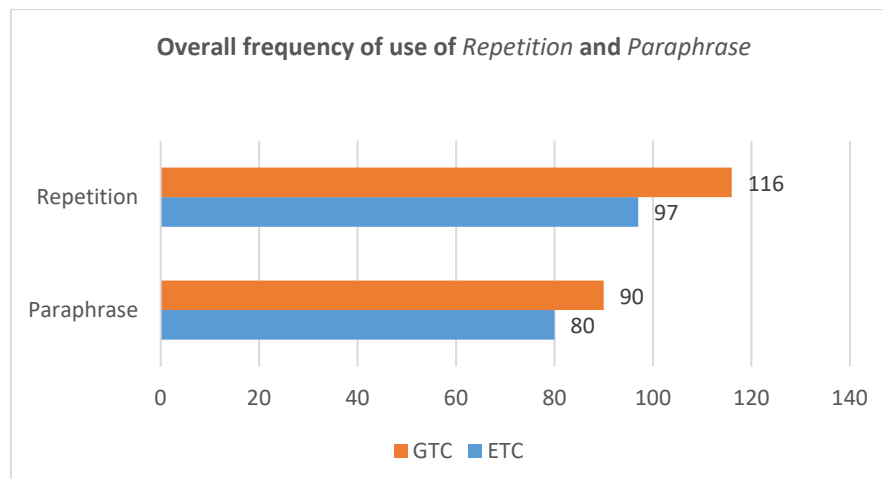


Figure 13. 13 Overall frequency of use of Repetition and Paraphrase

The following extracts are typical examples of how these features were operationalized by lecturers, sometimes extremely often to add emphasis and often, as with the case of Lecturer 1 in English, starting with the interjection/conjunction "so".

Extract 13.11 Lecturer 3, GTC (frequent use of REPETITION)

Dadurch, dass wir schon geprimt sind, dass das so <L2En> front of mind <L2En> ist, diese Geschichte, (REPORT) weil wir sie oft gehört haben, ist es viel viel (REPETITION) erm ja es ist viel viel (REPETITION) besser zugänglich und diese Frames sozusagen können, können viel viel (REPETITION) besser angewendet werden. Diese Geschichte kann einfach ganz ganz viel viel (REPETITION) besser, ja, kann viel viel (REPETITION) besser auf diese Geschichte kann zugegriffen werden. Und viel (REPETITION) leichter ermm ja auf uns eingehen. Eine Frage war? (OPEN, REFERENTIAL)

[By the fact that we are already primed, that this is so front of mind, this story, (REPORT) because we have heard it many times, it is much much (REPETITION) erm yes it is much much

(REPETITION) more accessible and these frames so to speak can, can be applied much much much (REPETITION) better. This story can just be accessed much much much (REPETITION) better, yes, can be accessed much much (REPETITION) better. And much (REPETITION) easier ermm yes to us. There was a question? (OPEN, REFERENTIAL)]

Extract 13.12 Lecturer 1, ETC (frequent use of PARAPHRASING)

(..) so it's it's the the the the technical part to say it from a very macro perspective,

Or

so it's it's more a passive use and an active use okay

A typical pedagogic practice implemented by lecturers at universities of applied sciences, is the use of real life examples in the form of case studies, anecdotes and, indeed the slogan used in marketing communication of the UAV is #diepraxisstudieren [study real business]. Lecturers are actively encouraged to use practical examples, case studies etc. in their delivery. As such, each time the lecturers used a practical example to illustrate REPORTing or DESCRIBing, they were coded in the corpus as EXAMPLE in order to see if there were any discernible differences in frequency in the different media of instruction. In the ETCs, there were n=89 tokens of examples compared to n=109 in the GTC, which represents 16% more. Lecturer 1 utilized examples the least in both languages of instruction

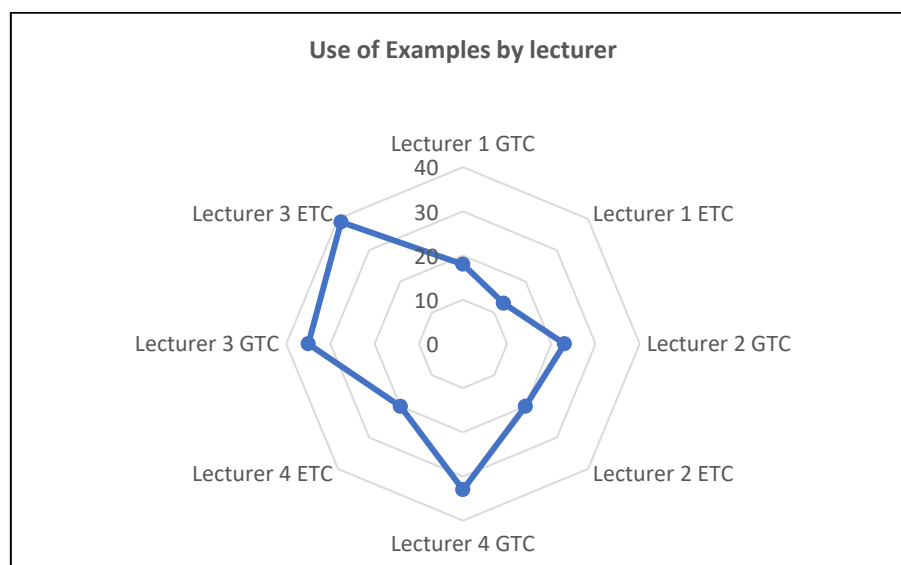


Figure 13. 14 Overall frequency of use of Examples

Taken as a whole, the contrastive results of the frequencies of use of discursive features point to a more varied language used in the L1 German lectures of all features analysed. Curiously, more CDFs are used in the GTC overall, however, the CDFs EXPLORE, DESCRIBE

and CATEGORIZE appear more frequently in the English corpus. The most conspicuous observation is the higher frequency of use of structuring devices in the GTCs. In both languages of instruction there is a clear tendency for lecturers to use both *referential* and *rhetorical* questions to aid content learning. The following sub-chapter zooms in on a more detailed contrastive review of each lecture, while bearing in mind the intended learning outcomes. In an attempt to uncover the relationship between rhetorical choice and content actually learnt, an exemplary question from the pre-and post-test is reviewed with the corresponding passage of the corpus.

13.2.2 Analysis of lecture *Online Communication*

The lecture *Online Communication* was one of those used in my pilot study. It was the first lecture in the data collection period and I was fortunate that the lecturer allowed me to access all three lectures, both the full-time and the part-time lecture of the GTCs. A linguistic analysis was not undertaken of the part-time lecture, as it was almost identical to the full-time cohort lecture, however, the findings of the post-test are included to further validate findings. The lecture in English was delivered at 09:30 on Thursday and the German ones on Tuesday at 09:30 and Friday at 16:30 in the same week. This lecture block was made up of four teaching units (each teaching unit is 45 minutes) in February 2021. The lectures followed exactly the same format, i.e., the lecturer used the same slides in German and English, and only differed with regard to a few examples. The lecturer timed breaks, self-study, and discussions at the same time in both media of instruction.

Table 13. 8 Overview of lecture *Online Communication*

Lecturer	Profile	Topic	Duration (net)	Words	Words / min
Lecturer 1	German native speaker / > 15 years teaching experience	English – Online Communication	111	16,135	145
		German– Online Kommunikation VZ	99	15,621	157

The lecturer is a senior researcher with considerable international teaching and research experience and was very familiar with my research interest. The comparison in student

performance is quite remarkable; the students performed similarly in the pre-test and had a very similar improvement in the post-test in all cohorts (see Table 13.9).

Table 13. 9 Comparison of student performance in the lecture *Online Communication*

Course	Language of instruction	N	Pre-quiz mean score	Post-quiz mean score	Knowledge increase	Wilcoxon signed-rank test
Online Communication	English	25	68.3%	86.0%	17.7 pp	$Z = 231.0, p < .001$
	German	57	67.4%	84.6%	17.2 pp	$Z = 1365.0, p < .001$
Overall	both	220	52.6%	78.0%	25.4 pp	$Z = 20454.5, p < .001$

As can be seen in Table 13.10, the only significant differences in the student perceptions of the lecture were in item one, where the students in the GTC considered the course easier to follow, and in item five, where the students in the ETC thought the lecture was slightly more relaxed. Item seven is ambiguous, as the content and structure of the lectures was identical, and so it is unclear why in the ETC the students were more critical. A possible explanation for this is that this perception of a sub-optimal structure could be related to the students' proficiency in English.

Table 13. 10 Students perception of the lecture *Online Communication*

Statement	Online Communication ETC		Online Communication GTC		Mann-Whitney U test
	Mean	(SD)	Mean	(SD)	
Q1: This lecture was easy to follow.	4,40	0,71	4,70	0,50	$U = 540.0, p < .05$
Q2: Some terms were difficult for me to understand.	1,96	1,02	1,60	0,65	$U = 591.0, p = .18$
Q3: Sometimes the lecturer spoke too fast.	2,08	1,04	1,79	0,98	$U = 585.0, p = .17$
Q4: I prefer not to ask questions in the lecture.	3,00	1,08	2,77	1,24	$U = 641.0, p = .46$
Q5: The atmosphere in the lecture was relaxed.	4,20	0,82	4,67	0,55	$U = 477.5, p < .01$
Q7: The contents of the lecture were presented logically.	4,36	0,57	4,77	0,42	$U = 441.0, p < .001$

Note: All items were measured on five-point scales (1 = strongly disagree; 5 = strongly agree)

The following extract further exemplifies how similar the lectures were in terms of communicative aims and didactic considerations of how to execute content delivery:

Extract 13.12 Lecturer 1 English and German definition of ARPANET

So where does the Internet, where did it all start? Okay? (RHETORICAL)(Topicaliser)
 We in general refer to it as the Arpanet the Arpanet is the advanced research project agency network (DEFINE). And that was an arm of the United States Department of DEfense the arpanet was actually just a computer network, and it was developed in 1968 and erm developed by researchers at the MIT the Massachusetts Institute of Technology in the United States DEpartment of DEfense So what we see that the the beginning of the Internet is actually based in in military area, so it was. (DESCRIBE) (PARAPHRASE)

Wo hat das ganze dann angefangen mit dem Internet. ja. (RHETORICAL) (Topicaliser) Fragen uns auch immer. Umm. Die Anfänge liegen eigentlich ganz weit zurück beim ARPANET ARPENET (REPORT) steht for <L2en> Advanced Research Projects Agency Network <L2en> (DEFINE) eigentlich ein Computernetzwerk Entwicklung, wurde das ganz in 1968 von der US Airforce. Umm. Wir werden dran daran sehen (PROSPECTIVE), dass diese ganze Entwicklung von Kommunikationstechnologien eigentlich immer sehr stark aus dieser Militärgeschichte hervorgeht. (DESCRIBE)

Overall, there are just a few differences in content delivered; after analysis of both lectures, the only remarkable difference is that the lecturer goes into more detail of “First order media” in the GTC and while the concept of the *Knowledge Gap Hypothesis* [Wissensklufthypothese] is merely explained in the ETC, in the GTC a discussion is actively started about it using a *display* question “Was ist die Folge?” [What does this lead to?]. As can be seen in the chart in Figure 13.15, in the GTC more linguistic diversity in all areas is displayed.

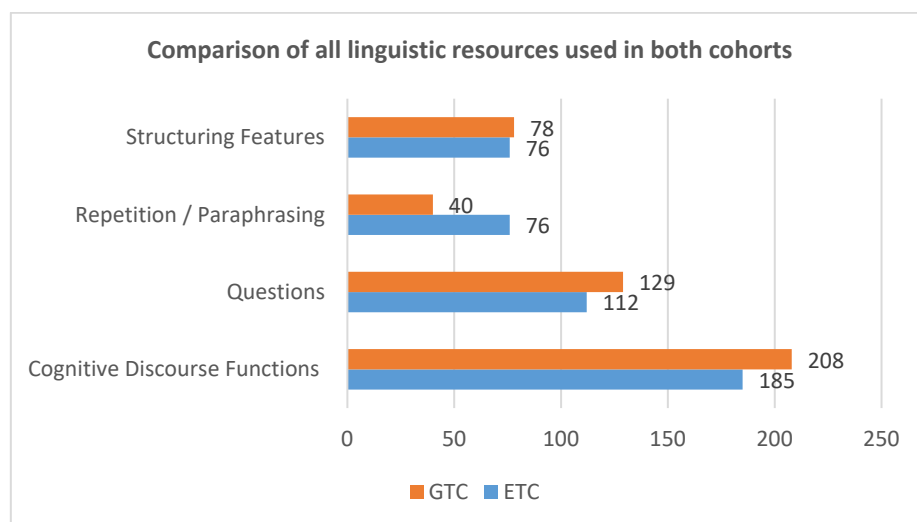


Figure 13. 15 Comparison of all linguistic resources in lecture *Online Communication*

Zooming in on the CDFs (see Figure 13.16) there is a notable difference between the ETC and the GTC; the lecturer spends significantly more time EXPLAINing, EVALUATing and REPORTing, and the only CDF used more frequently in the ETC is DESCRIBing. Due to the fuzziness of some boundaries between CDFs and the existence of overlapped and embedded CDFs, a small percentage of this difference might be attributed to coding difference too, as has been noted also in other studies (Dalton-Puffer 2016: 33; Doiz & Lasagabaster 2021: 60).

The learning outcomes of this lecture are: (1) Understand empirical usage habits and practices; (2) Know key media technologies; (3) Know the key areas of application for corporate online communication tools (e.g., website, social media, (micro)blogging, wikis).

The CDFs most directly associated with these learning outcomes are REPORT and DESCRIBE, seen in the use of the operators *know* and *understand*.

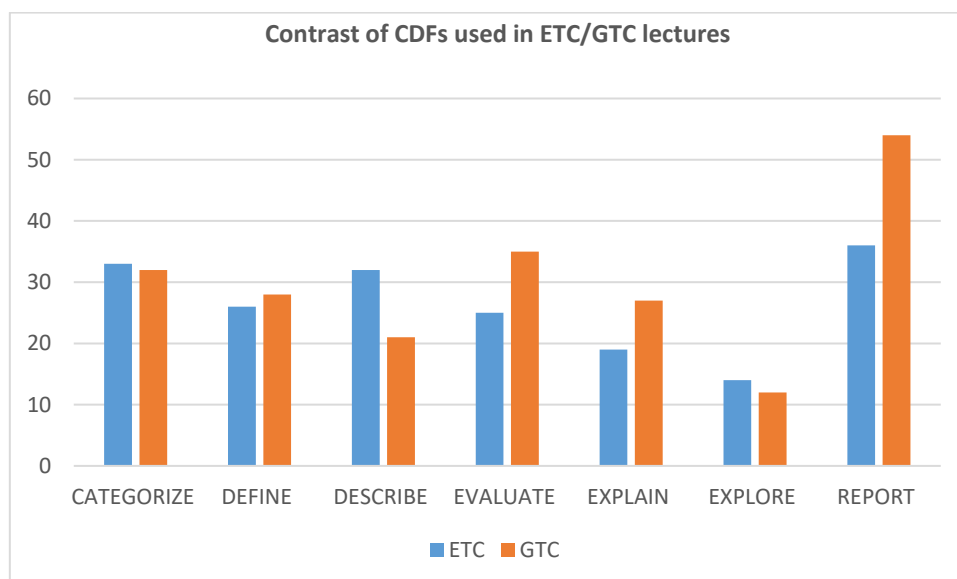


Figure 13. 16 Online Communication – Distribution of CDFs across both languages

The bar chart below (Figure 13.17) shows that many more *referential* questions are used, which encourage interaction and might also motivate the students to ask more questions themselves. This supposition is additionally supported by the number of times students interacted with the lecturer; in the GTC this amounted to 50 interactions, whereas in the ETC 39 were observed. Yet at the same time Lecturer 1 makes use of more *rhetorical* questions, which discourage interaction and seem to be used as fillers/markers. There is a more extensive use of *display* questions in the GTC, too. The following passages exemplify how questions are used consecutively, without giving the students much time to answer, but perhaps rather this reformulation of questions is used as emphasis and/or as a filler.

Extract 13.12

Die bauen darauf aus. Filterblasen und Echokammern, die Wörter da haben alle sicherlich schon gehört? (CLOSED, REFERENTIAL) Was ist denn der Unterschied zwischen der Filterblase und der Echokammer? (OPEN, DISPLAY) (4) Es ist ja wahrscheinlich nicht dasselbe oder vielleicht ist es auch dasselbe? (OPEN, DISPLAY) Sie haben sicher gehört es gibt Echokammer und Filterblase. (REPETITION) Was ist denn der Unterschied? (OPEN, DISPLAY)

Because this is actually when we think about two I don't know two hot topics in in in during the last years and filter bubbles and ECHO chambers does that tell you anything? (CLOSED, REFERENTIAL) Have you heard about the terms filter bubbles and ECHO chambers? (CLOSED, DISPLAY) Anyone? (CLOSED, REFERENTIAL) Or am I telling you something totally new? (CLOSED, REFERENTIAL) Filter bubbles ECHO chambers. (REPETITION) (3) Is, do you; do you have anything, information had you already about that? (OPEN, DISPLAY)

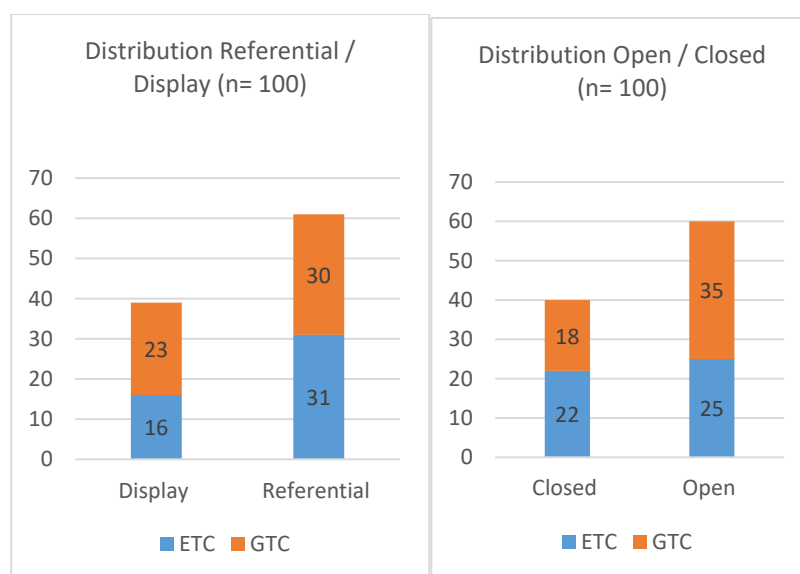


Figure 13. 17 Online Communication - use and frequency of questions type

The total numbers of structural markers (see Figure 13.18) indicate a clear preference for *sequencers* and *topicalisers* in German, whereas more use is made of *retrospective* and *prospective* markers in English.

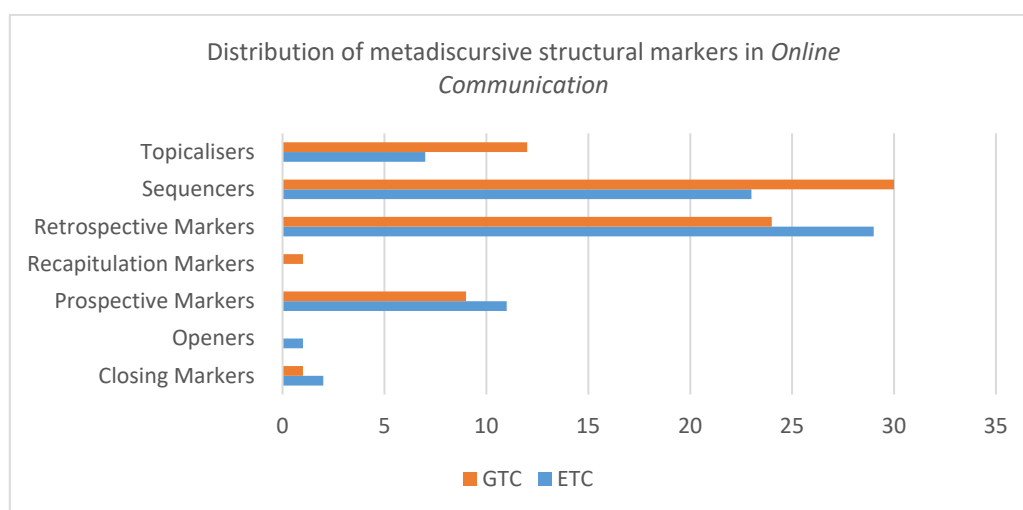


Figure 13. 18 Online Communication - use and frequency of metadiscursive structural markers

The following extracts exemplify this rhetorical tendency:

Extract 13.13 Lecturer 1, examples of frequent Sequencers

So jetzt komme ich aber zu dem Punkt, den ich vorher ansprechen wollte
or
und dann kommen wir eben wieder zu diesem Punkt
or
der zweite Punkt ist eben und dann sind wir wieder

Extract 13.14 Lecturer 1, examples of frequent Retrospective Markers

we said that before
or
Okay, so we already said
or
(..) question that we were talking about at the beginning,

Finally, and to some extent surprisingly, these ETC lectures show a greater frequency of the use of *paraphrasing* and *repetition*. They might serve as a communicative aid for the lecturer where there might be increased concern that the content had not been understood.

The use of examples was also coded, and this shows that these were used more often in German. Furthermore, the lecturer emphasized various points more frequently in German.

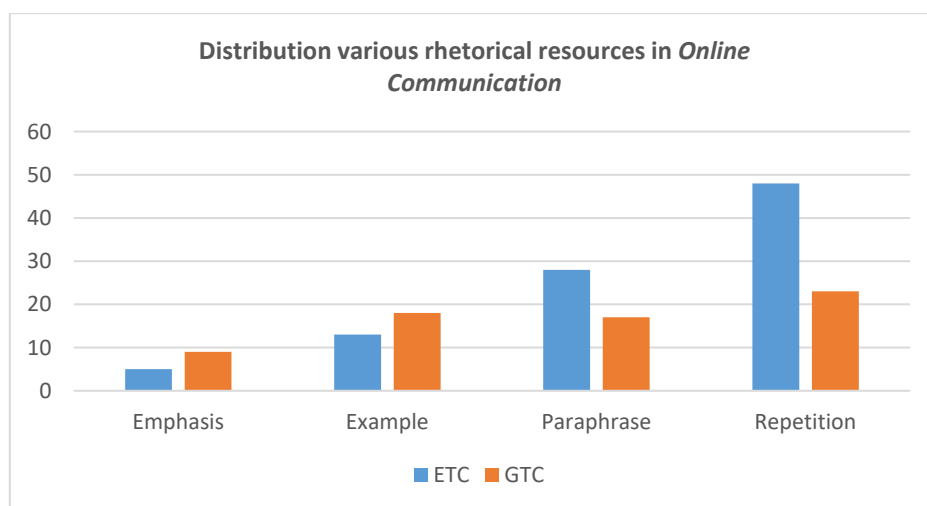


Figure 13. 19 Lecture *Online Communication* – various rhetorical resources

The analysis now turns to a question where the most notable differences in the post-test results occur. The question to be reviewed for a linguistic analysis is the following *detail* question: Devices which store, transmit and receive information are referred to as (a) first-order media (correct answer), (b) second-order media or (c) third-order media.

Table 13. 11 Overview of correct answers in the pre-and post-test question “first-order media”

GTC Pre	GTC Post	ETC Pre	ETC Post
3/35* Full-time cohort	33/35 Full-time cohort	8/25	21/25
3/22 Part-time cohort	18/22 Part-time cohort		

Correct answers / total number of valid participants

After having inspected the pre- and post-test questions in German again, I noticed that I had not translated “first-order” as “erster Rang”, the German translation the lecturer used

throughout, both orally and in the visual support materials. Notwithstanding this oversight, the GTC students did perform better in the full-time cohort, but the part-time GTC students fared similarly to the ETC students. Overall, the GTC displayed a 78pp increase in knowledge and the ETC a 52pp increase. The slides in Figure 13.20 show that the students were offered the same information visually; the lecturer commences with the header “Internet = a medium?” and only reveals the explanation after the students have contributed:

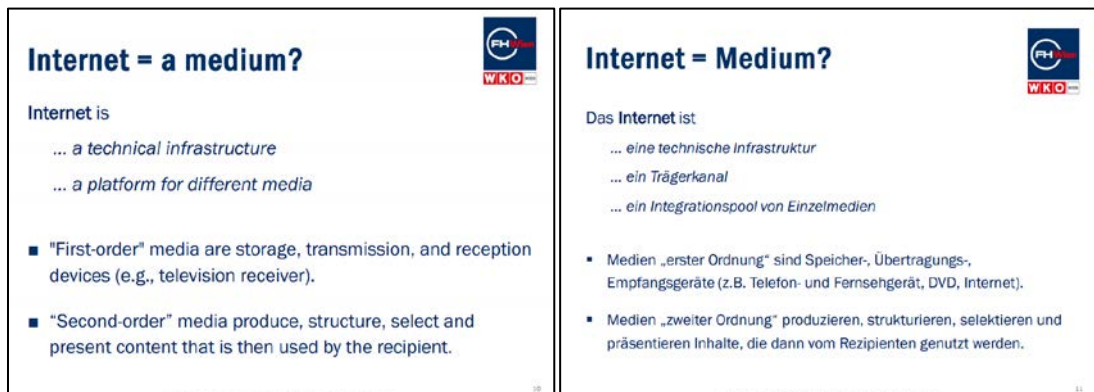


Figure 13. 20 Slide as background for discussion about “first-order” media

Extract 13.15 Lecturer 1, explanation of “first order media”, GTC

Heute kann sich kein Mensch mehr vorstellen, ohne das Internet zu leben. Ja, so die Frage ist aber natürlich überhaupt ist das Internet ein Medium? (CLOSED, DISPLAY) Frage an sie. Ist das Internet ein Medium oder nicht? (8) (CLOSED, DISPLAY)

Student: Ist das Internet ein Medium der vierten Dimension?

Lecturer 1: @@@ Ehrlich gesagt, das ist eher der ersten Ordnung. Also. Umm. Sie kommen schon dahin. Das Internet ist eigentlich kein Medium im eigentlichen Sinne, es ist eine technische Infrastruktur, es ist ein Träger Kanal und es ist Integrationspool von Einzelmedien. Ja (DEFINE) Selbstverständlich ist es so, dass wir in unserm Alltagsgebrauch vom Internet als Medium reden Ja. Selbst wenn sehe ich sag mal soll ich sagen die Zeitung aufschlagen, aber wenn Sie online gehen und irgendwie auf der ORF Webseite sind, oder Standardseite oder Falter (EXAMPLE) und es geht um Kommunikationstechnologien wird vom Internet immer noch als Medium besprochen, Ja, weil es in unserem Alltagsgebrauch so ist, aber eigentlich ist es Internet eben diese technische Infrastruktur der Trägerkanal (DEFINE) (REPETITION) und da kommen wir hin, zu dem was die Kollegen gerade gesagt hat, (RETROSPECTIVE) Wir unterscheiden zwischen Medien 1. Ordnung. Ja. In 1. Ordnung, (REPETITION) die umfassen eigentlich nur diesen rein technischen Möglichkeiten eines Mediums zur Vermittlung und zur Speicherung und Übertragung umm von Informationen. (CATEGORIZE) Ja. Also dieser Abruf von Informationen gute Beispiele sind halt immer so die CD und die DVD benutzt man auch schon keiner mehr, umm aber es ist quasi einfach sozusagen die Infrastruktur oder dieser diese Plattform auf der einzelne Medien umm stattfinden können, das heißt, wenn wir davon reden in das Internet ist Integrationspool von einzeln Medien, wir schauen uns dann die einzelnen Medien an, dann sehen wir ok, eigentlich ist die Webseite das Medium. Die E-Mail die Social Media Seite. Ja. (REPORT) Das sind dann diese vielen Einzelmedien die wir haben, und dass wir dann schon mal Medien zweiter Ordnung, ja, die beziehen sich eben auf diese auf die Kommunikatoren, die sich den diese technischen Möglichkeiten der Medien 1. Ordnung bedienen ja, also, da geht's dann umso Aspekte wie Selektion, Strukturierung, Aufbereitung medialer Inhalte, Ja. (CATEGORIZE) Und das ist das ist quasi wir können sagen das geistige Potenzial, also, dass ich diese technischen

Möglichkeiten bedient, also dahinter stecken dann zum einen aus der professionellen Sicht, Journalistinnen und Journalisten, umm wenn wir in Unternehmen gehen kann man sagen die Person die Nehmens (?) Kommunikation arbeiten und können aber auch genauso gut sagen wir ja, weil wir produzieren ja Inhalte ja strukturieren selektieren die schauen uns den Präsentieren wir was..Ja. Es fängt schon an, wenn wir einfach nur auf Instagram irgendwie was posten Kaption dazugeben oder Kommentar hinterlassen und dergleichen. (REPORT) (EXAMPLE) Ja. Also aus dieser Publizistik wissenschaftlichen Perspektive ist das Internet kein Medium. (DEFINE) Ja. Und es ist wichtig zu wissen (EVALUATE) und Sie werden selbst mich wahrscheinlich beim reden ab und zu dabei erwischen wie ich sage es Internet ist ein Medium, weil es Alltagssprache ist. (REPORT) Ja. Aber wir müssen eigentlich genau sein, weil es das nicht ist. Ja. Das ist Medium erster Ordnung. (REPETITION) Ich hoffe ihnen ist das klar. Ja. Wenn nicht aufzeigen aufrufen bitte. Ja. Das ist sehr wichtig. So. (EVALUATE) . Wo hat das ganze dann angefangen mit dem Internet. (RHETORICAL) ja. Fragen uns auch immer. Umm.

Extract 13.16 Lectuer 1, explanation of “first order media”, ETC

So where did it all start, you know my slide is not so now, the Internet so so first question is is the Internet, a medium? (2) (CLOSED, DISPLAY) Like radio newspaper TV, what we talk about. is it or is it not? (CLOSED; DISPLAY)

Student : I think it can be seen as both some and some medium on its own, and also as a platform for for other because there are things like you know you can just rewatch stuff from from TV and you can re listen to radio or also listen to the radio via the Internet.

Lecturer: Okay. yeah so you actually you kind of explain the way way why I'm saying it's actually not both. So, as you said (RETROSPECTIVE), (DEFINE) it's it's actually it's a technical infrastructure. And as you said (RETROSPECTIVE), , it's a platform for different media (PARAPHRASE), you know, like you said (RETROSPECTIVE), you can do different things on it, you know, radio and you newspapers or whatever social media so. From a communication theory perspective, the Internet is not a medium like what we used to okay? (DESCRIBE) It's it's it's as technical infrastructure it's a platform for different media, which are media and these different media are like the website, email, Facebook, instagram or other social media platforms blogs, and whatever there's out. (CATEGORIZE) (EXAMPLE)

But yes, of course, and you probably will even hear myself saying it, (DEFINE) you know when we talk about it, we often say, like the Internet is a medium, (REPETITION) you know it's even like if the mass media tells talks about it so in our everyday talk, we talk about the Internet is a medium, because it does all the things for us a medium is doing. (EXPLAIN)

It's just important for you to know from a communication theory perspective it actually is not. (EVALUATE) So what we do is from communication theory perspective we actually have first order media (REPETITION) okay and that's what the Internet is. And first order media (REPETITION) they compromise the technical capabilities for distributing arms drawing distributing retrieving information all these things okay? (DEFINE)

Examples are the computer the CD, the DVD if you can still remember it. Okay? (EXAMPLE) So it's it's the the the the technical part to say it from a very macro perspective, (PARAPHRASE) and then we have second order media Okay? and second, audio media (REPETITION) like to those we talked about here, email websites, social media with all different platforms so social so second order media (REPETITION) (EXAMPLE) actually referred to the communicators like journalists or marketers and other communicators who make use of these tech. technical capabilities of first order media.(CATEGORIZE) Okay, so it's about selecting and structuring and preparing content and it's it's about it's actually referring to the intellectual potential that makes use of technical possibilities okay? So second order media produce structure select and present content that is then used by us as recipients alright. (DESCRIBE)

So that's a big difference from a communication theory perspective so it's important for you to know (EVALUATE), but of course we all talk about the Internet as a medium Okay? (CATEGORIZE) And we, when we do so, we actually refer to the second order media and do you understand this differentiation? (4) (CLOSED, DISPLAY) Okay, I take this as a yes. Okay?

So where does the Internet, where did it all start? Okay? (RHETORICAL) (TOPICALISER)

The length of the explanation is similar. In the ETC, the student offers an answer which is incorrect and in the GTC, a student answers with a question and there are no other contributions from other students. Therefore, it is clear that the students were not familiar with these terms before the lecture. There are more detailed examples offered in the GTC and this is intercepted by the repetition of the definition. In this excerpt, there is more metadiscourse used in the ETC.

Together, this linguistic analysis points to an interesting different choice of rhetorical devices in each cohort. In the GTC, Lecturer 1 tended to use the CDFS EXPLAIN And EVALUATE, opted for more *referential* and *rhetorical* questions, utilized more *sequencers* and *topicalisers*. Whereas in the ETC, there were more instances of the CDFS DESCRIBE and EXPLORE and *display* questions and *retrospective* and *prospective* markers were more pronounced. Notably, Lecturer 1 made use of *repetition* and *paraphrasing* more frequently in the ETC.

13.2.3 Analysis of lecture *Visual Communication*

The lecture in German was delivered on a Tuesday morning at 09:30 and the English counterpart on Wednesday of that week at 18:30; both were planned for 4 teaching units (each teaching unit at the UAV is 45 minutes). The timing of the lectures should be duly taken into consideration upon reflection of the results, as tiredness on the part of the lecturer and students may have an impact on results for the ETC. The lectures, however, were comparable in the length of time and number of words used (see Table 13.12) and followed exactly the same format, i.e., the lecturer used the same visual aids in German and English and only differed with regard to a few examples. The lecturer built in breaks at the same points, self-study, and discussions in both media of instruction. The attendance of the ETC was poor on that occasion, with just 16 students completing the post-test compared to 28 students in the GTC, however, the Wilcoxon signed-rank test takes that into account. What was striking in this particular GTC lecture was that the lecturer used the informal second person pronoun [du] form with the students. This runs against common practice at the university when teaching in German. Whilst observing the lecture, it was noticeable that the lecturer positioned herself at eye level with the students, which is understandable and

justifiable due to her age and limited teaching experience. This position naturally creates an informal environment.

Table 13. 12 Overview of lecture *Visual Communication*

Lecturer	Profile	Topic	Duration	Words	Words / min
Lecturer 2	German native speaker / > 1.5 years teaching experience	English – Visual Communication	73	10,997	150
		German – Visuelle Kommunikation / full-time cohort	78	11,736	150

This lecture was the only one with a more significant improvement in the ETC than the GTC (see Table 13.13).

Table 13. 13 Comparison in student performance in the lecture *Visual Communication*

Course	Language of instruction	N	Knowledge increase (KI)	Difference (KI _{EN} – KI _{GE})	Mann-Whitney U test
Visual Communication	English	16	34.0 pp	10.2 pp	U = 327.0, p < .05
	German	28	23.8 pp		

As can be seen in Table 13.14 students' perception of the lecture was remarkably similar in both cohorts, with the only questions showing a statistical significance being questions 3 and 7.

Table 13. 14 Students perception of the lecture *Visual Communication*

Statement	ETC		GTC		Mann-Whitney U test
	Mean	(SD)	Mean	(SD)	
Q1: This lecture was easy to follow.	4,56	0,63	4,79	0,50	U = 180.5, p = .16
Q2: Some terms were difficult for me to understand.	2,06	0,93	2,11	1,20	U = 215.0, p = .82
Q3: Sometimes the lecturer spoke too fast.	1,56	0,73	1,32	0,95	U = 163.0, p < .05
Q4: I prefer not to ask questions in the lecture.	3,00	1,37	3,00	1,25	U = 222.5, p = .97
Q5: The atmosphere in the lecture was relaxed.	4,75	0,45	4,82	0,61	U = 194.0, p = .25
Q7: The contents of the lecture were presented logically.	4,63	0,50	4,93	0,26	U = 156.0, p < .05

Note: All items were measured on five-point scales (1 = strongly disagree; 5 = strongly agree)

There were only a few minor differences in content delivered; in the GTC the lecturer suggested that students could do some further reading if desired and spent some time discussing how prior knowledge and experience affects interpretation of images, which is only briefly discussed in the ETC. Lecturer 2 did not discuss the concept of the *Text-Picture Mismatch* [Text-Bild-Schere] in the ETC; in fact, I recall her approaching me about this and asking for a definition in English a long time before we agreed that I would analyse her

lectures. I could not help her at the time, as I had never come across this concept. This informal discussion showed that the lecturer was unaware of how to translate this concept. She touches on the idea of it, but very superficially. The lecturer adapted some examples in the GTC to include Austrian examples of deep fakes (current media examples of the so-called Ibiza video in Austria). Otherwise, the examples are the same and she uses the same short videos in English in the GTC. The students in this cohort are further required to read a paper in English as one of their tasks. However, the use of English language materials is not unusual in German-taught lectures at the UAV, as students are expected to have B2+ level of English. The following extract further exemplifies how similar the lectures were in terms of communicative aims and didactic considerations of how to execute content delivery:

Extract 13.16 Lecturer 2 English and German

Und das ist jetzt eben die Überleitung dazu (TOPICALISER), warum das visuelle online immer wichtiger wird, diese visuelle Komponente und zum Abschluss (SEQUENCER) möchte ich jetzt noch zwei Statistiken, dann ist es eh aus mit den Statistiken herzeigen, die stärker in das Arbeitsleben schon rein greifen, also die visuelle Kommunikation in der kommunikativen Arbeit. Das ist eine Umfrage von 2017, aber sie ist auch schon wiederholt worden und da stimmen eben über 95% von europäischen Manager im Kommunikationsberufe zu, das visuelle Kommunikation einfach immer wichtiger wird und dass das immer wichtiger ist, auch für Einsteiger für Jobeinsteiger Einsteigerinnen das zu wissen und das zu können. (CATEGORIZE)

Die gute Nachricht ist junge Menschen haben das meistens auch schon viel stärker in sich verankert, als die älteren das ist ein Vorteil, die man hat, wenn man ins Berufsleben neu einsteigt (EVALUATE), dadurch, dass man eben schon damit was zu tun hatte, dass man schon viel mehr visuelle Kommunikation gewöhnt ist und in seinem Alltag ist es auch etwas was die meisten jungen Professionals (REPETITION) besser können, (EXPLAIN), dass es z.b. Fotos machen oder Grafiken erstellen (EXAMPLE), das sind einfache Dinge, die viel öfter vorkommen schon auf dem Studium jetzt z.b. Und dadurch kommt einfach dazu, dass viele junge Menschen das auch schon besser können (REPETITION), überdurchschnittlich gut können (PARAPHRASE) und das ist definitiv ein Vorteil, wenn man danach ins Berufsleben einsteigen möchte (..) (EVALUATE) Genau.

So coming a bit away from the private use of online media (TOPICALISER), I also brought some graphs and it's the last two then I'm done with the with the numbers. That go more into professional communication, and so this is the European communication monitor that, basically, is a survey between and management, people working in management in different communication organizations in the whole of Europe (DESCRIBE), and so they also found that visual communication is getting more and more important in the future, and so erm so this is something that was published in 2017 so has been a few years, but still, it is still an even more getting more and more important. (EVALUATE)

The good news is that young professionals tend to have these visual communication skills (EVALUATE), a lot more than their older counterparts. So that's really good news for you, (REPETITION) if you're starting in a job if you're looking into starting in the communication professions, it is that because you're so used to visual communication, you also have developed skills that others might not have. These could be taking photos or creating graphs, taking professional photos or even making short videos (EXAMPLE) (EXPLAIN) because it is so rooted in our online life, people that are younger it's 29 years or younger (REPETITION), so I can still count myself there we are used to visual communication, a lot more, and that actually gives us an advantage. (PARAPHRASE)

As can be seen in Figure 13.21, it is apparent that in both languages Lecturer 2 employs a more balanced variety of linguistic devices. When reviewing this compared to the total numbers from all the lecturers, she is the only one to use more CDFs and questions in the ETC. This finding could point to the better outcome in the post-test, which the following analysis will investigate.

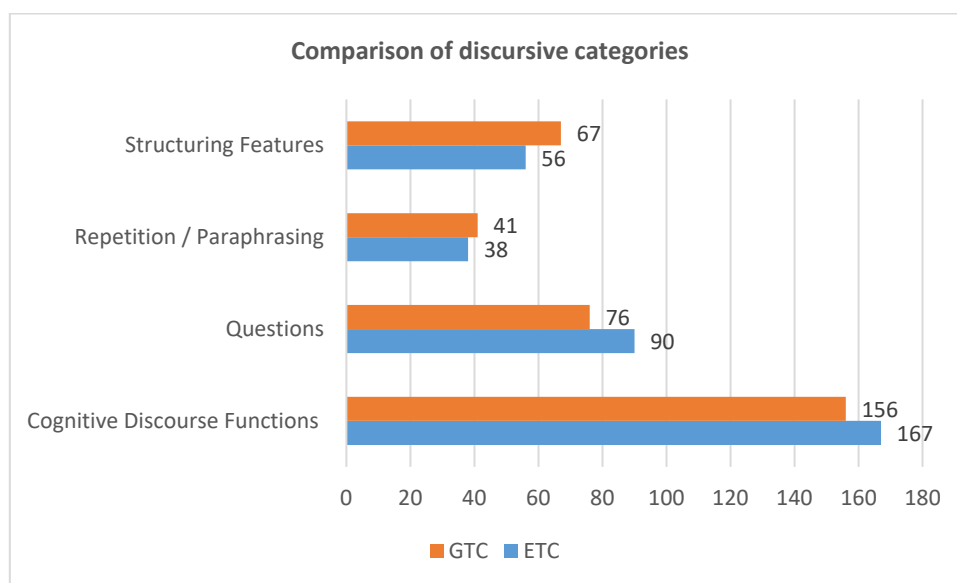


Figure 13. 21 Comparison of all linguistic resources used in both cohorts of *Visual Communication*

The most striking observation from the analysis of CDFs employed, as can be viewed in the bar chart 13.22 below, is almost the same number of realizations of the CDF EVALUATE and DEFINE in both languages. Lecturer 2 EXPLORES more in the ETC, whereas the CDFs DESCRIBE and REPORT are more prevalent in the GTC. Once again, the fuzziness of boundaries between these CDFs might have an impact on these results. The learning outcomes of this lecture are, as specified on Page 161, to (1) know key media technologies and the specifics of communication theory in online communication and (2) explain these on the basis of established as well as new scientific communication approaches and models. The CDFs associated with these are EXPLAIN, DESCRIBE and REPORT.

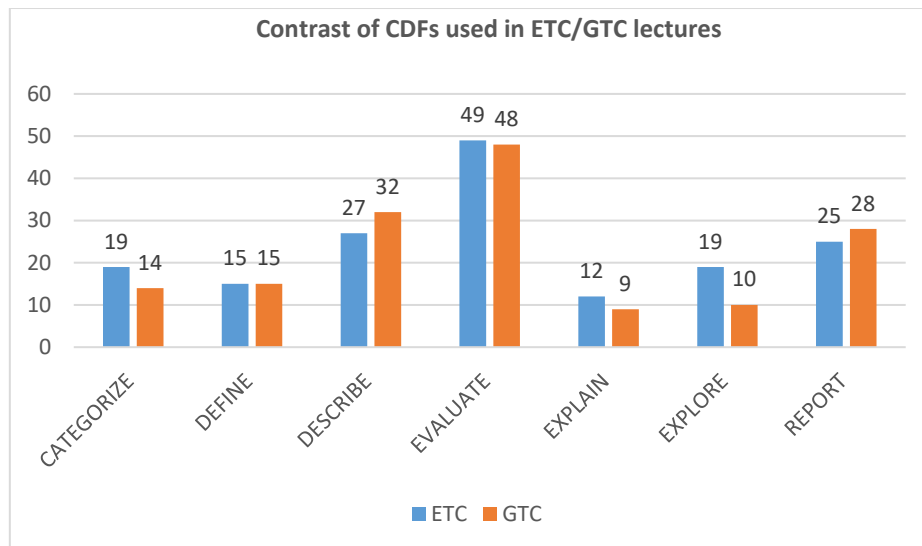


Figure 13. 22 Visual Communication – Distribution of CDFs across both languages

It seems possible that Lecturer 2 at times used the CDF EVALUATE as a method for conveying this content and knowledge:

Extract 13.17 Lecturer 2 discussing visual communication, ETC

And so I think that this is really like this graph really I think shows why visual communication is so important, when we talk about online communication (EVALUATE)

Turning to the frequency of use of questions, Lecturer 2 used *open* and *referential* questions more frequently in the ETC which encourage interaction and it is conspicuous that the students posed slightly more questions in the GTC. Here follows an extract exemplifying the typical use of questions by Lecturer 2:

Extract 13.18 Lecturer 2, typical use of questions GTC

(..)und mich würde es interessieren. Wer von euch ist es 100% sicher, dass dieses Bild gefälscht ist? (OPEN, REFERENTIAL) Ihr könnt sich das kurz anschauen und dann wird mich einschätzt wird mich interessieren, ob jemand sich da ziemlich sicher ist, mit seiner Meinung ob dieses Bild echt ist, oder ob dieses Bild nicht echt ist oder bearbeitet wurde? (OPEN, REFERENTIAL) (EXPLORE) [(...)and I would be interested. Who of you is 100% sure that this picture is fake? You can have a quick look at it and then I will be interested to know if anyone is quite sure of their opinion if this picture is real or if this picture is not real or has been edited?]

Extract 13.19 Lecturer 2, typical use of questions ETC

(..) and I want you to look at the picture and tell me if you are really, really certain that this picture is either real or fake? (OPEN, REFERENTIAL) So look at the picture for a bit, and let me know if you are really certain have one opinion? (OPEN, REFERENTIAL) Where yeah let me know if you think that you know if it's real or not? (23) (OPEN, REFERENTIAL) (EXPLORE)

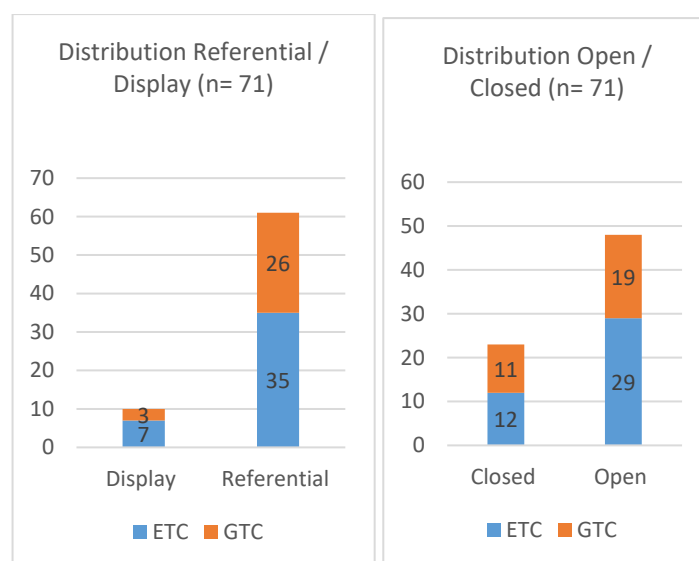


Figure 13. 23 Visual Communication - use and frequency of questions type

Notably, the number of student interactions was lower at 48 occurrences in comparison to 54 in the GTC. This is interesting, as in contrast, more *rhetorical* questions are used in the GTC.

Once again, *openers* and *closing* markers are seldom used and a *recapitulation* of content is only offered in the ETC.

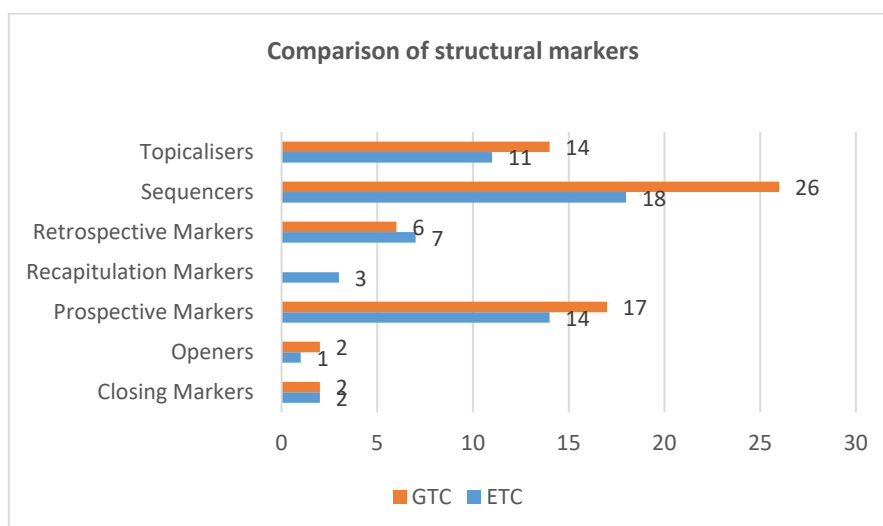


Figure 13. 24 Visual Communication - use and frequency of metadiscursive structural markers

Interestingly, Lecturer 2 does not make as much use of structural markers in the ETC; there appears to be a particular preference for *sequencers* and *prospective* markers in German. The extract to follow exemplifies how Lecturer 2 typically utilized structural markers:

Extract 13.20 Lecturer 2, examples of frequent structural markers

Im nächsten Part (TOPICALISER) habe ich jetzt den drei Theorien der Wirkungsforschung rausgesucht an denen Theorien von denen sollte ihr eigentlich im letzten Semester wenigstens kurz gehört habe. (RETROSPECTIVE) Das ist das Agenda Setting das Framing und das Priming. (CATEGORIZE) Sagen euch diese Theorien etwas? (CLOSED, DISPLAY)

The next part will then be priming (TOPICALISER) we also talked about priming last semester (RETROSPECTIVE) that one was the one that was very similar to framing and agenda setting. (CATEGORIZE) (EVALUATE) And so priming was the idea that (..)

Finally, it is apparent in Figure 13.25 that there is quite a similar use of the paraphrasing and repetition in both languages.

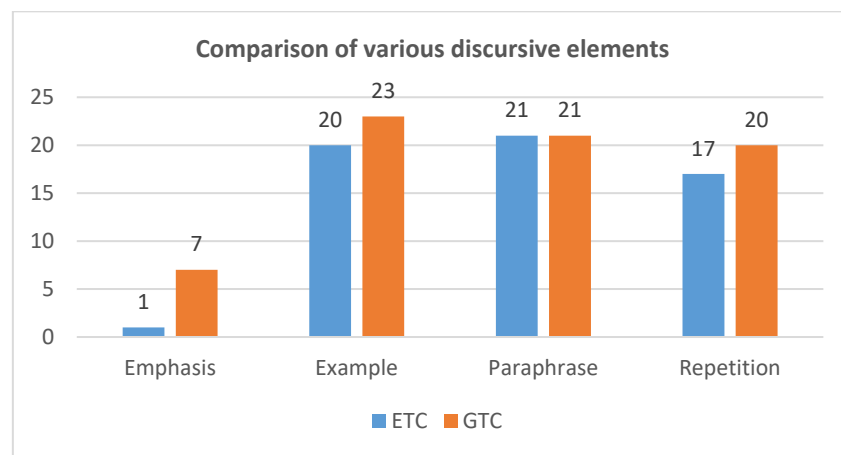


Figure 13. 25 Lecture *Visual Communication* – various rhetorical resources

There are almost the same number of examples offered, however on some occasions in the GTC, Lecturer 2 reverts to some forms of emphasis, which is often realised with the word “wichtig” [important] (n=26). For example, “ein wichtiges...” [an important] or “wichtig ist” [what’s important] or “wichtig für mich” [what’s important for me] or “das ist ganz wichtig das klarzumachen” [it is really important to make this clear]. In the ETC she uses this adjective 19 times.

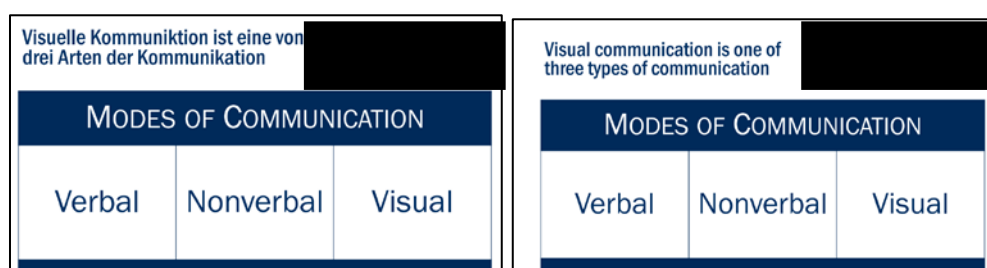
In the following section, a pre-and post-test question with the most interesting results are discussed. Question two showed the greatest overall increase in knowledge but that is also due to the way the points were allocated – the question posed was: “Can you name the three modes of communication?”. For each correct mention, one point was awarded (e.g., if a student mentioned all three types of communication, the student got three points, if they only mentioned one, they got one point). In this instance, the GTC

exhibited a greater increase in knowledge with a percentage point increase of 78.7 compared to 61pp achieved by the ETC.

Table 13. 15 Overview of number of correct mentions “verbal, non-verbal, visual” communication

GTC Pre	GTC Post	ETC Pre	ETC Post
23	66	12	45

The lecturer was extremely precise in her visual aids (see Figure 13.26) and held a long monologue explaining this, which was followed by an interactive discussion about the types of visual communication. This part of the lecture was used as an introduction to the main topic of the lecture.



MODES OF COMMUNICATION		
Verbal	Nonverbal	Visual

Figure 13. 26 Visual aid used as background for discussion about the three types of communication

Here follows the extract from the corpus on this topic, in which the lecturer discusses these three modes of communication:

Extract 13.21: Description of three types of communication, ETC

And then so visual communication is very old, and it is one of three types of communication, we talked about that last semester (RETROSPECTIVE) that we often distinguish between verbal communication, nonverbal communication and then visual communication. (CATEGORIZE) However, it is not that we can simply say that we are only focusing on verbal communication or we are only interested in visual communication, because very often that is actually mixed up. Like I’m right now, when you look at the slides there could be a picture on there so that will be something visual I also put some text there so that will be verbal. (REPORT)

And if you look at me, I mean you don't see that much of me, as you would be seeing in a classroom, but you can see a bit of my nonverbal body language. And so, very often, these kinds of modes of communication, cannot be seen as totally distinguished from each other (DESCRIBE), if you think, for example, about advertisements, you often have pictures and text or also when you think: On instagram, for example, you have the picture, but then you have text on the bottom, or in the stories, very often, you have text written over pictures are on pictures. (EXAMPLE) And so there's very often and mixture of visual, verbal and nonverbal (CATEGORIZE) but so today we're focusing on visuals. (PROSPECTIVE) So what will be like kind of the first visuals or kinds of visual communications that come to your mind so when you think about that what can be visual communication? (4) (EXPLORE) (OPEN, REFERENTIAL)

Extract 13.22: Description of three types of communication, GTC

Grundsätzlich unterscheidet man oft Kommunikation in diese drei Arten, also verbale, nonverbale und visuelle Kommunikation. Erm es ist aber jetzt nicht so, dass man das immer ganz streng voneinander getrennt sehen soll muss kann (EVALUATE). Es wird oft unterteilt, weil es dann einfacher ist darüber zu sprechen, bzw. es ist einfacher dann zu sagen (CATEGORIZE); wir fokussieren heute z.b. auf die visuelle Kommunikation und wir bedenken einfach hauptsächlich daran heute, (PROSPECTIVE) aber natürlich gibt da oft auch eine verbale Komponente. Oder eine nonverbale Komponente, also, wenn man jetzt die Situation in der wir sind gerade dran denkt dann hatten wir erm er ein Bild von mir, also etwas visuelles aber, er siehst auch meine nonverbale Kommunikation ein bisschen zumindest, ich sage auch gerade was und es ist Text auf den Folien. (EXAMPLE) Also, das ist das verbales, hin und wieder sind aber auch Bilder auf den Folien das wäre denn das visuelles, also man muss das gar nicht immer so getrennt voneinander sehen, weil es auch viel zusammen spielt, aber heute wollen wir uns eben auf diese visuelle Art der Kommunikation hauptsächlich angucken, fokussieren. (PROSPECTIVE) (REPORT) Was würde euch denn alles einfallen, was zu visueller Kommunikation zählen, (OPEN, REFERENTIAL) was sind da; gesehen von Bilder und Videos waren die ersten die ersten die Dingen die ihr denn einfallen? (EXPLORE) (OPEN, REFERENTIAL)

The monologues are very similar; the only differences are in the introduction in the ETC, where Lecturer 2 commences the discussion by framing visual communications as being old. In the GTC she explains that they are often discussed separately, as this is easier to talk about and differs slightly in the ETC, as she suggests that they “cannot be totally distinguishable from each other”. Lecturer 2 also offers another example (Instagram) in the ETC. However, the use of the CDFs of CATEGORIZing, REPORTing and EXPLORing and the use of referential questions to start the interaction are the same.

To summarize, the data from the post-test results show that *Visual Communication* is the only lecture where there was a significant difference in the increase in knowledge in the ETC. The linguistic analysis points to a more even distribution and variety of linguistic devices in both languages of instruction, compared to the other lectures analysed. Lecturer 2 used the CDFs EVALUATE and *referential* questions more extensively in the ETC, however, more structural markers were utilized in the GTC. With regard to the exemplary question analysed, the GTC students performed slightly better; here the lecturer used another example. From this analysis a possible explanation for the better performance of the students in the ETC could be the more extensive use of CDFs and *open/referential* questions. However, it must be noted that there were fewer students in the ETC and their lecture and post-test took place late at night (around 21:15), which further adds ambiguity to the findings.

13.2.4 Analysis of lecture *Framing and Priming*

The lecture in English was delivered at 09:30 on Monday morning and the German one at the same time the next day in early February 2021. This lecture block was made up of four teaching units (each teaching unit is 45 minutes). Notably, the net speaking time of the lecture in English was shorter by 19 minutes. The lecturer was speaking faster in English, which is also mirrored in the Likert statements where the mean score is higher for the item “sometimes the lecturer spoke too fast”.

Table 13. 16 Overview of lecture *Framing and Priming*

Lecturer	Profile	Topic	Duration (mins)	Words	Words / min
Lecturer 3	German native speaker / >1.5 years teaching experience	English – Framing & Priming Eng	74	11,211	151
		German – Framing & Priming VZ	93	12,832	137

As with the other lectures reviewed so far, they followed exactly the same format i.e., the lecturer used the same visual aids and only differed with regard to a few examples. The lecturer built in identical breaks, self-study, and discussions in both media of instruction. In order to structure the lecture, an overview of the agenda of the lecture was presented at the start, which was identical in both cohorts (see Figure 13.27). As Young reports (Young 1994:174) macromarkers indicating when the content will be discussed, assists students in content learning.

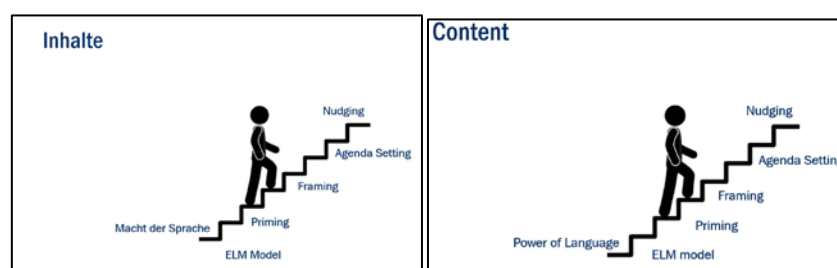


Figure 13. 27 Slides offering an overview of the structure of the lecture

Table 13.17 shows that the students in the lecture did not achieve a **significant** difference in the post-test scores in the GTC and ETC (this was only the case for in the lecture *Visual Communication*); notwithstanding this, the analysis shows that the students in the ETC did perform better.

Table 13. 17 Comparison in student performance in the lecture *Framing and Priming*

Course	Language of instruction	N	Knowledge increase (KI)	Difference (KI _{EN} – KI _{GE})	Mann-Whitney U test
Framing & Priming	English	22	34.4 pp	6.2 pp	$U = 331.0, p = .65$
	German	28	28.2 pp		

Table 13.18 provides an overview of the differences in student perceptions after the lecture and shows they were similar; only in the ETC the results were worse for item two due to the terminology in English. It is apparent in this table that the items one (easy to follow), five (relaxed atmosphere) and seven (logical presentation) have higher values in the GTC.

However, Lecturer 3 structures the lecture identically for the ETC by using the same format and style, and addresses the students in a similar way, so this could be attributed to the delivery of the lecture in the students' L2.

Table 13. 18 Students perception of the lecture *Priming & Framing*

Statement	Priming & Framing ETC		Priming & Framing GTC		Mann-Whitney U test
	Mean	(SD)	Mean	(SD)	
Q1: This lecture was easy to follow.	4,45	0,60	4,79	0,50	U = 212.0, p < .05
Q2: Some terms were difficult for me to understand.	1,76	0,83	1,96	1,00	U = 263.5, p = .51
Q3: Sometimes the lecturer spoke too fast.	1,73	0,70	1,29	0,66	U = 182.0, p < .01
Q4: I prefer not to ask questions in the lecture.	3,27	1,12	3,11	1,29	U = 291.5, p = .74
Q5: The atmosphere in the lecture was relaxed.	4,55	0,60	4,86	0,36	U = 224.0, p < .05
Q7: The contents of the lecture were presented logically.	4,45	0,51	4,86	0,36	U = 184.0, p < .01

Note: All items were measured on five-point scales (1 = strongly disagree; 5 = strongly agree)

There were some differences in content. For example, Lecturer 3 went into more detail about the exam and other examples are offered in the GTC. Furthermore, a more detailed explanation about “front of mind” is offered and there was a lengthy monologue about priming and the media which is missing in the ETC. These differences may explain the reason why the lecture took 19 minutes longer in German. Similar to the lecture in Visual Communication, the lecturer does not display any hesitation in her delivery, although she is relatively young and inexperienced in teaching in either language. Her style is very light-hearted, although she uses the expected formal pronoun (Sie) in German, and there is more humour and laughter in both her lectures. Additionally, in both languages she frames relevant bits of content with the statements “it is important to me” [es ist mir (einfach) wichtig] and at certain points adds a lightbulb to the slide to visually point to those

important definitions or explanations, indicating to the students which elements are important to recall at the examination.

An interesting feature in Lecturer 3's GTC class is the frequent use of "sozusagen" [so to speak], which is used here as a filler and throughout the rest of her lecture (n=104). Typically, this would be a RECAPITULATION marker.

The following extract taken from the start of the lectures further exemplifies how similar the lectures were in terms of didactic considerations of how to execute content delivery. However, there is a difference in ETC concerning the different types of "social situations" (private, personal, and professional), and the lecturer adds a personal note at the end of this explanation that it does not need to be "boring":

Extract 13.23: Lecturer 3, discussion of the reasons why communication theories are studied, GTC

Erm, und natürlich ich find diese fünf Funktionen von Kommunikationstheorien, persönlich sehr sehr gut (EVALUATE), erm wir studieren, diese Kommunikationstheorien oder so so wir setzen sogar neue Theorien auf ern um einfach Kommunikation besser zu organisieren, besser organisieren zu können (REPETITION), das zu verstehen erm auf unser Wissen zu erweitern und natürlich ja auch Kommunikation zu verstehen (PARAPHRASE), zu verbessern und und Herausforderungen meistern zu können. Das ist so das ist mein Reason Why, warum ich mich mit Kommunikationstheorien beschäftige. (EXPLAIN) (DESCRIBE)

[Erm, and of course I find these five functions of communication theories, personally very very good, erm we study, these communication theories or so we even set up new theories on ern in order to simply organise communication better, to be able to organise better, to understand that erm to expand our knowledge and of course yes also to understand communication, to improve and to be able to master challenges. That is my reason why I am working on communication theories]

Extract 13.24: Lecturer 3, discussion of the reasons why communication theories are studied, ETC

And also, I think those are five main function of this theories and and I think they they put it quite quite well (EVALUATE), so those theories, they help us understand our own communication, well in a private and personal but also in a professional way ermm and they help us broaden our knowledge and and to help us predict and control communication and they can aid us in challenging communication situation social situations (CATEGORIZE). So those are my reasons my personal reasons of why we study or why we should and can study communication theories (EVALUATE), and that they don't need to be all boring and and pages and pages of literature. (EXPLAIN) (DESCRIBE)

Turning now to a review of the overall linguistic diversity adopted in Lecturer 3's delivery of content, it is clear from the data in Table 13.28 that in all categories there are more tokens used in the GTC. Naturally, as noted earlier, this difference can be partly attributed to the extended delivery of content in the GTC; however, as reported in Table 13.28, the number of CDFs per minute was exactly the same for this lecturer.

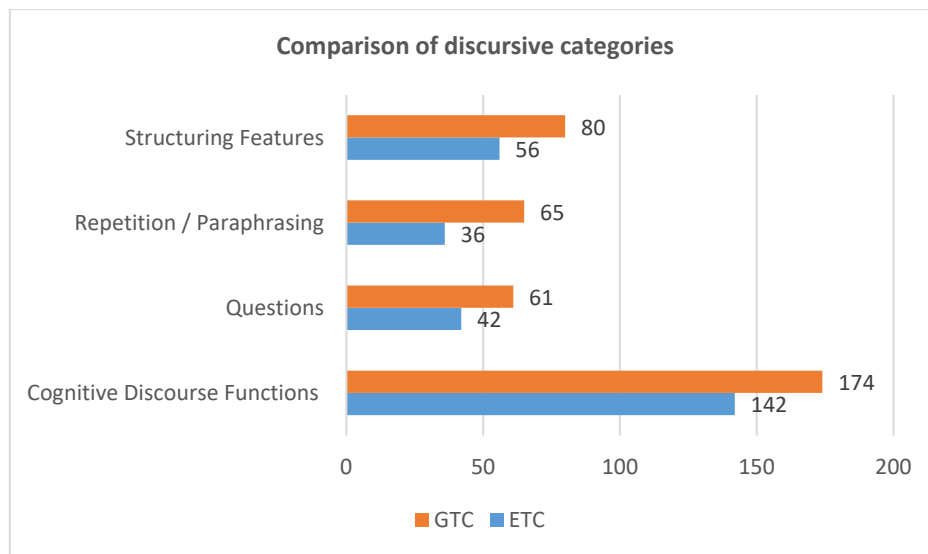


Figure 13. 28 Comparison of all linguistic resources used in both cohorts of *Framing & Priming*

Reviewing the diversity of CDFs employed by Lecturer 3, it can be seen in Table 13.29 to follow that there is an equal use of CDFs apart from the CDF REPORT and EXPLAIN, which are utilized in the GTC more frequently. The learning outcomes for this lecture are: (1) know the specifics of communication theory in online communication and (2) explain these on the basis of established as well as new scientific communication approaches and models. Once again, the CDFs associated with these are EXPLAIN, DESCRIBE and REPORT, which can be aligned to the operators know and explain amongst others.

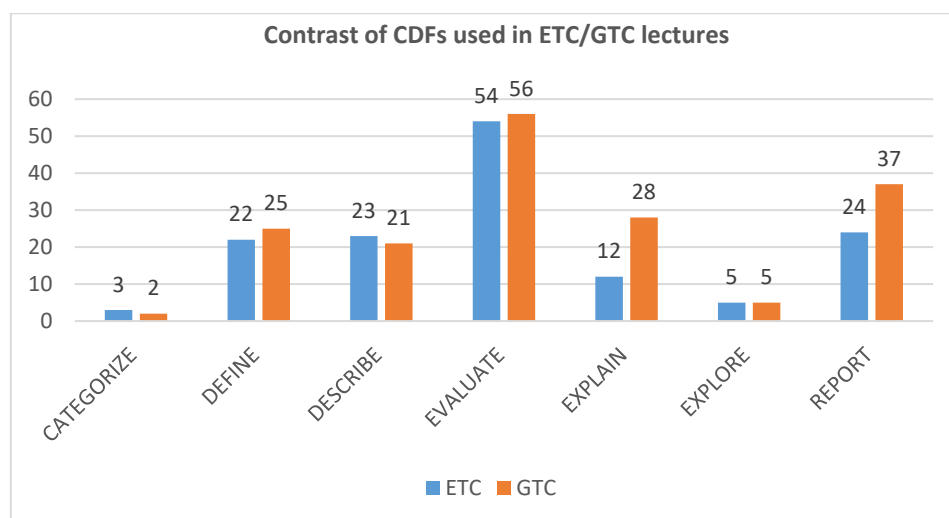


Figure 13. 29 *Framing and Priming* – Distribution of CDFs across both languages

Figure 13.30 provides an overview of the frequency and diversity of questions posed in Lecturer 3's classes. It shows that there are overall more questions posed in the GTC in most categories, and the only striking difference is the more frequent use of *Referential* questions in the GTC.

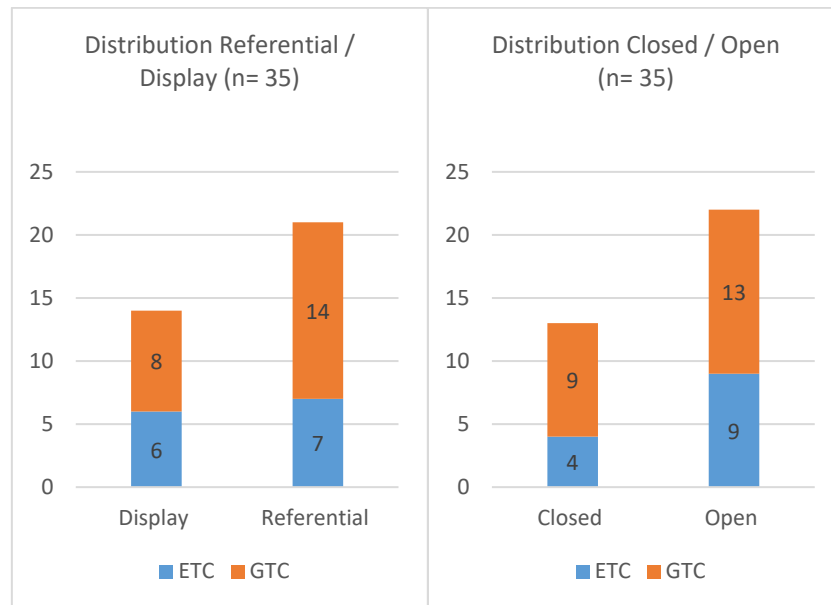


Figure 13. 30 Framing and Priming - use and frequency of questions type

Typical realizations of *open* and *closed referential* questions in the GTC can be seen as follows:

“Gibt es Fragen von Ihrer Seite zu diesem ganzen Bereich das Framing oder auch Framing und Priming in Zusammenspiel?” [Are there any questions from your side on this whole area of framing or framing and priming in interaction?]

or

„Keine Fragen soweit? “ [No questions so far].

Turning now to the analysis of structural markers employed by Lecturer 3, the most striking aspect is the more frequent use of *retrospective* markers.

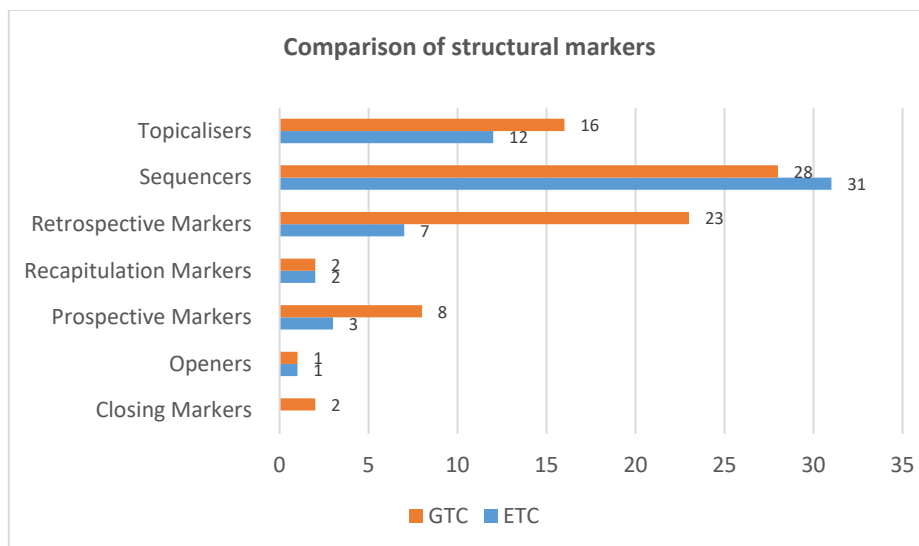


Figure 13. 31 Framing and Priming - use and frequency of metadiscursive structural markers

These *retrospective* markers were often realized as such:

“weil wir zu Beginn gesagt haben” [because we said at the beginning] or

Jetzt kommen wir noch mal zu dem Thema Framing und Medien (**TOPICALISER**), was wir auch schon vorher bei dem Thema priming gesprochen haben. (**RETROSPECTIVE**) [Now we come back to the topic of framing and media, which we also talked about before in the topic of priming]

Similarly, an interesting observation can be seen when reviewing the various other discursive elements as represented below in Table 13.32, where it is clear that Lecturer 3 uses the linguistic device of *repetition* far more extensively in the GTC.

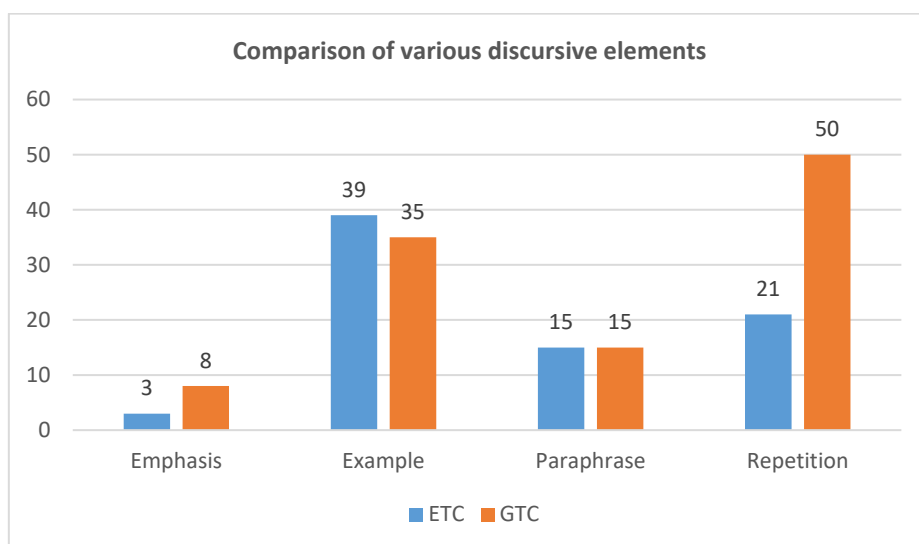


Figure 13. 32 Lecture Framing and Priming – various rhetorical resources

Often *repetition* is not used to emphasize content to ensure comprehension, rather it appears that this is a linguistic habit used by Lecturer 3, particularly in German:

Extract 13.25:

(..) wir schauen sozusagen **diese Reise durchs Gehirn** aus einer Kommunikation Perspektive, also wir machen **eine Reise durchs Gehirn** (..) [we look at this journey through the brain from a communication perspective, so to speak, so we take a journey through the brain]

(..) also nur ein Wort aktiviert werden können und so später **leichter** zugänglich und und **leichter** wieder abrufbar sind (..) [thus only one word can be activated and thus be more easily accessible and and more easily retrievable later on]

(..) ist **viel leichter viel leichter** zugänglich (..) [is much easier, much easier to access]

(..) und diese Studie wird es folgendermaßen erklärt das **tatsächlich** z.B mit dem Thema Terrorismus. Das **tatsächlich** der Blick auf fremde Länder oder die diese Evaluation von anderen Ländern **tatsächlich** vorwiegend dadurch bestimmt wird (..) [and this study explains it in the following way: with the topic of terrorism, for example. That the view of foreign countries or the evaluation of other countries is actually predominantly determined by the following]

The question to be analysed from this lecture refers to the *detail* question: “Rational thinking occupies how much of the brain?” where the correct answer is 5%. Students were offered the possible answers 5%, 10%, or 95%. The number of correct answers per cohort can be viewed in Table 13.19.

Table 13. 19 Overview of correct answers in the pre-and post-test question “rational thinking”

GTC Pre	GTC Post	ETC Pre	ETC Post
10/28	22/28	5/22	14/22

While the pre-knowledge in the GTC was higher and the number of correct answers in the GTC is greater, the difference in percentage increase is 43% in the GTC and 40% in the ETC, so negligible.

Extract 13.26: Explanation of rational thinking, ETC

And I’m sure you know, Daniel Kahneman he wrote the now famous book *Thinking fast and slow*, but essentially like the the core essence of this book, he describes there’s two different systems like in our brain, our brain can be can be divided into those two different systems. (PARAPHRASE) (CATEGORIZE) System one is based on intuition and instinct and I think the the curious thing (EVALUTE) is that 95% of our time we’re using system one which is based on fast thinking associative thinking and just really autopilot that reacts to words and language, for example. And system two the rational thinking rational (REPETITION) systems only used in 5% of the time, (REPORT) if we do not make a

conscious effort to activate and trigger it more and it's the logical side add the slow thinking, so to speak. (REPORT)

Extract 13.26: Explanation of rational thinking, GTC

Und diesen Herrn kennen Sie vielleicht alle Daniel Kahneman, bekannt geworden durch sein Buch *„Thinking fast and slow“*, das vor einigen Jahren mittlerweile publiziert worden und und ich möchte auch auf einige Kern Faktoren dieses Buches eingehen (PROSPECTIVE) und das ist ermm diese beiden Systeme in die Daniel Kahneman (REPETITION) unser Denken, eingeteilt hat zwei zentrale Systeme, die aber unterschiedlicher nicht sein könnten. (EVALUATE) (REPORT) So, System 1, da sehen sie hier abgebildet, passiert eher auf Intuition und Instinkt und wird zu 95% der Zeit von uns genutzt, dass das unterbewusstes denken, es ist schnelles Denken assoziatives denken und wir doch oftmals als als Autopilot bezeichnet und zu 95% (REPETITION) Prozent ermm unserer Kommunikation efforts ermm sozusagen verwenden wir dieses intuitive und instinctive System, und nur in 5% aller aller Kommunikation sozusagen wenden wir uns umso rationalem Denken zu, das natürlich viel viel langsamer vonstattengeht das viel (REPETITION) mehr Bemühungen braucht und dass eher so die die logische Seite unseres Denkens darstellt, (REPORT) also es ist sehr faszinierend. (EVALUATE) Wenn Sie das mal so vor Augen hält nun grundsätzlich so allgemein gesprochen nur in 5 % unserer unserer Kommunikation benutzen wir dieses logischer dieses rationale ermm System. (PARAPHRASE) Natürlich auch, weil es viel viel langsamer vonstatten geht, weil es viel viel mehr Aufwand von unserer Seite bedarf, dieses System zu involvieren zu aktivieren ermm und deswegen verlassen wir uns auch auch so stark auf unser unser intuitives & und ins instinktives ermm Denksystem. (EXPLAIN) Das viel viel schneller funktioniert, (DESCRIBE) ((PARAPHRASE) aber natürlich auch ermm immer wieder bei Sprache Worte und Sprache ganz anders interpretiert und und ganz andere Assoziationen hervorbringt als das System 2. Also das hier nur auf eine kleine Detour ermm weil denke, dass Daniel Kahneman das ist hervorragend geschrieben hat. Falls sie das noch nicht gelesen haben kann Ihnen ans Herz legen, das ist eigentlich ein ganz ganz (REPETITION) amüsantes Lese Vergnügung. (EVALUATE) (CATEGORIZE)

The monologue on this content is much shorter and more precise in the ETC. It is very noticeable that the lecturer evaluates this phenomenon in greater detail in the GTC and EXPLAINS why rational thinking is used less often. Furthermore, there are more cases of paraphrasing and repetition in the GTC. Interestingly, Lecturer 3 uses the same visual aid in English in both cohorts, as can be seen in Figure 13.33 below. However, this is an appropriate practice in the GTC, as students are expected to have an English proficiency of B2+. This is impermissible in the ETC lectures, as there are always a small number of students who do not speak German since this is not an admissions requirement.

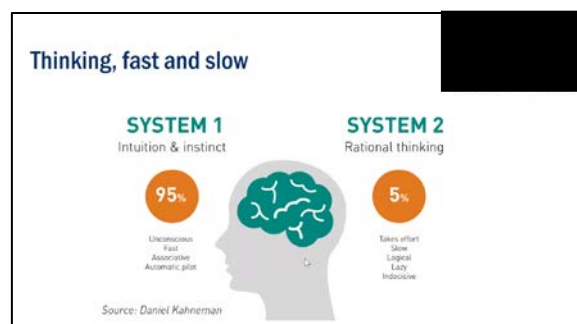


Figure 13. 33 Visual aid supporting the explanation about rational thinking, GTC and ETC

Summing up the findings from Lecturer 3's class, the students performed better in the post-test in the ETC (+6.2pp) however the linguistic analysis does not offer any insights into why this was the case as it shows that linguistic devices were used more frequently in the GTC. Particularly, there were more tokens of the CDFs REPORT and EXPLAIN, more referential questions and retrospective markers. The lectures were structured similarly, yet there were slight differences in terms of more content delivered as is indicated in the corpus examples provided and the longer time used to deliver the content. Furthermore, the exemplary question reviewed does not offer any further explanation as to why the students in the GTC performed better as this example also showed that there was more linguistic diversity and further elaboration in the GTC although there was a similar performance in the ETC.

13.2.5 Analysis of lecture *Media Planning*

During a conversation with a colleague whilst describing my data collection plans, it transpired that she planned to deliver the content of *Media Planning* in both languages of instruction. However, in contrast to the other three lectures, the cohorts are different; the ETC in this case is a module (*Public Relations*) taught in English, although the students study *Kommunikationswirtschaft* [CC] in German. This module has been taught in English for several years and serves to include incoming students in the lecture and offer these students exposure to EMI. The GTC is also different; in this case the lecture is part of the module *Werbung und Public Relations* [Advertising and Public Relations] in the sister study programme, *Marketing and Sales*. However, it is also situated in semester two of the curriculum. Therefore, on discovering that the content was the same, I deemed it an ideal opportunity to enrich my data from the viewpoint of other students and cohorts. The

lecturer delivering this module has over 5 years EMI teaching experience and over 20 years practitioner experience. She has a PhD in applied linguistics and so English is almost an L1 for her. The lectures were delivered one month apart from each other; the ETC was delivered on a Friday morning in March and the GTC was delivered on a Thursday morning in April.

While the GTC lecture took 20 minutes longer to deliver, it followed exactly the same format, i.e., the lecturer used the same visual aids and only diverged with a few examples. As in the previous examples, the lecturer built in identical breaks, self-study, and discussions in both media of instruction.

Table 13. 20 Overview of lecture *Media Planning*

Lecturer	Profile	Topic	Duration	Words	Words / min
Lecturer 4	German native speaker / > 5 years teaching experience	English – Media Relations VZ KOMM	75	7,983	106
		German – Media Relations / VZ MARS	95	10,382	109

Although in both cohorts there was a good knowledge increase in the post-test results, this is the only instance where the knowledge increase in the GTC was greater than in the ETC (see Table 13.21), which on first consideration could be attributed to the fact that the ETC students were not used to EMI instruction.

Table 13. 21 Comparison in student performance in the lecture *Media Planning*

Course	Language of instruction	N	Knowledge increase (KI)	Difference (KI _{EN} – KI _{GE})	Mann-Whitney U test
Media	English	20	27.5 pp	-7.9 pp	U = 182.5, p = .17
	German	24	35.4 pp		

The questions concerning the student's perception of the lecture positioned after the post-test questions are revealing. Table 13.22 below shows that the students considered the lecture slightly harder to follow in the ETC and some terms were harder for them to understand. The students felt that the atmosphere in the ETC was less relaxed in comparison to the GTC.

Table 13. 22 Students perception of the lecture *Media Planning*

Statement	Media Planning ETC		Media Planning GTC		Mann-Whitney U test
	Mean	(SD)	Mean	(SD)	
Q1: This lecture was easy to follow.	3,30	0,92	4,21	0,59	U = 106.0, p < .001
Q2: Some terms were difficult for me to understand.	1,90	0,97	2,38	0,97	U = 171.0, p = .09
Q3: Sometimes the lecturer spoke too fast.	1,25	0,72	1,42	0,58	U = 189.5, p = .13
Q4: I prefer not to ask questions in the lecture.	3,50	1,10	3,08	1,32	U = 200.5, p = .34
Q5: The atmosphere in the lecture was relaxed.	3,90	0,91	4,50	0,78	U = 143.0, p < .05
Q7: The contents of the lecture were presented logically.	4,15	0,59	4,42	0,65	U = 183.0, p = .13

Note: All items were measured on five-point scales (1 = strongly disagree; 5 = strongly agree)

Notably, Lecturer 4 spoke significantly slower in both languages than the other three lecturers. Her style is formal and direct. She offers different and local examples in the GTC lecture, which could also explain why the lecture took so much longer. Furthermore, she uses a didactic technique that requires particular boldness, especially in the online-delivery setting: she offers the students on several occasions extended periods for reflection. On one occasion, it amounted to 90 seconds. Furthermore, at the beginning of the lecture, she presented one slide with the “agenda” of the lecture with precise times and content and also dedicated one slide to the learning outcomes of the lecture. While the visual aids (Figure 13.34) are almost identical, and as illustrated in the following extract, the lectures were similar in terms of communicative aims, in this instance Lecturer 4 offers a little more background information in the GTC monologue:

Extract 13.27: Lecturer 4 English and German description of “the myth of media relations”

So jetzt möchte ich nachdem ich ein bisschen den Zusammenhang zwischen PR und Journalismus bezeichnet beleuchtet haben und sozusagen die Arbeitsweise von den Journalisten und Journalistinnen und noch die Konzepte bei die zugrunde liegenden Konzepte, die da eine Rolle spielen, möchte ich jetzt ganz konkret auf die Medienarbeit als auf die Bereiche der Medienarbeit innerhalb der PR innerhalb einer Organisation eingehen (TOPICALISER). Also, ich arbeite in dem Bereich schon relativ lange und es ist mir in meiner sowohl als Angestellte als auch als Selbstständige von Kundenseite schon öfters vorgekommen, dass es immer noch dieses Mythos gibt der Medienarbeit das Unternehmen oder Organisationen sich das so vorstellen, dass sie eine Geschichte oder eine Information an die PR-Abteilung weitergeben. Die PR-Abteilung schreibt dann eine Pressemitteilung überzeugt der Journalisten oder Journalistinnen darüber zu berichten am besten ohne den Text auch nur zu verändern. Idealerweise bekomme ich dann als Unternehmen oder als CEO von dem Unternehmen den Text noch mal zur Freigabe, damit ich auch wirklich schauen kann, ob das alles richtig wiedergegeben wurde und ob ich da auch positiv dargestellt wurde. Und dann wird es veröffentlicht. Dann lesen alle den Zeitungsartikel im Bericht und denken, was für ein super Unternehmen das doch ist, und wie nicht super ich doch bin. (EXAMPLE) Das ist eine ein Mythos der durchaus noch vorherrschend ist (PARAPHRASE) (REPORT). Die Realität schaut allerdings anders aus, das ist ein langfristiger Prozess des Beziehungsaufbau (..) (EVALUATE) (DESCRIBE)

And I want to start with a myth (TOPICALISER) and I've had quite a number of customers I've worked for quite a number of companies and they actually had this myth (REPETITION), or they had this belief (PARAPHRASE) that media relations or public relations works that way. Erm, I as a as a as a company as a CEO as an owner erm the PR department or the PR agency story they write it up, they write a press release er and give it to the journalists and the journalists that they say Oh, thank you very much I'll cover that I write it out, and I use exactly word for word the way you've written it. Erm, before I publish it I send it back to you so that your CEO or the owner of the company can have a look at it, whether everything is cited correctly and it's done it's projected in the correct frame. Erm, and then it will be published and a lot of people read that article, and I think what a great company I am. (EXAMPLE) (REPORT)

Unfortunately or fortunately depending on the perspective, you look at it, it doesn't work like that at all. (EVALUATE)

WAS MANAGER VON DER PR-ABTEILUNG ERWARTEN	What managers expect of PR professionals in regards to Media Relation
► Mythos: • Ich stelle der PR-Abteilung eine gute Geschichte zur Verfügung • Die PR-Abteilung schreibt eine Pressemitteilung und überzeugt eine/n Journalisten/in darüber zu berichten – am Besten ohne den Text zu verändern • Vor Druck erhalte ich den Text zur Freigabe • Die Menschen lesen den Bericht und denken nur das Beste über mich ► Realität: • PR identifiziert wichtige Medien und JournalistInnen, die am Thema interessiert sein könnten • Es beginnt ein Prozess der Kontaktaufnahme, des Dialogs, Aufbau von Vertrauen und langfristigen Beziehungen • Möglicherweise wird über mein Unternehmen berichtet	■ Myth: • I brief the PR department with a good news story • The PR department writes a release and persuades a journalist to write it out – preferably word for word • People read it and think good of me ■ Reality: • PR identifies key media / journalists that might be interested • Begins process of contact, dialogue, trust, long-term relationship • Possible media coverage

Figure 13. 34 Visual aid, “myth of media relations”

In terms of the comparison between the two cohorts of linguistic resources used, as shown in Table 13.35 below, it is striking that there are far more realizations of *repetition* and *paraphrasing*, and Lecturer 4 uses structuring feature, CDFs and questions more frequently in the GTC.

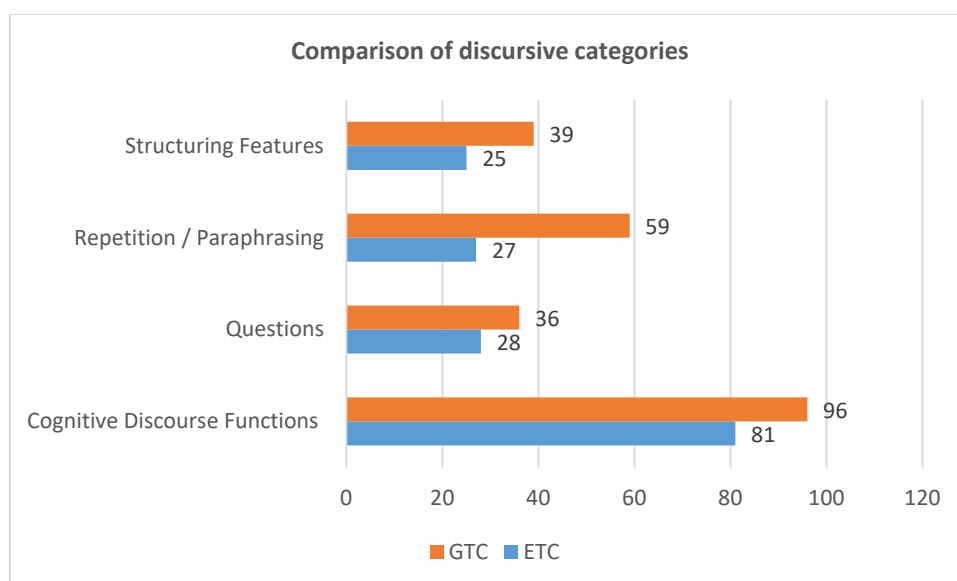


Figure 13. 35 Comparison of all linguistic resources used in both cohorts of *Media Planning*

The total number of CDF realisations in the GTC is greater by 15 tokens, and as the bar chart (Figure 13.36) clearly shows the CDF REPORT and EXPLORE are utilized more frequently.

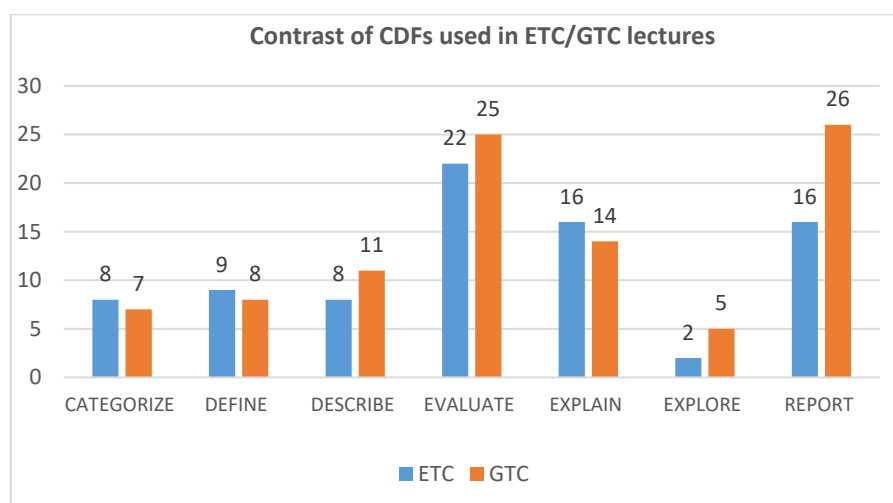


Figure 13. 36 *Media Planning* – Distribution of CDFs across both languages

The learning outcomes of this lecture are as specified on p.161: (1) understand the nature of mass media and how journalists work, (2) explain the relationship between journalism and PR, (3) compare the determination hypothesis to the intereffication model, (4) name and outline different tasks of Media Relations, (5) write a press release. The CDFs closest to these learning outcomes are REPORT and EXPLAIN. In extract 13.27 above, Lecturer 4 addresses

learning outcome (2), which is realized in this instance with the CDFs REPORT and EVALUATE. The CDF EVALUATE supports the REPORTing of the “myth”, thanks to the lecturer’s own professional experience of this situation.

On review of the differences between the cohorts regarding question types posed, it is striking that there are very few *open* questions posed:

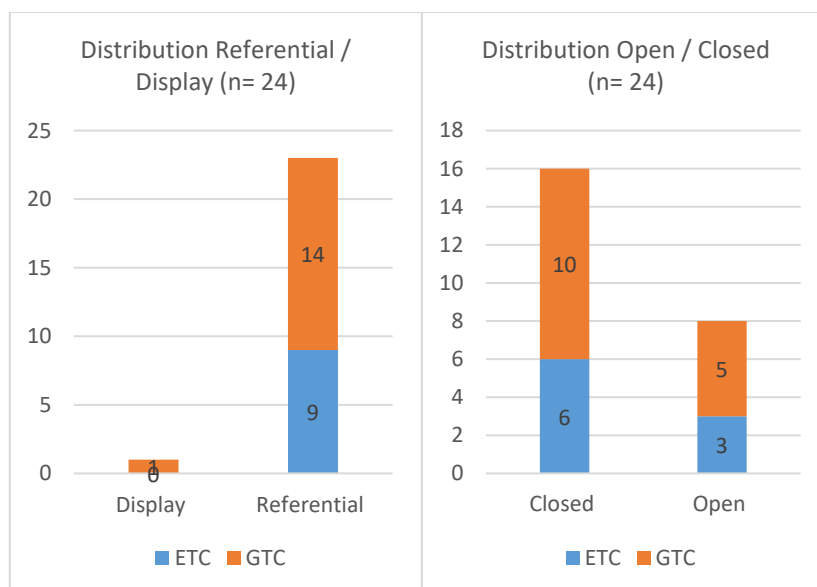


Figure 13.37 Media Planning - use and frequency of questions type

This is an interesting finding as open questions can interrupt the flow of a lecture and “put a strain on the teacher’s cognitive and linguistic resources” as Dalton-Puffer (2007: 97) notes. Although lecturer 4 is very happy to teach in English (see p. 241) this may indicate that she is not as open for such interactions. Examples of *open* questions are:

Extract 13.28: Lecturer 4, examples of frequent *open* questions

Gut, wenn sonst gibt's denn sonst noch Anmerkungen oder Fragen? or
Gut gibt es dazu noch Anmerkungen?

This could be further substantiated with the more frequent use of rhetorical questions in the ETC.

With regard to other metadiscursive structural markers, Table 13.38 shows an irregular pattern of use by Lecturer 4; in the GTC, *sequencers* and *retrospective* markers are used more frequently, whereas *prospective markers* and *topicalisers* are used equally often.

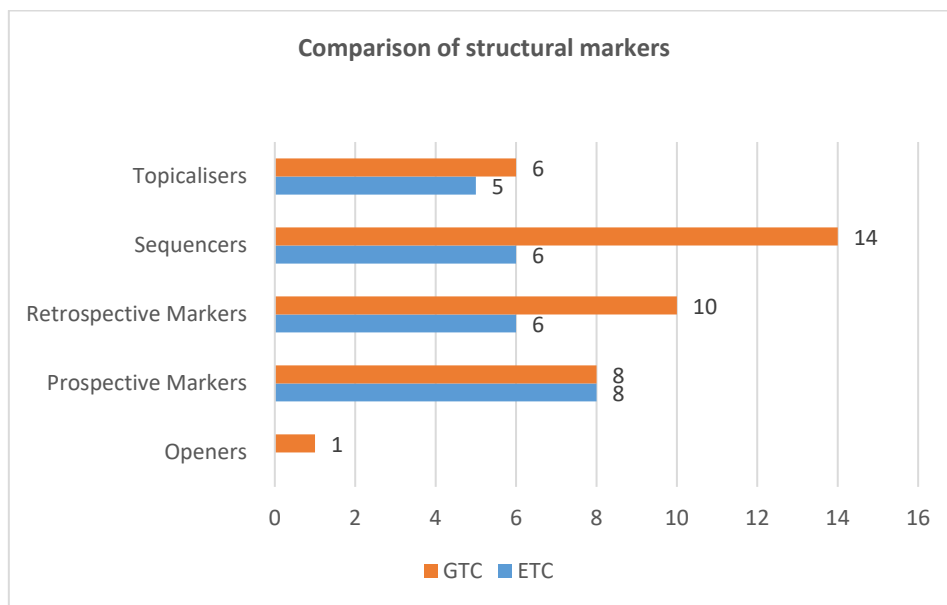


Figure 13.38 Media Planning - use and frequency of metadiscursive structural markers

This tendency in German to frame content more with sequencers is illustrated in the following excerpt where the lecturer explicitly numbers the steps:

Extract 13.29: Lecturer 4, examples of the differences of use of *sequencers*, GTC

So dann es gibt unterschiedliche Bereiche der Media Relations darauf habe ich schon auch das hingewiesen, (TOPICALISER) das heißt der 1. eine Säule davon ist natürlich mal die Beobachtung (..) (SEQUENCER)
 [So then there are different areas of media relations - I have already pointed this out, that is to say the 1st pillar of which is, of course, observation]
 Zweite Säule ist die Bereitstellung von Informationen (..) [The second pillar is the provision of information] (SEQUENCER)
 Und die 3. Säule ist er die Themensetzung der Öffentlichkeit (..) (SEQUENCER) [And the 3rd pillar he is the public's issue setting]

Extract 13.30: Lecturer 4, examples of the differences of use of *sequencers*, ETC

So media relations does not only involve, er you know meeting, journalists and having a chat with them, but it is a lot of research, it is monitoring erm (not coded as a sequencer) Erm, which is the next step, provide the information. (..)
 And then, this is the area, we think it is only erm that you actually try and position erm, your organization in different media er contribute to a public discourse on certain topics (..) (not coded as a sequencer)

The three pillars are more clearly demarcated in the GTC and the start of the third pillar in the ETC is rather jumbled, with Lecturer 4 possibly being unsure of how to deliver this content. The visual aid below (Figure 13.39) shows that the pillars were clearly numbered in

the GTC, which might have been the reason why the lecturer chose this linguistic strategy here.

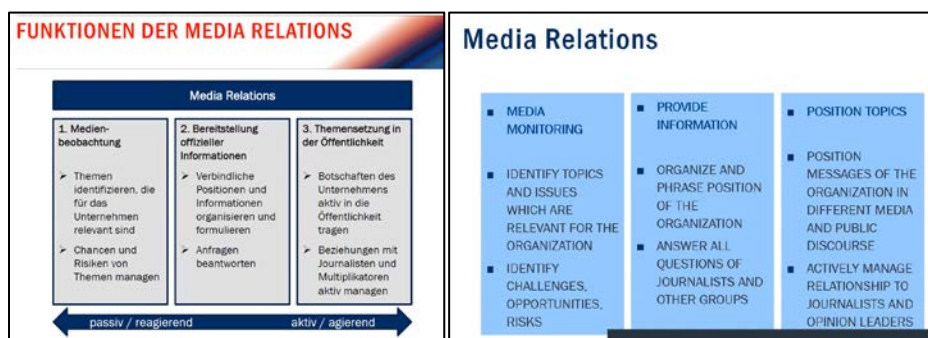


Figure 13.39 Visual aid, “functions of media relations”

Once again, after reviewing the various other discursive resources utilized by Lecturer 4, it can be clearly seen that they are more frequent in the GTC in all categories.

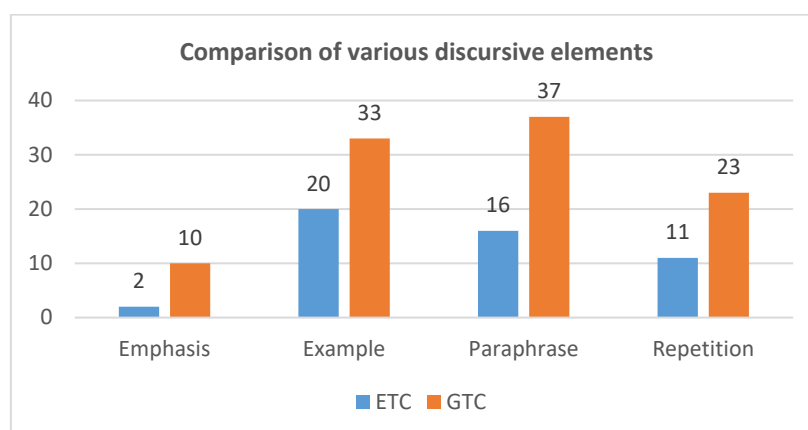


Table 13.23 Lecture *Media Planning* – various rhetorical resources

Turning now to a review of the pre- and post-test data, the detail question asks students if they recall how much content in the media stems from PR, with the correct answer being 60%. Students were offered the choice of 20%, 40% or 60%. The students were certainly unfamiliar with this statistic and so the correct answers in the pre-test can be put down to guessing. However, more students in the GTC were able to retain this information, and the increase in the GTC is 66.4pp compared to 50pp in the ETC.

GTC Pre	GTC Post	ETC Pre	ETC Post
4/24	20/24	4/20	14/20

Although the lecturer shared more or less the same information with her visual aids, she divided the information a little differently in the 2 slides, as can be seen below in Figure 13.24.

Determination Hypothesis

- Why is the diversity of topics in the media fairly small?
- US study (New York Times and Washington Post) -> about 60% from input of PR (Sigal 1973)
- Study in Germany almost the same results (Baerns 1979) Method: input-output-analysis (press releases, articles, TV and radio reports etc.)
- Public relations material seen as a prime factor in the journalistic workflow -> sees the content of media strongly dependent on content provided by PR (press releases and other press material)
- PR material seen as framing the topics in journalism (agenda building)

Determination Hypothesis results of the study

- 60% of national-political topics in the media were based on inputs from PR (cf. Röttger et al. 2011:86)

	News Agencies	Media	Radio	TV
PR	59%	64%	61%	63%
Other Sources	41%	36%	39%	37%

DETERMINATIONSTHESE

- Wie gelangen Informationen in die Medien und wie werden sie dort präsentiert?
- Studie in den USA (New York Times and Washington Post) -> ca. 60% des Inhalts stammt von PR Initiativen (Sigal 1973)
- Eine Studie in Deutschland zeigte ähnliche Ergebnisse (Baerns 1979); als Methode wurde eine Input-Output-Analyse durchgeführt

DETERMINATIONSTHESE

- Studie in Deutschland (Baerns 1991): Zusammenhang zwischen PR und Berichterstattung
- Public Relations beeinflusst Themen und Timing der Medienberichterstattung (Pressemitteilungen und andere Materialien)
- Leistung des Journalismus hauptsächlich im Auswählen aus einem vorgegebenen Angebot (Schreiben, redigieren, kürzen)

	Agenturen	Presse	Hörfunk	Fernsehen
PR	59%	64%	61%	63%
Andere Quellen	41%	36%	39%	37%

Table 13. 24 Slides used to support the explanation of the Determination Hypothesis

The excerpt to follow shows that while the lecturer in the ETC was very direct and precise, she neglected to verbally mention the statistic of 60%, although it appears twice on the visual aids.

Extract 13.31: Lecturer 4, Determination Hypothesis, ETC

Erm, the determination hypothesis was first erm first erm established or come up with as early as the 70s of last century. Erm, the question is that er the researcher concerned was erm looking at different newspapers er different publications and realizing er that the diversity of topics in the media is rather small, there's not a such a high amount of diversity. (REPETITION) And therefore they wanted to analyze why is this the case, why diversity fairly small (REPETITION) er why do different media always or write about roughly the same er content, the same topics. Erm, and so there's a study that has been done in the US erm and that part does study have been repeated in erm Germany, erm with an input output analysis, meaning at that time analyzed press release release by organizations. And erm analyzed the topics of erm articles TV and radio reports and the results of the study are that erm, erm, that the the input of PR activities or er press releases er on topics covered in the news er is more erm than 50%, so still a valuable erm resource for erm for topics being covered in the media.(5) So determination hypothesis mainly erm states that PR has an influence on journalism and all topics and articles that are written erm about talked about. (PARAPHRASE) (DEFINE) (REPORT)

Extract 13.32: Lecturer 4, Determination Hypothesis, GTC

Gut. Die Frage ist natürlich, wir haben immer Gatekeeping erm besprochen über über framing gesprochen, aber die Frage wie viele Wissenschaftler umtrieb oder immer noch umtreibt, ist natürlich schon die Frage, wie eigentlich gelangen eigentlich die Informationen in die Medien und wie werden sie dort präsentiert. (EXPLORE) Und da gab es eine eine Studie in den 70er Jahren in den USA, das war im im im Zuge eines Wahlkampfes und die Ausgangsfrage war eigentlich warum berichten unterschiedliche Medien dann doch immer wieder über die gleichen Themen? Warum ist das so? (research RQs so not coded) Das war die Ausgangsfrage und dann wurden dann zwei Qualitätsmedien analysiert und auf die Quelle zurückgeführt und man hat festgestellt, dass circa 60% des Inhaltes von PR Initiativen stammt aus einer Pressemitteilung eine Pressekonferenz oder andere Informationen, die an die Presse herangetragen wurde. Die Studie wo das noch mal in Deutschland oder nicht genau die gleiche Studie aber eine Studie ähnlicher Art oder in Deutschland dann auch noch durchgeführt mit einer input-output-analyse, man hat Medienberichte analysiert und hat geschaut inwieweit deckt sich das mit Pressemitteilungen und mit Presseaussendungen, die von Unternehmen verschickt worden sind und danach festgestellt, dass auch an bis zu 60 über 60% (REPETITION) also fast dreiviertel (PARAPHRASE) aus Informationen stammt die Unternehmen oder Organisationen zur Verfügung stellen. D.h. die Journalisten und Journalistinnen sind hauptsächlich damit beschäftigt auszuwählen aus dieser Fülle an Informationen an das zu redigieren zu kürzen umzustellen vielleicht noch andere Quellen mit einzubeziehen, aber man hat schon festgestellt, dass auch weit über die Hälfte der Berichterstattung auf lediglich einer Quelle beruhte. (PARAPHRASE) Und das ist natürlich eine große Chance auch für die PR sozusagen beizutragen an der Themensetzung oder beizutragen an über was in Medien berichtet wird (EVALUATE). Timing ist natürlich sehr wichtig, weil die meisten Aussendungen von Unternehmen oder Organisationen wurden aufgenommen und direkt am gleichen oder am nächsten Tag darüber berichtet, also, man muss da dann schon auch sehr schnell sein mit den richtigen Themen. (REPORT)

The communicative aim of this monologue is to describe the hypothesis, which Lecturer 4 does using the CDF REPORT. In essence the content is the same, however in contrast to the ETC, in the GTC she opens the monologue by EXPLORing the research question, and then as she approaches the end, she finishes with an EVALUATion. The monologue in the GTC is longer and notably, 60% is repeated three times and backed up by paraphrasing, which could be the reason why the GTC students were able to retain this statistic better.

Bringing these findings together, this was a particularly interesting analysis as it points to a greater difficulty that students experience in EMI modules if they are normally taught in their L1. The linguistic analysis suggests that the ETC students might have fared worse due to fewer CDFs adopted by Lecturer 4 coupled with few open questions, more rhetorical questions and fewer other linguistic resources. Naturally, it must be noted that the lecturer in the GTC spoke for a longer time, but as commented at the start of this chapter, the learning outcomes are the same whatever the length of the lecture.

13.3 Findings: student grades, BA programme Corporate Communication [Kommunikationswirtschaft]

To further complement the data, a review of student grades from the first EMI cohort graduating in 2021 compared to the other GTCs was undertaken. The following grading scheme applies at the UAV:

- Very good (1): 100% to > 90% of the maximum points; performance assessed with "very good" meets the requirements to an outstanding degree.
- Good (2): 90% to > 75% of the maximum points; performance assessed with "good" meets the requirements to a degree that substantially goes beyond basic requirements.
- Satisfactory (3): 75% to > 60% of the maximum points; performance assessed with "satisfactory" meets the requirements set for key areas.
- Sufficient (4): 60% to > 50% of the maximum points; performance assessed with "sufficient" mostly meets the requirements for key areas, despite deficiencies.
- Insufficient (5): 50% to 0% of the maximum points; performance assessed with "insufficient" and does not meet the requirements for an assessment of "sufficient"

Table 13.25 offers a comparison of course grades in the ETC and the GTC from semester one to semester six. Given that the Austrian grading system is characterized by unequal spacing between the grade points, it must be considered as an ordinal scale rather than an interval scale. Therefore, a decision was made to report the median and mode values rather than means and standard deviations as well as to conduct non-parametric Mann-Whitney U tests to assess whether the differences in grades between the two cohorts are statistically significant. Some differences are highly significant ($p < .001$), while in other courses/semesters the grades are relatively similar.

Firstly, as will be reported in the next chapter, students recall that they invested more time at the start of their program and at the same time suspected that the lecturers graded more leniently given that they were the first cohort taught in English. Indeed, the average grades of the ETC in the first semester are better than those of their GTC counterparts. Also interesting is the fact that in the "numeracy" such as *Accounting*, *Cost Accounting & Business Simulation* and *Corporate Finance & Controlling*, the ETC students performed worse. Overall, students in the ETC performed better in the first year of study. Naturally, this can also be put down to ETC students working more conscientiously in these

first two semesters, as several of them claimed they did during the focus groups; however, this claim cannot be verified.

Table 13. 25 Overview of student grades graduation year summer 2021

Course / Semester	ETC grades	GTC grades	Mann-Whitney U test
Fields of Corporate Communication	Median: 2, Mode: 1	Median: 3, Mode: 3	U = 821.0, p < .001
Media	Median: 1, Mode: 1	Median: 2, Mode: 2	U = 797.0, p < .01
Communication Psychology	Median: 1, Mode: 1	Median: 2, Mode: 1&2	U = 957.5, p < .05
Communication Theory	Median: 1, Mode: 1	Median: 2, Mode: 1	U = 865.5, p < .05
Social Skills 1	Median: 1, Mode: 1	Median: 1, Mode: 1	U = 992.0, n.s.
Business Administration 1	Median: 2, Mode: 2	Median: 4, Mode: 5	U = 833.5, p < .001
Cost Accounting & Business Simul.	Median: 3, Mode: 2&3	Median: 2, Mode: 2	U = 1309.5, n.s.
Corporate Finance & Controlling	Median: 2, Mode: 2	Median: 1, Mode: 1	U = 1152.5, n.s.
Semester 1 overall	Median: 2, Mode: 1	Median: 2, Mode: 1	U = 67033.5, p < .001
Public Relations	Median: 2, Mode: 2	Median: 2, Mode: 2	U = 1228.5, n.s.
Online Communication	Median: 1, Mode: 1	Median: 2, Mode: 1	U = 933.0, p < .05
Marketing	Median: 2, Mode: 2	Median: 3, Mode: 3	U = 456.0, p < .001
Business Communication 1	Median: 2, Mode: 2	Median: 2, Mode: 2	U = 831.0, n.s.
Macroeconomics	Median: 2, Mode: 2	Median: 2, Mode: 2	U = 1080.5, n.s.
Microeconomics	Median: 2, Mode: 2	Median: 2, Mode: 1	U = 861.5, n.s.
Semester 2 overall	Median: 2, Mode: 2	Median: 2, Mode: 2	U = 36730.0, p < .001
Advertising	Median: 2, Mode: 2	Median: 1, Mode: 1	U = 290.0, p < .001
Copy Workshop	Median: 2, Mode: 2	Median: 2, Mode: 2	U = 766.0, p < .01
Business Field Project 1	Median: 1, Mode: 1	Median: 2, Mode: 2	U = 826.0, p < .01
Research Skills 1	Median: 2, Mode: 2	Median: 3, Mode: 3	U = 750.5, p < .001
Qualitative Methods	Median: 1, Mode: 1	Median: 1, Mode: 1	U = 853.5, p < .05
Civil Law	Median: 2, Mode: 1	Median: 2, Mode: 2	U = 560.0, p < .001
Semester 3 overall	Median: 2, Mode: 2	Median: 2, Mode: 2	U = 39909.0, n.s.
Business English 2	Median: 2, Mode: 1	Median: 2, Mode: 2	U = 294.5, n.s.
Specific Communication Topic	Median: 2, Mode: 2	Median: 2, Mode: 2	U = 249.5, n.s.
Research Skills 2	Median: 3, Mode: 3	Median: 1, Mode: 1	U = 183.5, p < .001
Statistics	Median: 3, Mode: 3	Median: 3, Mode: 3	U = 1000.0, p < .05
Semester 4 overall	Median: 2, Mode: 2&3	Median: 2, Mode: 1	U = 7402.0, p < .001
Creative Design	Median: 2, Mode: 2	Median: 2, Mode: 2	U = 983.0, n.s.
Bachelor Thesis Composition	Median: 2, Mode: 1	Median: 2, Mode: 2	U = 927.0, p < .05
Semester 5 overall	Median: 2, Mode: 1	Median: 2, Mode: 2	U = 3810.0, p < .05
Video Production	Median: 1, Mode: 1	Median: 1, Mode: 1	U = 911.0, p < .05
Innovation & Trends	Median: 1, Mode: 1	Median: 1, Mode: 1	U = 840.0, p < .001
Business Field Project 2	Median: 1, Mode: 1	Median: 2, Mode: 2	U = 520.0, p < .001
Social Skills 2	Median: 1, Mode: 1	Median: 1, Mode: 1	U = 1180.5, n.s.
Semester 6 overall	Median: 1, Mode: 1	Median: 1, Mode: 1	U = 13901.0, p < .001
Overall (all semesters)	Median: 2, Mode: 1	Median: 2, Mode: 1	U = 924297.0, p < .001

The comparison of the overall average grade of the third semester is not significant, and there are modules where the ETC performed better (*Research Skills 1, Qualitative Methods, Civil Law*), but also modules where the GTCs performed better (*Advertising*). The ETC lecturers of the *Copy Workshop* were interviewed and one of them who taught in the GTC before taking on ETC reported similar standards in both cohorts: “(..) but there is room for improvement, particularly for those who are struggling anyway, in German or English does not matter. That this is basically the same in both languages”. In the fourth semester there is a significant difference in average grade, which was due to the poor performance of the ETC students in the modules *Research Skills 2* and *Statistics*. Although the students did not point to these modules specifically during the focus group discussions, a few students implied that in “math-related” subjects they might have done better if these had been in German.

Students spend the most part of their fifth semester on their internship but have to write their bachelor thesis during this time, too. At first sight, it may seem quite surprising that the ETC students have a better average grade on their thesis than the GTC. However, I interviewed one lecturer who teaches research skills in the ETC and has considerable experience teaching in the GTCs, who suggested that in his experience students in the ETC are no worse in academic writing than their counterparts, which supports findings that academic writing is a challenge to both L1 and L2 speakers of English (Coxhead 2016: 177) and is certainly just as challenging in German:

Extract 13.33:

I found very interesting it's actually in many cases it's the other way around.

My hypothesis is um because they're writing in the language that's not their first language of course they're paying more attention to what phrases to use. Because it doesn't come that natural because it's not the first language so they have to reconsider Okay, how to phrase that. And when you use the first language, then you often have the problem of thesis, they use kind of everyday language and phrases that you would not use in academic writing because they're just using the way they're the language and the way they use it like an everyday speech or in the way they would use it to phrase a copy text for for a marketing campaign, for example. And they don't do that in English, that much of course that's all the true for for students, that are not of course native speakers themselves but that's the majority of my students (..) But usually, in my opinion, the quality of, in my experience, the quality of thesis is actually better than than the ones in German in overall

(Lecturer 6)

Students also believe that academic writing is not harder than in the L1. Although this student refers to the thesis with regards to workload, it seems that the availability of research in English facilitates an easier process:

Extract 13.34:

the only thing I realized when I wrote my thesis it took me longer to phrase the sentence very academically because you know a lot of academic phrases in German if you if you have like if you have read papers before, this was maybe a part where it took me longer than it might have in German But on the other hand the entire literature is in English so if I had written it in German, I would have had translated everything into German first somehow or I yeah would not have been able to avoid English literature, so I think at the end of the day, it is the same amount of work just for different parts of writing the thesis.

(Female student, 6th semester)

This view is further validated in the practice lectures I observed; Lecturer 1 requested the students to read the same article in English in preparation for the lecture in both cohorts and Lecturer 2 used a twenty-minute break out session and tasked the students with reading an article in English in both cohorts, too. Additionally, in the interviews many lecturers stated that they preferred to teach in English due to the abundance of material which they can use in their teaching.

In the sixth semester the students must partake in the Bachelor's examination, which is not reflected in these grades. This is the most significant part of this first-cycle programme, as the grades awarded in this oral exam appear on the degree certificate. Whether students took previous examinations more lightly due to this fact cannot be verified.

13.4 Summary

Summing up this chapter, the only post-test where there was a significant increase in student knowledge compared to the GTC was the lecture *Visual Communication*. The students fared slightly better than the GTC in the lecture *Framing and Priming*. The results of the post-tests in the lectures *Online Communication* were identical, whereas the students fared worse in the ETC in the lecture *Media Planning*. In an endeavour to explain these differences, a linguistic analysis was conducted. Although the GTC and ETC lectures were all structured the same, overall, there were more realizations of all devices utilized in the GTC lectures. A possible explanation for the better results in the *Visual Communication* lecture could be the more frequent use of *Display* and *Referential* questions and CDFs in her ETC

lectures compared to the other ETC lectures. When taking into account the context, curiously one would expect poorer results in the ETC, as the test was conducted late at night, but at the same time these findings should be taken with caution, as there were fewer participants in this lecture compared to the other ones.

The contrastive review of the student grades showed that overall, the students in the ETC achieved a superior average grade compared to the two GTCs combined. This comparison may be surprising at first sight; however, the context must be taken into consideration. Firstly, this was the first group of graduates from the ETC and students suspected that they might have had an advantage because of this. This suspicion cannot be validated, as although the exams are checked by each academic coordinator, subjectivity is almost impossible to exclude unless exams are carried out using multiple choice. As Chapter 7.1.3 indicated, such summative assessment is rare in this discipline, where oral and written skills are at the fore. Students of the ETC had the poorest results in the module statistics, a module with little subjectivity, which might give the suspicions some foundation.

14 Results of the qualitative investigation

Turning now to the findings from the qualitative investigation, this chapter first discusses the themes to emerge from the qualitative interviews with lecturers using the ROAD-MAPPING framework as a point of access for the discussion. Then, a closer look is taken at the statements from the four lecturers whose lectures were analysed in the contrastive study and these statements or beliefs are compared with their lecturing practice. Finally, the insights gleaned from the focus group sessions with the students are presented.

14.1 Findings: lecturer voices

The findings are discussed using the dimensions of the ROAD-MAPPING framework, which was not only used to help define the codes deductively, but also serves as a conceptual aid in presenting the themes. However, there are some overlaps, and certain themes emerge in several dimensions, which is illustrated in Figure 14.1.

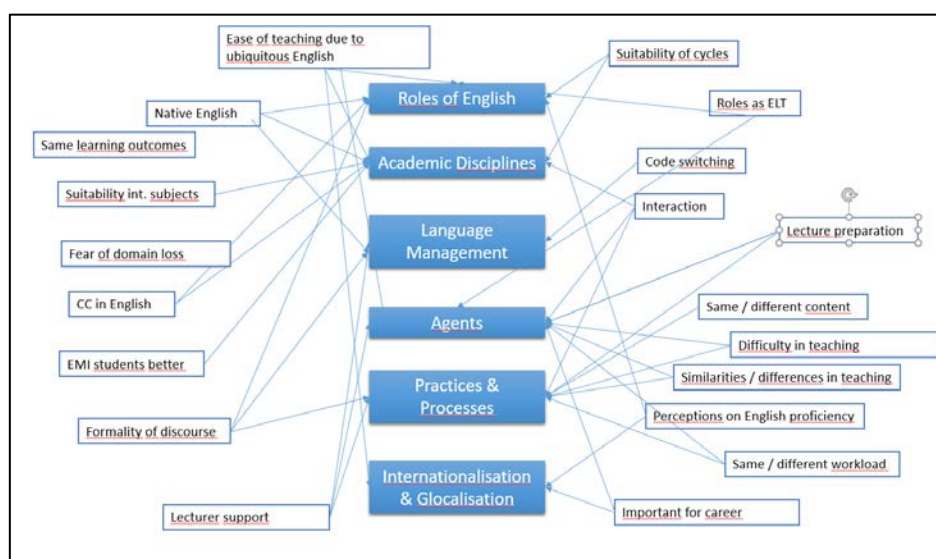


Figure 14. 1 Visualization of overlapping themes occurring in the ROAD-MAPPING framework

Since these overlaps present a challenge in the discussion of the findings, each theme will be discussed in the dimension where it appears to be the most dominant and significant in the findings.

Following the order of the acronym, and as a starting point, themes emerging in the *Roles of English* dimension are reviewed. The top-down codes in this group served to capture any insights lecturers offered from the societal, institutional, and disciplinary perspective, in relation to German. According to Dafouz and Smit (2020: 47-9), when assessing this dimension, one must examine context and stakeholders on all levels, as well as concerns for the justification of EMI. A review of the communicative role of English used in the lecture theatre will be presented in the section *Practices and Processes*.

Unsurprisingly, a central theme to emerge was the importance of developing students' skills in English due to its status as a global lingua franca. It was clear that the interviewees felt the pressing need for students to be highly proficient in English in order to be able to work in an international context; one lecturer described English as the "common language" and another as the "language of exchange", clearly pointing to a conceptualisation of ELF. Most of the lecturers agreed about the importance of ELF in the business domain, as Lecturer 7 observed: "it's probably also this way or it's there's a demand for this on an international level, so so people are going to need this." The lecturer emphasized this again: "(..) good, I think, because you know, like just in business and and business fields, actually, you cannot survive without any English knowledge at all communication will get more and more international as well".

"Native English" was a predominant theme with regard to delivering content in English. The lecturers were very clear that EMI teaching does not have to be done by native speakers, and for the most part, they were unperturbed about not delivering at "native speaker" level. Four lecturers explicitly referred to themselves as "non-native", with Lecturer 11 explaining that he explicitly tells the students at the beginning of the course that he is non-native and might make mistakes. This attitude is further exemplified by the statement from Lecturer 9: "I don't mind if my English is not perfect, OK (..) I'm not a native I don't mind if there's a mistake, you know." These insights indicate that lecturers are conscious of the lingua franca context of EMI and that they think that reaching native-speaker proficiency is unrealistic and unhelpful (cf. Seidlhofer 2011). More precisely, when delivering content in the lecture theatre, they see the role of English primarily as meaning-making; they regard achieving native-speaker correctness as superfluous. More comments were made around the topic of correcting students' English, which will be taken up in the discussion of *Practices*

and Processes. Lecturers are very aware if there is a native speaker in the cohort. On the one hand, they would use the native speaker as a resource for learning; as one lecturer put it, “if there is a native student I wouldn't mind if they correct me okay, yeah, I wouldn't mind that because it's always you can always learn something (..)”. However, one lecturer pointed out that the presence of a native speaker could undermine the interaction of the other non-native speaker students:

Extract 14.1:

the only negative for students could be if there are native speaker in the class mixed with non native speaker I think that's, the only thing what might actually.. some students who are a bit shy, who actually might say block them a little bit in speaking up freely

(Lecturer 11)

While the lecturers did not explicitly discuss English in relation to German, two expressed concern about domain loss, with Lecturer 5 referring to the dominance of English and Lecturer 8 similarly pointing to the global spread of English:

Extract 14.2:

I hope that the national languages will remain, because I think that's a benefit to have more than just one language, but we will see, and I think language is constantly evolving and now we are integrating the youth is integrating more and more English in their common language (..).

(Lecturer 8)

When probed about their perceptions of English at the institutional level, there were conflicting opinions among the lecturers. With regard to teaching in English, Lecturer 1 stated that all academic staff should be able to teach in English, and Lecturer 6 pointed to the ease that younger faculty staff have teaching in English. A clear theme to emerge was the ease of teaching in English due to the ubiquity of English in the academic realm. Four lecturers commented on the fact that conferences and journals are mostly in English, which makes transferring the latest research to students a lot easier. Two other lecturers who undertake research also stated the advantage of having more resources in the medium of English, which can be shared to a greater extent with the ETC. Interestingly, although they initially stated that they align the content of their GTC and ETC lectures, these insights indicate that lecturers believe they go into more detail in the ETC.

With regard to which disciplines should be taught in English, lecturers first thoughts were that all disciplines could be taught in English. On probing to get a clearer picture, there

was a sharpening of their thoughts towards more business-related and/or international topics; as Lecturer 7 suggested, “(..) of course, all the all the subjects actually which to have an international approach would be would be probably would be suitable for for entirely in English like finance, international finance, investment and these things”. Similarly, after probing, Lecturer 4 suggested that some subjects such as law would be unsuitable for EMI, and Lecturer 5 then excluded geography or history.

Lecturers were resoundingly in agreement concerning the importance of the option to teach Corporate Communication (CC) as an EMI program. As one lecturer clearly put it, “come on, the whole corporate communication world is international and in English”. Lecturer 10 pointed to the fact that as the subject is about communication, it then follows that it can be taught in English. Two lecturers indicated that contemporary practical topics they teach such as *Digital Marketing* and *Digital Communication* are very suitable for EMI. Regarding more scientific and academic theories, one lecturer suggested that simple theories could be taught very well in English, but when they get too complex, it could become difficult. Lecturer 3 reflected on this further, explaining how vital it is for students to be able to discuss global issues in English:

Extract 14.3:

But also, I think when it, especially when it on a broader level when it comes to when it comes to the humanities, or like social issues on anything like that, I think English has a has a specific place for me there because yeah if we are if we're looking at a global issues, issues of I don't know climate crisis or politics or anything like that. I think it would be really good to to teach those in English and to give students, the ability to discuss those topics in English (..)”
(Lecturer 3)

With regards to perceptions about whether a first or second-cycle degree is more suitable as EMI, lecturers were undecided with three clearly saying second-cycle is preferable. Three lecturers suggested a bi-lingual approach is more suitable in the first cycle, with the second-cycle in English with the five other lecturers saying that it did not make any difference. These insights into disciplines and placement of EMI in which cycle is similar to the general status of EMI in Europe; as reported earlier the study by Wächter and Maiworm (2014:20), showed that the disciplines are predominantly social sciences, business and law, with more programmes being offered at the Master level.

The following review of *Academic Disciplines* does not look at the suitability of programs for EMI as before, but rather zooms in on literacy and learning specifically in the

study programme under investigation. The themes emerging in this dimension cluster around lecturer perceptions of EMI students in comparison to L1 students with regard to their interaction and engagement in lectures, and the resulting impact on their learning outcomes. Furthermore, differences in content delivered and formality of address will be discussed here, although this also could be placed in the *Practices and Processes* and *Language Management* dimensions, respectively.

The perceptions of the lecturers point to some discrepancies in their beliefs regarding practices. I coded the mentions of perceptions of inferior learning outcomes in CC slightly more often (n=11), yet there are a lot more coded statements (n=24) pertaining to *same* content, which indicates a mismatch between beliefs and practices. Lecturers clustered their practices which have an impact on learning outcomes with regard to the examples given and level of interaction in their lectures. There are several short statements confirming the attempt to teach the same content, such as: “I try to make it as close as possible”, or “my aim is to teach the same things you know, because they are supposed to learn the same things”, or “we tried to align our topics, so as to make them comparable”. In addition, Lecturer 3 shared her aim to present exactly the same number of examples, even if they are different, and points to the fact that there is more of a problem finding examples in German:

Extract 14.4:

I don't feel like there is a lot of difference because I have really consciously tried to, especially when it comes to like sources that I'm giving the students and when it comes to practical examples I've really tried to kind of balance it out and have the same amount of examples for English and for the German lecture. Sometimes I feel there is there is like an overflow of sources in English that can that I can give to students and when I'm looking for like German sources and, like okay something similar or similar and well established example in German, sometimes I feel like it's a bit missing and and and lacking in in this area. So sometimes have feel like Okay, I have 10 examples of 10 links 10 for the links for the students to look at in English and then maybe there are only like I don't know five or six in German, because, like there, there are so many more sources out there in English language.

(Lecturer 3)

The use of practical examples is an important didactic technique in the field of business studies, particularly at UASs. As such, lecturers are encouraged to use real life examples of cases, situations and/or commercial communication, wherever possible. Two lecturers revealed that they used English-language examples in *both* cohorts, as this lecturer explains:

Extract 14.5:

But then usually what I do is I expect also the German cohorts to know a bit of English, and so, most of the times are trying to do the visualizations in English and then just have the Germans translated to them when I use it.

(Lecturer 2)

Lecturer 4 stated that she does the same and explained that she would use the English example but would discuss a local example verbally in the GTC. Lecturer 1 acknowledged that she was aware that she should use international examples due to incoming students in the ETC but recognized that she did not always practice that.

My literature review showed the importance of student interaction in achieving improved content learning (e.g. Morell 2004). When probed about interaction, the lecturers said they believed that it is generally poorer in the EMI cohort, with statements such as “it was still not a lot of interaction. No.”. Generally, this was put down to concerns about their English skills. Lecturer 3 expressed it as follows:

Extract 14.6:

I think it is sometimes difficult and only the ones who have really good erm who have have really good self, esteem, they they really do come forward and they say something and explain something and the others I think it's a bit it's a bit harder for for those students who are maybe a bit self conscious about their and their English speaking abilities and so maybe there is this there's a bit of a barrier for some for some students, where they won't say as much in an English lecture as they do in a in a German lecture.

(Lecturer 3)

These statements echo the findings of Airey and Linder (2006), who noted less interaction in EMI lectures; however, conversely, the equality of rapport as reported by Dafouz (2018) pointed to more interaction.

Although the formality of language could be discussed in the next dimension *Language Management*, there was a clear interest in this issue and the link to learning outcomes and so it will be taken up here. My literature review pointed to limited findings in this area; in their investigations, Thøgersen and Airey (2011) showed that the EMI lectures were *more* formal compared to the L1 Danish counterparts, which is also confirmed by the review carried out by Jiang and Zhang (2016). There is scant literature on the *impact* of formality of lectures on learning outcomes. One study undertaken by Schoerning and Hand (2012) reviews the impact of informal language in a science classroom and indicates that informal language has a positive impact on student achievement.

Whether discourse address has an impact on formality is unclear. It is customary at the UAV to address students with the formal pronoun in the GTCs. As an EMI lecturer I have always been on first-name terms with my students and noticed that many other EMI lecturers do the same. The lecturers validated my perception that they are on first name terms with the students in the ETC and use SIE (Herr or Frau X) with the GTC. Notably, when addressing the lecturers after the class in person or via e-mail they often reverted to German and as such to the formal SIE form. This type of translanguaging is quite common in the German speaking environment as this extract from a guide for potential students confirms:

Einige wissenschaftliche Mitarbeiter duzen die Studenten ihrerseits ohne Probleme, die Studenten selbst aber trauen sich oft nicht recht, zurückzuduzen. Je nach Fachbereich gibt man sich mehr oder weniger formell, je nach Charakter mehr oder weniger überheblich“ [some academic staff members address students informally, but the students themselves often do not dare to address them informally. Depending on the department, people are more or less formal, more or less arrogant depending on their character] (Messing 2006: 65).

Lecturer 1 was curious about this concept of formality and impact on learning outcomes and stated the following:

Extract 14.7:

So that's why I'm saying I would actually like to know what's better, but that probably also depends on then on the students probably there's no one answer probably some students, want the the informal connected cool, this is, you know this is how I learned and the other ones rather want it to be like Okay, this is my university setting, and this is not me I don't know going out for a beer with someone.

(Lecturer 1)

This concern of being too informal was confirmed by a statement “other students that might think like okay she’s not taking it serious”, so the issue was more about respect and distance rather than how this could impact learning outcomes. Another lecturer suggested that it could have an adverse effect:

Extract 14.8:

Of course, in some in some so it's not kind of you are the teacher you are the lecturer you're sitting above your students and you lecture them but it's kind of more teamwork working together when you have to you form of course it, it can also be helpful, the other way around, because there's some situations where it's was..I've already been approached by students in a way that I considered a little inappropriate like, like they're talking to to a peer, a colleague to say okay I'm still the lecturer I'm still your teacher. In that situation, so of course it has its pros and cons.

(Lecturer 6)

However, the resounding voice was of the perception that there is a superior, more relaxed atmosphere in the informal ETC, as lecturers stated they felt more connected to their

students, and the atmosphere was conducive to teamwork. Moreover, this lecturer does believe that there is an invisible barrier in the formal settings:

Extract 14.9:

I feel like when in German, there is more of maybe kind of a barrier between me and the students I don't know if barrier is the right word but for me it's more like a German for me is more like a hierarchy hierarchical language is it the right word? (..) I think it's it is, it is quite a good setting for the students that they they are able to come out of the shell a bit more and and try to to talk with the others and try to talk to me so I found that it is at least with my students, it is a really yeah, it is a really good relationship, I feel when I'm when I'm teaching an English and we can be yeah we can be more casual and on the same level, so it also helps me, I think, to connect to the students, a bit more and because I'm like bit more casual and more free and within my use of language. Or at least so I feel.

(Lecturer 6)

The discussion of the overall perceptions of the level of the EMI students was less congruous. Thoughts were divided about CC competencies when the lecturers were asked directly if they believed the students in the EMI cohort were better or worse; there were nine positively coded utterances and 11 negatively coded ones. Some lecturers commented along the lines of “I don't think there was a big a difference between the two cohorts”. However, this lecturer perceived superior performance due to greater diligence and motivation:

Extract 14.10:

And this is my like my my point of view is like that that the English speaking cohort those people, those Austrian people who are who are willing to have an international or doing everything in English, I think they're a little bit more motivated, they are more language focused than the than the German ones yeah getting taught in the same way. And I think this makes a big difference in there in there in also in the results.

(Lecturer 7)

This view is corroborated by a research skills lecturer:

Extract 14.11

But usually, in my opinion, the quality of, in my experience, the quality of thesis is actually better than than the ones in German in overall, I must say that of course the thesis is supervise myself (..) But but but still I guess, because I, of course, I also see the concepts and research questions and so forth, and I see them for the whole cohort and it's usually quality wise it's fine, of course, in general, they're making the same mistakes in terms of structure and so forth, that they would do in German, but still I I can't see a big difference and if there's a difference than I would I would even dare say that the English cohort is even a bit better (..).

(Lecturer 6)

By contrast, another lecturer disputes this opinion, particularly when a deeper understanding is required:

Extract 14.12:

yeah yeah when I listen to my gut feeling it says the maybe the German speaking cohort did it do a little bit better when it came to the exam so did a little bit better when it came to really understanding on on a really deep level, although all the topics that we discussed and all the all the areas we talked about something at a teensy bit. @@@ I noticed on how they phrased the sentences and which examples to use to explain a concept. Where I thought to myself, like Okay, that there is maybe a smidge more understanding with the German speaking cohort for all the topics we discussed okay.

(Lecturer 3)

Additionally, one lecturer recalled that oftentimes he was stricter in his marking in the GTC; however, it must be noted that this particular module is on text/copy writing and so correcting written language is at the fore:

Extract 14.13:

One more detail that just you know comes to my mind, now. I think I was stricter German correcting their papers, for example, because I was maybe expecting more of them, and now, when I see the papers that are very good, I still want to encourage them to write.

(Lecturer 5)

As elaborated in Chapter 7.1.3, academic literacy in CC is often defined via the communication and presentation skills. On searching all interviews for the keywords *presentation* and *skills*, I uncovered an additional interesting statement from a social skills lecturer, which points to the similarity of skills of the cohorts. At the same time, it implies that the presence of a native speaker could hinder the performance of non-native speakers in the ELF environment:

Extract 14.14:

In general, so for FHWien [UAV], I would say the level of presentation skills was more or less the same or they could be when you have a student who is a native speaker than other students might say, oh yeah he's much better because he's a native speaker so it's (...).

(Lecturer 11)

The first-cycle codes in the dimension *Language Management* focussed on formality of language and its impact on learning outcomes, which was addressed in the previous section. A theme to emerge related to informal language management in the lecture theatre was lecturers' attitudes towards the use of German and code-switching, which naturally overlaps with the dimensions *Roles of English* or *Practices and Processes*. Chapter 6.2 highlighted the fact that in typical EMI settings code-switching is sometimes regarded as deviant, lazy and frowned upon, especially in classes with exchange students who do not share the same L1. While this hard-line attitude was taken by STEM lecturers in the review by Roothoof (2019),

researchers have shown that code-switching can have a positive impact on learning outcomes (e.g., Tang 2002; Tarnopolsky & Goodman 2014). I was aware that as the academic expert for the ETC, I had advised the lecturers to avoid code-switching in line with the informal EMI policy, which may have influenced the lecturer statements. As such, the statements made here must be taken with caution as lecturers would not have wanted to contradict the policy. The lecturers generally indicated that they avoided this, as evidenced by statements such as “I hope I am not doing that because I would think that’s not okay” or:

Extract 14.15:

I wouldn't tell them Okay, because it's it's hard enough to get them students to to to take part in discussions and everything, but I think if that happens, and I don't know if it happened, I can't remember maybe it did, then what I would do I hope I did it if it happened would like translate what the student in German said to everyone, so I would like say okay person X just said this and this, and this, what does everybody think about it, because if not, we leave have people out and that's not ok.

(Lecturer 1)

While this statement illustrates this lecturer’s sensitivity to being inclusive, at the same time it also points to her awareness of the pressing need to encourage students to interact. Lecturers generally admitted that if they do switch languages to find a word they turn to the students for help, for example:

Extract 14.16:

sometimes when you really do want to explain a very specific detail and they do not have the words for it, then we then I, and I just I usually say okay let's first say the German and then we try to translate it to English if they really can't get it get it out as well in English.

(Lecturer 9)

Code-switching can be avoided if there is a native English speaker in the cohort to help find missing vocabulary and if the lecturer is happy to use them as a learning resource: “if there is a native student I wouldn't mind if they correct me okay, yeah, I wouldn't mind that because it's always you can always learn something (..)” (Lecturer 1). However, in some subjects, like accounting, where vocabulary can be new and unfamiliar to the students, code-switching of individual words can help learning, as illustrated by this lecturer of accounting, who is, at the same time, acutely aware of the potential discrimination this could cause for non-speakers of German:

Extract 14.17:

And in fact it's like the vocabulary they don't have available and that they know probably from the business school whatever I call that the depreciation and that's it in German that's <L1/de Abschreibung L1de>.[depreciation]. Yeah it's, not that I am using a full sentence in German. Because this really makes people feel a little bit yeah discriminated

(Lecturer 7)

The *Agents* at focus in this investigation are naturally the lecturers and this is the only dimension where I opted solely for *In Vivo* coding. My intention was to capture perceptions of their general attitudes towards EMI and the impact on workload. After a second-cycle reduction of codes, the following themes emerged, with the overlaps to the other dimensions indicated in brackets:

- Less / more workload (*Practices and Processes*)
- Preference for teaching in L1 or EMI (*Language Management*)
- Support required (*Language Management*)
- Perceptions of ideal lecturers in EMI (discussed in *Roles of English*)
- Considerations of role as language teacher (*Practices and Processes*)

With regard to the first theme, workload, Lecturer 2 was the only one to recount that teaching in English involved less work due to the abundance of resources originally in English. Most lecturers complained that if they had been teaching the course in German and then had to change to English, it involved more work due to the tendency to translate content, as this lecturer explained:

Extract 14.18:

So if I prepare the slides in English, from the beginning on it's not more work, but if I first prepare the slides in German, and then I have to translate them, especially if I'm if I teach the same stuff like in our BA cohort and I, my aim is to teach them the same things you know because they are supposed to learn the same things, then I think it's more work because it's not only translating this it's you know it's not just a one on one translation, you can't do it that way, then it's like weird English. Okay, so you translate it and then you have to redo it and I think it's more work to then think of like How should it be you know if I just start doing it, I think of it to do it the right way, but then yeah so.

(Lecturer 1)

This perception was confirmed by other lecturers (n=4) and this practice is echoed by Lecturer 9:

Extract 14.19:

Yes, it is absolutely more work in this specific case I translated, so I had to read them in German and then translated to English. And for other lectures, where I knew from the

from the beginning that I had teach in English, of course I I prepared them from the beginning on in English and I use English literature and English resources for that, but still it's it's it's more work, because I have to think more about how to, especially when when the subjects are getting more complex, then I have to think of how to how I want to explain them and express my ideas and that's for me, of course, more difficult in English than to do it in German.

(Lecturer 9)

The topic of workload was a theme in several studies which are summarized in Table 5.1 on p. 66 of this dissertation, as it appeared very often in the literature review as being a big issue for EMI lecturers. Notwithstanding this, many lecturers do prefer to teach in English. When probed about making their own decision on language of instruction on a *new* course in a *future* semester, six out the eleven lecturers interviewed stated that they actually would opt to teach in English. One lecturer said yes, but only because he had been doing it for years, which resonates with the study by Jensen and Thøgersen (2011), who indicated that it got easier over time. Lecturer 3 elaborates on this, stating that the choice would be English due to the high amount of teaching done in English; however, with complex subject matter she would prefer to teach in German:

Extract 14.20:

I can't really say that I have a preference... Well now, because I'm teaching so much in English, I think I prefer to teach in English because it's I'm so used to it and it's it's according to all the research, I do and it flows kind of nicely, because when I'm I'm doing like five lectures in English and then I'm doing one lecture in German in between, it feels really weird for me. And I'm done I'm all like rusty in with my German I'm like what is this word in German @@@ I can't I can't remember. So it's really at this point it's more like okay what am I do what am I doing more I'm I'm doing more lectures in English or more lectures in German. But, of course, when it comes when it comes to like, really, a deep dive into topic and explaining maybe some really tech heavy topics or topics, who do use a lot of specific phrases, of course, then it's easier for me in in German, because it is my mother tongue and mostly in most cases, I do know the words, and I do know how to describe it better, so when it really comes a deep dive, maybe more technical topic or where we really need to get to the nitty gritty of things I think in German is still still easier for me, but if we're just talking about an idea I did I did a lecture on the power of language and we get some overall discussions and then it did not go very deep and and and theoretically heavy into the topic and then English is also quite fine for me and I do prefer I kind of do prefer to do a lecture in English if I've done a really heavy if I've done my research, really, with emphasis on on English sources and and then it's it's much easier to do it this way.

(Lecturer 3)

Leading on from this, the next theme to emerge in this dimension concerns support for EMI teachers. The UAV offers EMI lecturers voluntary targeted coaching sessions with language teachers, of which several of the lecturers interviewed had taken advantage. These sessions

provide “Individual English language coaching: workplace/teaching support with (a) One-to-one support for preparing courses, presentations, meetings, documents, interviews, etc. in English and (b) Focus on Grammar and lexis (vocabulary) and Pronunciation” (University of Applied Sciences for Management and Communication, Intranet, *Inside*, 2020). One lecturer summarized his experience of this training course as follows:

Extract 14.21:

Yes, last semester, I had some workshops about the, especially for teaching in English. If it's not your your mother tongue and they were at the beginning, I thought Okay, what we are perhaps attempt for but probably not so much, but in in the end, I had the feeling that it was really hard for, and there were some small like really small like tips and hints and things like that, but they gave me more they made me more confident And also the like the discussion with with other people that are teaching in English and about their feelings and their experiences and this also was was quite helpful and useful for me.

(Lecturer 9)

Three other lecturers mentioned that they knew of or had applied for this further training. This is worth noting, as research shows that there is often a lack of support with EMI pedagogy (e.g., Airey 2010; Ball & Lindsay 2012; Gürtler & Kronewald 2015; Dearden & Macaro 2016). This offer by the UAV could explain the lecturers' enthusiasm in delivering EMI courses although there is no explicit evidence in the data to support this assumption.

The literature review on attitudes towards language teaching in EMI (see Chapter 5.1.3) indicated that for the most part lecturers do not see themselves as language teachers. The concept of ICLHE can be seen an opportunity for EMI lecturers to co-frame themselves as ELT professionals (e.g., Smit & Dafouz 2012; Unterberger & Wilhelmer 2011). However, the study by Dafouz, Hüttner and Smit (2016) reviewing this attitude across five universities indicated that content integration is complex. In this investigation, when probed specifically about whether the lecturers considered themselves as a teacher of language too, it is not surprising that all of the lecturers considered it to be outside of their remit. For example, Lecturer 1 was very clear on this: “No, that's not my business, you know, this is not my business to do so. First of all, this is not what I'm there for. Second it's not my mother tongue and maybe I tell them something wrong”, which reconfirms a clear view of the role of English as a lingua franca in this setting. Lecturer 8 agreed and said “and I would say I'm a content teacher I'm not eligible for language teaching and you know language to me is I've never really liked a grammar and things like”. Other lecturers answered clearly with a “no”

(n=8), with statements such as “I do not see myself as a like a language instructor or someone that has to correct the students” or “for me it is more about content and less about language”.

As this part of the review was less structured using the *In Vivo* coding method, a final check of the interview data using the *Text search* function of Atlas ti 9 was undertaken to review frequency and context of some words that I considered important, drawing on the insights from my literature review. I searched the word *challenge* and noted that in the 11 interviews, it was mentioned 32 times, out of which I used it 10 times. In the negative sense it was used 16 times (e.g., „this is one of the biggest challenges” and positively (e.g., “a challenge, a good one”) 6 times. Of the other emergent themes from the literature review captured in Table 5.1 on p. 66 of this study, the following frequency and context offers a comparison:

Theme	Positive mentions	Negative mentions	Comments
Challenge	16	6	
Tiring	0	0	The synonym <i>exhausting</i> mentioned negatively twice.
Burden		1	
Indifferent	1		
Career	8		With regard to how teaching in an EMI environment is important for career advancement
Preference	6	1	With regard to preference for teaching in EMI
Support	1		
Faster		4	

The last point of this comparison, *faster*, is dealt with in the next dimension, namely *Practices and Processes*. This dimension is particularly interesting for this investigation as the aim is to discern if there are any teaching practices which could positively impact content learning. The focus as such is on the *practices* rather than *processes* in this study, particularly lecturer reflection of EMI implementation, especially delivery style and discourse strategies. As such, my first *Magnitude* coding was done with the intention of capturing whether lecturers thought of this aspect as the same, different or whether it was unknown to them, i.e., they had never given it due consideration. Once again, I found this coding to be too simplistic and added codes which led me to the central themes:

- Delivery challenges
- Delivery style (includes spontaneity, humour, speed)
- Differences in preparation

There were naturally a few overlapping codes with the *Agents* dimension, such as workload and support, which were discussed fully in the previous section (dimension).

Nine lecturers explicitly stated that they use the same pedagogic methods in both languages of instruction. Comments included affirmations such as “Yes, no difference, yes”, and “as far as my approach goes I wouldn’t say I changed a lot”, or “I don’t think I use different tactics, I think I use the same”. Only one lecturer revealed there were differences in techniques, which was due to a lack of confidence in English proficiency when addressing a difficult or challenging topic:

Extract 14.22:

I’m I’m of course I’m more confident in German so I’m more flexible and if I have the feeling, there is a topic that is interesting now at the moment for the students and they would like to discuss then I’m probably a more flexibility in German to jump on that and say okay let’s discuss it and, and I also tried in English, but perhaps a little bit less because I’m not this confident as I would be in German. If it is a topic well I have talked about a lot before and thought about a lot before and I know my what my arguments are, then, then of course yes. But if if it is a topic, where I where I have the feeling Okay, I have to think about it, first, I have to sort my own thoughts I’m not sure about it myself, then probably in German, I would still be very open for discussion and in English, I would I would probably think okay, I’m not so sure if I can really if I’m if I’m confident enough to express my thoughts that that are not as like developed.

RESEARCHER: So, so perhaps you might go into more depth with the German taught cohort, then you would be the English taught cohort?

I mean I’m not sure, but it could be yes.

(Lecturer 9)

This issue overlaps with the dimension *Roles of English*, as do a lot of concerns with regard to delivery style. While humour was not a central topic in the interviews, some lecturers referred to certain barriers due to the difficulty in being humorous in English: “I think the humour, the spontaneous humour, sometimes gets a bit lost when I’m teaching in English” (Lecturer 9), which echoes the findings by Sert (2008) that EMI lecturers lamented they could not be humorous in English. Sometimes the fear of the unknown was an issue: “well, yes, it was a challenge at the beginning, not knowing what was expecting me. And how I would erm, you know perform” (Lecturer 5). Interestingly, one lecturer stated that when she missed a word in English this had an impact on her flow of thoughts:

Extract 14.23:

I do miss words, sometimes in English, I most of the time I can speak freely and fluently but sometimes I'm missing a specific word that I just cannot remember. So that kind of stops kind of the flow of the content, sometimes. When I have to try to describe or translate it.

(Lecturer 2)

This was quite the opposite for another lecturer, who considered that precisely the perceived less-structured nature of the lecture in English allowed more flow and flexibility in delivery:

Extract 14.24:

In English and again, and maybe that's because of the flow that English has, for me, and that it. I think it allows for students and, for me, really, really nicely to have to have this discussion and to maybe set up discussions and ask questions in between, so I think I think I think with German when I'm holding lectures in German I'm like Okay, this is my schedule and we're doing like topic topic topic, and maybe there are questions in between. But it's more like scheduled driven it's Okay, those are the topics let's let's get on with it and...So at least I feel with English I'm more prone to ask questions in between so I'm not like okay I'm doing my topics A to D and then we have time for questions I think when teaching. In English some I'm spreading those questions, a bit more in between, because it kind of feels easier to to distribute two questions in between.

(Lecturer 3)

Two lecturers thought that their delivery was faster in German, and one considered this an advantage for the ETC, as this slower delivery enabled students to think more about what they had to say. Only one lecturer thought that the delivery was faster in English. These findings confirm the mixed picture regarding speed of delivery in EMI discussed in Chapter 6.2.6, with Thøgersen and Airey (2011) and Arkin and Nedec (2015) suggesting EMI delivery was slower than in the L1, whereas Aguilar and Rodriguez (2012) showed the opposite in their research.

Regarding the theme mentioned earlier, namely the notion that due to the ubiquitous nature of English in academia, teaching was perceived to be easier, for the most part lecturers considered preparing for teaching in English to be easier due to the abundance of resources available. Lecturer 1 clearly describes this idea:

Extract 14.25:

So, first of all it's I think easier for everyone, because if you if you if you decide you want the new stuff and high quality stuff and then, especially for my for myself it's easier because I do all my research in English or like 90% so I have everything in English, so I don't I don't really have to go out and search, you know it's just like. Open my laptop back on to take this, and this, and this. So that's maybe one thing that makes it easier. When I prepare things.

(Lecturer 1)

This view is supported by Lecturer 6, who stated: “everything is in English so it’s actually erm for particular for preparing the course material it’s easier to do it in English”. Lecturers agreed that translating content from German to English was time-consuming, and Lecturer 8 pointed out that “you might miss some of the nuances in the in the language”. However, there are a few lecturers who do translate and that would be the case only if they had taught the course already in German before:

Extract 14.26:

I sometimes translated also freely so that it feels also more natural for myself, but I basically went through that as Okay, this is, these are my German slides, this is my content these are the English books, this is the English vocabulary and now I just do a simple translation job and then also discuss them with some native speakers about some things which were not 100% clear

(Lecturer 11)

As my analysis of the practice lecture in Chapter 13.2 highlights, lecturers may think that they do not translate course material, but this may differ in practice. In the subject of communication there are some dominant theories in the German-speaking world which are part of the curriculum, and the research is not available in English, and in these instances, lecturers claim they have no option but to translate, as this lecturer explains:

Extract 14.27:

But I mean there's some theories that are not existent in English, but we still teach them so that's what I translate from German to English then. Yeah like Constructionist and Habermas and the theory of <L1de Verständigungsorientierte Öffentlichkeitarbeit L1de> and things like that I think I I sort of touched that along my teaching, but I don't go in depth on that.

(Lecturer 2)

The final dimension for analysis is *Internationalisation and Glocalisation*. While Dafouz and Smit (2020) advise that this dimension can facilitate access to an understanding of how these themes are conceptualized at HEIs, they also highlight tensions that this may bring. Tensions arise with universities’ internationalisation policies, which call for EMI as a means of inclusion, which also benefits universities due to the income students bring and offers possibilities to improve an institution’s ranking. In this investigation, the effect that EMI has on lecturer career opportunities is at the fore. There was a clear consensus (n=6) that having the opportunity to teach in EMI was advantageous for career progression for both faculty and external staff. For faculty staff, the lecturers interviewed agreed that teaching and researching in English is the stepping-stone to an international academic career due to

English being used in the international research community. One lecturer explains as follows:

Extract 14.28:

if you're achieving for a scientific career, then of course it's important to feel confident talking in English because you will also have to talk on other meetings and you know how's it called like conferences conferences, they are in English, so I think that's important yes.

(Lecturer 9)

The external lecturers interviewed agreed (n=5) that being able to teach in English opened up new work opportunities for them due to the expansion of EMI courses. Being proficient in teaching in English gave them an advantage over people who lacked those skills. Lecturers also confirmed that EMI is vital for students who want to work internationally, as the following comment illustrates, which refers again to the communicative role of English as a lingua franca in international business:

Extract 14.29:

Yes, most companies do, and maybe, maybe even if a company does not act on like a global level and has, as have people all over the world working for them, but I mean, even if you only have your headquarters in Austria we are such a such a global world that maybe you have colleagues from I don't know from the US from from China from from wherever in the world, or you have a boss, who isn't an English native and I think it is important, it is an important skill to be able to work with people from all over the world and to work together efficiently and I really think it is, it is a huge, It is a huge advantage if you're able to communicate with with different people.

And if you're able to do everything to doing, also in in the context of yeah of language setting.

(Lecturer 3)

14.2 Findings: comparison of lecturer beliefs to teaching practices

As outlined earlier, there is no one-to-one link between teacher beliefs and practices, even if teacher beliefs often affect practices and are difficult to change (e.g., Buehl & Beck 2015; Pajares 1992; Skott 2015). Fortunately, by virtue of this multi-method enquiry, insights were gained into the beliefs of the four lecturers whose teaching practices were captured and these insights are now presented. Table 14.1 offers an overview of the main themes to have emerged from the interviews.

Table 14. 1 Overview of perceptions of beliefs about EMI captured in interviews

Beliefs and Perceptions concerning:	Lecturer 1	Lecturer 2	Lecturer 3	Lecturer 4
Content	More or less the same, supposed to learn the same	As close as possible	Mirror image	Sometimes different sources
Depth	More depth in ETC due to research insights	Tries to have same level of depth	Sometimes more in GTC "nitty gritty"	Same depth
Use of practical examples	Uses same domestic examples	Sometimes different if theory not available in English, tries to give same examples	Uses the same number of examples, sometimes feels more in ETC, tries to find equivalent in GTC	Uses English examples
Preparation	No more work, prepares directly in English	No more work	No more work, prepares in English	Prepares in English, sometimes in the GTC terminology in English
Preference for teaching	Ambivalent	Prefers teaching in English	Prefers teaching in English generally	More confident teaching in English, enjoys it more
Thoughts on interaction/engagement	Importance of student engagement	Importance of interaction	More interaction with ETC, due to flow, less interaction due to language barrier	Uses same teaching tactics
Content v Language	Not a language teacher	Does not correct language	Not a language instructor, not a NS so can't do that	Not a language teacher
Attitude towards English proficiency	Unperturbed if English is not perfect	Faster delivery in ETC, sometimes misses words, stops flow	Not a native speaker, not important	x
Attitude towards code-switching	Not ok (due to incomings) but negotiation of meaning	Negotiation of meaning ok	Negotiation of meaning ok	Not ok, prefers to paraphrase
Formality of delivery style	Informal in English, formal in German, curious about the significance of this	Formal in both ETC and GTC (it is nicer to have DU) so easier for them to ask questions	GTC = formality creates barrier (hierarchical language), connect better in ETC. More structured in German	GTC = formal SIE, but makes no difference to learning outcomes
Use of repetition, questions	Asks the same questions	Questions help interaction	Paraphrases, poses more questions intermittently	Paraphrases
Various	No perceived difference in level of students	Not a lot of interaction in the ETC	Perhaps GTC slightly better CC students	x

Lecturer 1 is the most experienced lecturer. The ETC lecture took longer and contained more words per minute, so her speed of delivery in English was faster. In all cohorts, the pre- and post-test results were essentially identical. The lecturer believes that she delivers the same content but goes into slightly more depth with the ETC due to her main role as an (international) researcher. In this particular lecture the content was indeed almost identical except for one additional slide in both cohorts (see Table 14.2). Although the lecturer perceives her rhetorical style to be the same in both languages, analysis of her lecture indicated that in the GTC she used the CDFs *Explain* and *Report* more frequently and posed more referential and rhetorical questions.

Table 14. 2 Comparison of visual content delivered by lecturer 1

Main Content Topic / Example	GTC	ETC	Description of differences
Mass Media	✓✓	✓	Uses a different quote in GTC Ein Medium ist ein institutionalisiertes System um einen organisierten Kommunikationskanal von spezifischen Leistungsvermögen mit gesellschaftlicher Dominanz.“ Faulstich 2002, p26. Additional slide about mass media
Digital divide	✓	✓	Translates Di Maggio (2001) quote in both languages
Limited effects paradigm	✓	✓	Klapper (1960)
Cognitive dissonance theory	✓	✓	Festinger
Filter Bubbles / Echo chambers	✓	✓	Exactly the same (Breunig, Handel, Kessler 2020)
ARD / ZDF Onlinestudien	✓	✓	Exactly the same
Online Behaviour	✓	✓	Exactly the same
Online Behaviour 2019	✓	x	Extra slide offered in the GTC (Frees, Kuperferschmitt & Müller 2019)
Information about Snapchat and Instagram	x	✓	Pew Research Centre
Info slides about Motivations of Social Media Use	✓	✓	Exactly the same

After reviewing the lecture again, paying particular attention to whether she corrected any language issues, or how she dealt with difficult terms and explanations, in this lecture there were no incidents of students using unknown words or incorrect language requiring code-switching or paraphrasing. Lecturer 1's delivery style is very similar in both cohorts and seems to show her experience and confidence, which come across in her delivery, confirming her statement that she is ambivalent as to whether she prefers teaching in English or German. The discourse analysis in the previous chapter indicated that she repeats statements more often in the ETC. In sum, Lecturer 1's beliefs seem consistent with her practices in this particular lecture.

The lecture on *Visual Communication* was the only one with a significant increase in student knowledge in the ETC (see Chapter 13.1). In the interview the lecturer already suspected that her delivery in English is faster than in German, which is confirmed with the review of timing and words/minute (see Table 11.4) and an analysis of the relevant questionnaire items for students at the end the post-test. Lecturer 2 is the only one to use the informal DU pronoun in the GTC, and in the interview she confirmed that she did this to create a more informal atmosphere with the intention of increasing student interaction. Nevertheless, my analysis revealed that there were more questions from the students in the ETC, although the lecturer perceives that there is generally less interaction in the ETC.

In the interview the lecturer was quite clear that the content delivered is the same in both cohorts but suspects that, like Lecturer 1, she may give more scientific examples because of her dual role as a researcher. After reviewing the content of her lectures once again, I can confirm that the visual aids in the GTC and ETC are identical, except for one slide about the “Text-Bild-Schere” [text, picture, difference], which I had not been able to help her with in advance of the lecture (see Table 14.3).

Table 14. 3 Comparison of visual content delivered by lecturer 2

Main Content Topic / Example	GTC	ETC	Description of differences
Statistics – time spent online, activities, importance of visual comms	✓	✓	8 identical slides
Example of La Castillo	✓	✓	
Speed of visual communication	✓	✓	
Technical advances, ease of sharing	✓	✓	
Three perspectives in visual communication	✓	✓	
Types of research	✓	✓	
Image Superiority Effect	✓	✓	Translation of quote by Müller & Geise (2015) in ETC
Text-Bild-Schere	✓	x	Example of Ibiza
Image Impact Research: Agenda setting	✓	✓	Same study and example, Al Gore & Bush (2000)
Image Impact Research: Priming	✓	✓	Same example, visual stereotype research
Image Impact Research: Framing	✓	✓	
Image Superiority Effect	✓	✓	Uses same English quote in GTC: “I don’t trust words, I trust pictures” (Gilles Peress)
Trust and Images	✓	✓	Same photoshop examples, insta, Fukushima

Fake News	✓	✓	Same Trump, same slide dis-information, same definitions, same example of Australia on fire, scorpions in Vienna
Deep Fake	✓	✓	Austrian example of Strache & Gudenus – offers extra info in the ETC- identified by their ears

When asked about potential differences in her lecture delivery style in English and German, Lecturer 2 mentioned her faster speed of delivery in English. In situations when a word does not immediately come to mind, she is concerned that this stops her flow. Such a situation is addressed by paraphrasing and sometimes code-switching to get student assistance or by using google translate if delivering online. In this lecture there were no such episodes to check actual practice versus belief. Lecturer 2 was the only lecturer to implement more CDFs and ask more questions in the ETC lecture, which may have contributed to better post-test scores. She recognizes the importance of interaction to help assimilation of content and poses more questions in English. Her beliefs appear very similar to her actual practice in this sample lecture.

Lecturer 3 delivered her lecture content a lot faster in English; the net lecture time was 19 minutes longer in German. Lecturer 3 had a rate of around 151 words per minute compared to 137 in German. The lecture was identical in structure. The ETC students performed better in the post-test. In the interview the lecturer informed me that her content is a “mirror image”, although she suspects that she might go into more detail in German and thinks that she might use more examples in the ETC and should find equivalent ones for the German lecture. She also states that she prepares in English and does not translate her slides. On reviewing the visual support for her content (see Table 14.4), I noticed some contradictions to this statement, as on several English language slides I noted the source was given with the page number as “S.”, which stands for “Seite” [page], indicating that the slide had been taken from the German version. On one slide there was the word “Effekt” instead of “effect” which would also point to translation. The lecturer believes that she might give more examples in the ETCs, whereas my lecture analysis indicates that she gives exactly the same number of examples and does offer alternative examples in the different medium if appropriate. There is only one slide which is offered in the GTC and not in the ETC.

Table 14. 4 Comparison of visual content delivered by Lecturer 3

Main Content Topic / Example	GTC	ETC	Details
Why study communication theories?	✓	✓	
Language shapes our reality	✓	✓	Same quote, visual of film <i>Arrival</i>
Power of language	✓	✓	
Miscommunications	✓	✓	Different example – GTC UFO / ETC –deaf/death
Thinking Fast & Slow / Process of Comm	✓	✓	Same visuals, Example of : B___ N - same English examples in GTC
Priming	✓	✓	Same examples in English in the GTC
Priming	✓	✓	Different example – Welche Farbe hat Schnee / Fill in the missing word..
Priming Terms	✓	✓	Source Scheufele 2016 S20 – ETC has been translated from GTC (mistake in English = Priming-Effekt, not effect)
Types of Priming	✓	✓	
Recent vs Frequent Priming	✓	x	Slide missing in ETC
Priming & Media	✓	✓	
Priming as website optimization	✓	✓	Same examples meat website, MARS,
Framing	✓	✓	Different examples – Manipulation durch Framing / Visual of one man smashing a car with media attention. Uses the term “Framing Ansatz” – German not translated
Message Framing	✓	✓	Same bunny example
Media Examples	✓	✓	Visual of one man smashing car
Media Examples	✓	✓	Daily Mail / Irish Daily Mail / BLM / Fox News /NY Times/ Jane Fonda/Ford/VZ/Burger –identical examples
Framing =Applicability effect Priming =Accessibilty effect	✓	✓	
Agenda Setting	✓	✓	Terms – Agenda Melding (?) from Maurer 2010, S11f
3 Agendas, basic assumptions	✓	✓	
Time of change	✓	✓	
Nudging, libertarian paternalism	✓	✓	
Nudging	✓	✓	Once again source in the ETC vgl:Thaler, Sunstein 2011, s.23ff Examples same – fly, canteen, organ donors, save more tomorrow, environmentalism, traffic, everyday life, big gulp ban
Nudging in politics	✓	✓	Same visual of Cameron/Obama
Nudging in advertising	✓	✓	3 examples on slides – 3 rd example of Amazon basket different Wird oft zusammen gekauft / frequently bought together
Digital Nudging	✓	✓	English language example given in GTC
Critical Voices	✓	✓	
ELM & Fake news	✓	✓	Pope Francis endorsing Trump, ELM in UX design

In the interview Lecturer 3 said that she thinks that there is more interaction due to the easier flow of discussion in English, but later suggested there is less interaction due to a

potential language barrier. The analysis of questions in this practice lecture points to less interaction in the ETC, as there are fewer questions posed and also fewer questions from the students, whereas she believes that she poses more questions in English and does that intermittently. Lecturer 3 feels that the strict structure in the German lecture does not lend itself to such interaction, however she uses exactly the same structure in the ETC. In this particular practice lecture, a lot more time is spent EXPLAINing in German and EXPLORing in English. There is also a significantly higher number of meta-language elements in German. The lecturer prefers teaching in English and certainly her style in English was relaxed with a similar level of humour; this is something that researchers have shown is particularly difficult to achieve in the L2. She believes that the formality and structure in the GTC hinders connection with the students and implies this hinders interaction. It is her firm belief that being a L2 speaker of English is irrelevant in the EMI setting, and she states that negotiation of meaning is acceptable. Once again, there were no episodes of code-switching or negotiation of meaning in this particular practice lecture to verify in this instance the beliefs versus the practices. Generally, there seems to be a slight mismatch of beliefs versus practices, especially in the area of perceptions about flow and interaction in the ETC and about whether the content has been translated. However, her perception that there is more depth in the GTC is valid in this instance.

As explained in an earlier part of this chapter, *Media Planning* was the only lecture with cohorts from different study programs, and although the learning outcomes presented by the lecturer were the same at the beginning of both lectures, there were more differences in the visual support (content) than in the other lectures reviewed. This is also due to the fact that the modules in the study programmes are not mirror images of each other and so the lecturer is not obliged to deliver exactly the same content. However, the lecturer advised me that she intended to deliver the same content, and as such I considered the practice lecture to be a good additional data source. Lecturer 4 was the only lecturer to offer an overview of the learning outcomes at the start of the lecture as well as an overview with timeslots planned per content area. The comparison of the visual content overview (see Table 14.5) shows that although the essence of the content is the same, there are more differences between the content delivered in comparison to the other practice lectures reviewed.

Table 14. 5 Comparison of visual content delivered by lecturer 4

Main Content Topic / Example	GTC	ETC	Details
The Media	✓	✓	Different order of slides- visual is set out differently
Summary overview of Gatekeeping, agenda setting and framing		✓	
Nachrichtenfaktoren / Newsworthiness	✓	✓	Different bullet points – Timing, significance, proximity, prominence, human interest Aktualität, Außergewöhnliches, Konsequenz oder Relevanz für viele, Prominenz der Handelnden, Räumliche oder kulturelle Nähe, Emotionen und Gefühle, Einfachheit
Code of Ethicx	✓	✓	Different sources – Society of Professional Journalists, Österreichischer Presserat
3 slides explaining Gatekeeping, Agenda Setting, Framing	✓		
PR v Journalismus	✓	✓	Both in English
Interaction PR and Media		✓	
Determination hypothesis	✓	✓	More information in the GTC visual support
Intereffikationsmodell	✓	✓	2 slides GTC, 3 slides ETC
What managers expect of PR professionals	✓	✓	
Media Relations	✓	✓	Different format
PR tasks in media relations	✓	✓	Does not mention interviews in ETC
Online newsroom	✓	✓	Omits background info, case studies and factsheet from bullet point in ETC. Example offered in ETC
Pitch a story		✓	
Media Interviews		✓	
Press conferences		✓	2 slides ETC, 1 GTC
Was Journalisten wollen	✓		
Wie arbeiten Journalistinnen heute?	✓		
How do we relate to the press		✓	
Press – what we need to know	✓	✓	
Writing a press release	✓	✓	Slightly different bullet points
The most overused PR words in press releases		✓	
Structure	✓	✓	Visual in GTC, Principle of inverted pyramid, same examples
Content	✓	✓	Die W-Fragen / Catchy, to the point, KISS
Example APA OTS, Bloomberg		✓	

We recall this was the practice lecture where the students in the GTC performed better in the post-test and the students in the ETC indicated that they found the lecturer harder to follow, but these students are not normally taught in the medium of English. In the interview, the lecturer suggested she uses the same teaching methods in both languages; in

terms of structure this is the case but in terms of linguistic devices there were considerable differences. There were over double the number of CDFs in use and although the use of questions was more comparable, other rhetorical devices were hardly used in the ETC, which is surprising for a lecturer with this level of proficiency and confidence in delivering in English. Once again there were no episodes of code-switching in this practice lecture, and like the other lecturers interviewed, she said she did not think that she was qualified to correct language, although this lecturer would be qualified, having a PhD in English linguistics. This lecturer was also very clear in her thoughts that the perceived formality of German and the informality of English would not have any impact on learning outcomes. Her beliefs about EMI and the practices observed in this single lecture are quite well aligned in this instance.

14.3 Findings: student voices

After reviewing the findings and codes, there were several central themes to emerge in the dimensions, which at times overlap with other dimensions of ROAD-MAPPING, which is illustrated in Figure 14.2 below:

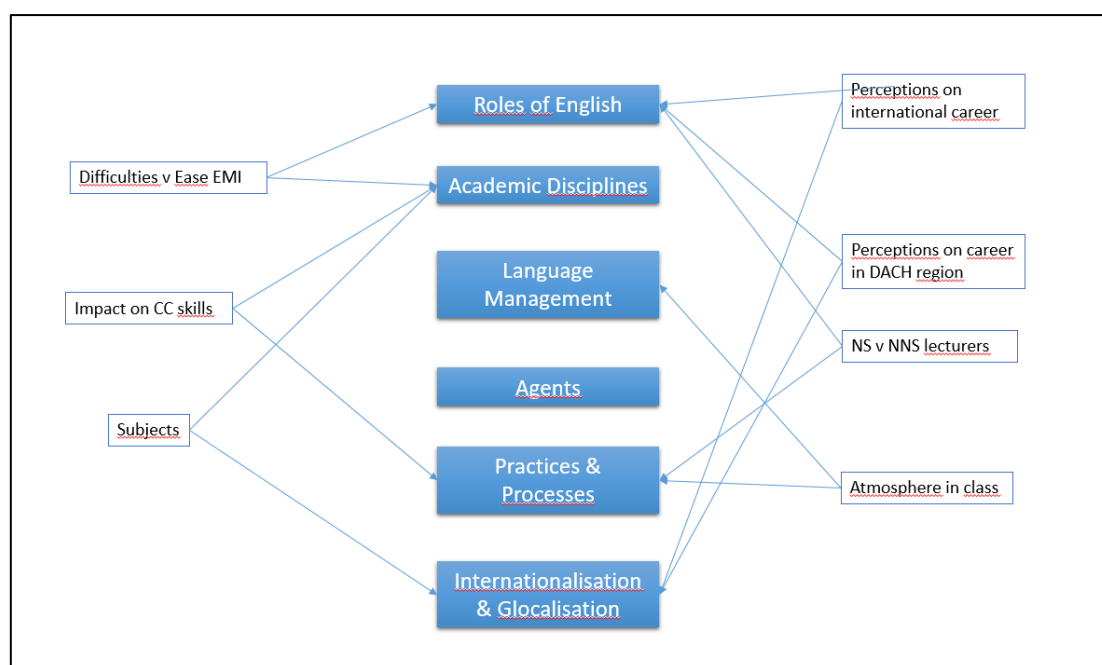


Figure 14. 2 Visualization of overlapping themes occurring in the ROAD-MAPPING framework, student focus groups

A central theme to emerge concerns students' perspectives on the impact of EMI education on their future career. This theme overlaps to a large extent with *Internationalisation and Globalisation*, and as such these two dimensions are combined in the discussion of the findings. Students recognise the value of multilingualism and see it as a chance to broaden perspectives and horizons, as one student summarized:

Extract 14.30:

(..) but I do think that people who grow up or like who are very interested in different languages and who are able to speak more than one language that they are also like like I wouldn't say like smarter but I don't know how to say that, like you know what I mean like I do think that people who are able to speak more languages and are able to express themselves in more than one language that they do have like very different perspectives of the world, and that they do have like let's say more competencies.

(Female student, 4th semester)

This statement resonates with the definition of internationalisation offered by de Wit (2020) and discussed in the literature review, namely that its purpose is “to make a meaningful contribution to society” (de Wit & Hunter 2015: 3). However, not all students considered EMI in this humanist light; when comparing English with German, this student saw an advantage in English due to its perceived linguistic efficiency:

Extract 14.31:

(..) English is the language to me personally enables you to to communicate in a much easier way than in German, sometimes at least, because in German, you have these huge long sentences and it could be the same, the same the same equation that you have to order the same the same example that you have to go through. And it could be a be explained to you in such a difficult or or confusing manner in German. Even though it is exactly the same thing and whereas in English only needs to need two or three sentences, to say the same thing.

(Male student, 2nd semester)

With regard to career opportunities, one student in the second semester raised a concern that EMI could be a disadvantage if in the future they decided to work in the German speaking region, as they might be missing certain specialist business terms. However, after raising this concern, two other students in this focus group relativized this statement and argued that catching up on those missing terms would be a very simple task.

Notwithstanding this, a similar concern was raised in the other focus group, with one sixth-semester female student stating that in bookkeeping they do not know enough about the Austrian system, which would put them at a perceived disadvantage when working in Austria. However, by and large, students agreed that their future international career was

certainly enhanced due to EMI, as this comment illustrates: “I see a lot more international possibilities erm for my job afterwards” (female, sixth semester). Furthermore, students implied that due to the perceived extra effort of studying in an L2, their career perspectives were also improved:

Extract 14.32:

They might even be a little more impressed about and this might not like have a huge, might not be a huge, decision point but it might it might be just the point that makes the difference. Because I guess for recruiters it also shows that we even as like German native speakers went probably went the extra mile just as XX said, maybe the English was not as good before, but nevertheless we took the leap to do the English spoken programme, went the extra mile and this might also just like have a very good impression on recruiters.
(Male student, 6th semester)

Students thus generally considered English as important for their career advancement, and by studying in the medium of English, “new horizons” would open for them. The importance of preparing students for the global job market is a core element of the strategy of Internationalisation at Home (e.g., Knight 2013; Leask 2015; de Wit & Hunter 2015), a fundamental driver of EMI programmes and something which has clearly worked in the perceptions of these students.

Students were in disagreement about whether studying in the medium of English was easier or harder than in their L1, which touches on the dimensions *Academic Disciplines and Processes and Practices*. These perceptions are naturally speculative in nature, as the students have little contact with the GTCs and no experience of studying in German in a first-cycle level. The sixth-semester students reflected that the first two semesters were harder and involved more time investment due to new vocabulary. There were a considerable number of comments regarding workload; students generally considered studying in English no more work, for example: “I think the workload is very manageable” or “I think the workload is similar”. Interestingly, the sixth-semester students believed that as they were the first cohort to be taught in English, that due to the inexperience on the part of the lecturers it was made a little easier. They also considered that as the semesters progressed, studying in English got easier. One student summarized: “yeah I agree with XX, I think in the first and second semester you have to invest”, which echoes the findings from the investigation by Evans and Morrison (2011), whose research showed that students performed better in EMI with time.

There was some agreement about the different subject areas within the programme; students considered some subjects easier to study in English than others. Some subjects even gave EMI students an added advantage, as this student suggested: “I think that is an advantage, the advantage that we really, really have in our English cohort with the soft skills, we have learned, and we have acquired and basically how to tackle certain issues”. There was consensus amongst the students in thinking their intercultural skills are superior to those in the GTC. As one student in the sixth semester student put it: “even though we only had four students from other countries, I think we are, we also have, a little better intercultural communication skills”. A similar comment was made in the other focus group: “while our cohort gives us a more international focus, maybe also more cultural awareness, and equips us better for a more international environment” (male, second semester). On the other hand, this student suggested that there are some topics which are harder in English, particularly in those subjects which are a personal challenge to them in any language:

Extract 14.33:

I genuinely have very hard time with math related subjects so like accounting and all these other like cost accounting and all these business administration's I felt like it was like double like hard for me. And I think I would have done better in German, because in German, I don't know, I would probably feel easier to to learn, but all the other stuff I don't think I had any disadvantage or. That I would have had a harder time or better time in German was pretty equal, I think I have a better time in English, actually.

(Female student, 4th semester)

In the last 5 years of working at the university and speaking to numerous applicants of the programme, I have observed an ongoing feeling of anxiety towards the numeracy-related modules, which other lecturers similarly report anecdotally. Research into this topic is scant, however, an investigation by McMullan, Jones and Lea (2012) point to “a growing deficit among university entrants in basic numerical dexterity, appreciation of number, and basic algebraic reasoning” (McMullan, Jones & Lea 2012: 179). Although the setting of this particular study is the field of nursing and care in the UK, the anecdotal evidence points to a similar situation, particularly for those who study outside of Austria, where Maths education may not be compulsory after the age of sixteen, whereas in Austria it is mandatory until eighteen.

Overall, the participants were positive about the programme and dismissed the idea that learning through the medium of English detracted from their Corporate Communication

skills. The students are generally happy about the content taught and believed they have learnt the same skills as those from the GTC:

Extract 14.34:

I feel confident in my skills in what I am good at and we knew coming into this that it would be a broad knowledge, of a lot of things that we would acquire and if we want to go into depth about something that we have to do a Masters so yeah I am fine with that.

(Female student, 6th semester)

Although not a central topic for this investigation, the students were particularly critical about the English language modules which they perceived as being too easy and stated they would rather have CC content taught in English than with ELT modules:

Extract 14.35:

For me, I haven't learned anything that I haven't learned in high school and everything that we're doing right now. It just feels like I'm kind of wasting my time and I have talked to a lot of people and they they basically told me the same thing.

(Female student, 4th semester)

This was also raised in the other focus group with the sixth semester students who were even more direct with one student bluntly saying that she found the module a “waste of time”. Currently, these modules are taught by English language experts and there is little cooperation with the content teachers in the program.

Themes emerging in the *Practices and Processes* dimension clustered around thoughts regarding who students believed is a “better” EMI teacher: a native or non-native speaker of English. This question was discussed in both focus groups, although it was not probed directly and was not part of the moderator guide. Students in both groups had very diverse opinions, with some vehemently stating that they preferred native speakers (n=3), while others agreed that lecturers do not have to be native speakers (n=5), provided their English is sufficiently fluent, as stated by this student:

Extract 14.36:

I don't think it's important that the teachers have to I mean of course it's good if they have a good level of English, but, most importantly, they have to know how to teach because I think that makes the biggest difference we had really amazing teachers that maybe, I don't know didn't have a native English or the most amazing English, but I took a lot with me, and then we had very, very well spoken English native people or with really high high level and I couldn't get a lot from that so yeah I think teaching is on top, and then the English skills.

(Female student, 4th semester)

At the same time, the lecturer's English language skills have to be of a very high standard, otherwise students claim they can no longer concentrate, suggesting that they might learn less: "if the English is really like bad or hard to listen to it's also like we just shut down and we don't we don't want to pay attention anymore" (female, second semester), which is similar to a comment made by a sixth-semester student: "I think if someone is not secure in English that hinders the delivery and so we don't remember the content as well." Students emphasised the importance of practical examples and praised lecturers who used examples:

Extract 14.37:

those lecturers that do this next to their main job they really had the most engaging lectures with all of the examples they have. Everything they explained they gave practical examples. It didn't feel like a prepared and rehearsed speech.

(Female student, 6th semester)

Additionally, students believed excellent English proficiency facilitates interaction, which also leads to better content learning, echoing the comments made by the lecturers with regard to the importance of achieving interaction in the lectures:

Extract 14.38:

I definitely agree, they don't have to be native necessarily but they definitely need to be fluent, because for me teaching is not only about passing on information from one to another but also about adapting your lecture to the dynamics in class, maybe add some personal anecdotes if we dig deeper into one topic. And if you are not really fluent in the language, you might be hesitant to be flexible and also you might be a bit more nervous, probably those teachers who didn't have like such a good command of English they very meticulously prepared their lectures first, maybe even like learnt them by heart a bit, so for them it was very hard for them, it was more like a presentation, I guess, more than an interaction, which it should actually be in class if there are questions coming up and especially in an environment as personal as the FH is, because in a class of 30 to 40 people there is just this dynamic where it is more like a ping-pong than a real presentation for me.

(Female student, 6th semester)

Students were probed about their perceptions of formality and atmosphere in class and asked whether they had an impact on content learning. Sixth-semester students commented that they believed lecturers in the ETC were more approachable because of the feeling that the setting is less formal, which is underlined by this student from the second semester:

Extract 14.39:

Yeah what I've noticed is that the native English speaking population in general kind of has this kind of entertainer vibe to them more than, for instance, such might lean into

conservative culture that we have in Austria. Yeah and so that obviously makes a huge difference because I always even though people were gasping for words or. It took them quite quite some time until they articulated their sentences, I always preferred listening to English lectures over German lectures because. It's the language that I like more, even though I I'm not not as good at it, as in German, but still have kind of this yeah the cultural going here, which is a bit bit more entertaining or yeah.

(Male student, 2nd semester)

However, in none of the focus groups did students link formality or informality with superior content learning. Interestingly, students confirmed some statements from the lecturer interviews, for example that lecturers may use students as a resource and opt for code-switching when negotiating meaning, as this quote illustrates: “they often ask us what that’s called in English” (fourth semester, female).

In conclusion, the students consider EMI is essential for their soft-skill profiles, especially in intercultural competence. Students in these focus groups did not detect any reduction in their Corporate Communication skills or their measurable learning outcomes due to EMI. They firmly believe that they will have better international career opportunities than their counterparts in the GTCs. On the whole, students consider the English fluency of a lecturer to be a key aspect for their learning, as this facilitates interaction, and they positively evaluate the perceived greater informality of courses taught in English.

14.4 Summary

The themes to emerge from the qualitative interviews indicate that lecturers are aware of the importance of ELF, particularly for international business. Lecturers are not concerned that they are imperfect speakers of English but are more sensitive if there is a NS in the cohort; while the NS on the one hand is seen as a resource for meaning making, at the same time lecturers are concerned this could undermine other students’ learning. They clearly see an advantage due to the predominance of English in the academic realm in terms of research, where knowledge transfer happens more readily in English. This is an interesting finding, as lecturers stated that they endeavoured to align content. Lecturers concurred that there were some subjects which are more suitable for EMI education than others but agreed that CC should be taught in English due to the nature of the subject. However, they suggested that it may be more suitable in second-cycle programmes.

These lecturers aim to deliver the same content in their EMI classes and would use EMI practical examples in their L1 lectures, but not the other way round. They are aware of the importance of interaction but lament that this is limited in the EMI cohort. With regard to the atmosphere in the classroom, there was some discussion about the differences, but without any conclusions as to which atmosphere was more advantageous for student learning. However, the relaxed atmosphere in the ETC was welcomed by the lecturers. There was disagreement regarding the academic standards of the students, with some lecturers suggesting they saw the students in the ETCs as more diligent, and a few suggesting that they expected higher standards in the GTCs.

Code-switching was something the lecturers avoided, although at times German words might be used when new vocabulary is introduced. For the majority of lecturers interviewed, EMI teaching involves more work, however, interestingly, they still mostly prefer to teach in English. There was an overwhelming agreement that the lecturers do not consider themselves at all responsible for any language teaching. Concerning teaching practices, the lecturers reported that their didactic plan for EMI and the L1 courses are the same, however their perceived lack of humour or fluency was a concern for two lecturers. Preparing for EMI lectures was conceived as easier, due to the abundance of research and other material available in English; however, if the lecture has been taught in German before, lecturers stated that they would translate it, which meant an additional workload. Notwithstanding this, all of the lecturers believed teaching in English was important for their career development.

The second part of this chapter reviewed the beliefs to emerge in the interviews with the practice lectures analysed. Of the four lecturers interviewed, for three of them, there was consistency in the matching of their beliefs to their practices. There appears only to be a mismatch between beliefs and practices with Lecturer 3, particularly in the area of perceptions about more flow and interaction in the ETC and the belief that the content is not translated.

Findings from the student focus group sessions revealed that students believed that studying in English offered them improved career opportunities, as they think it sets them apart. Notably, students did not consider studying in English any harder than studying in

German, although some students expressed that maths-related subjects did pose more of a problem in English. They agreed that their soft skills are superior due to the multi-cultural nature of their cohort and overall considered that they have the same level of CC competence as their GTC counterparts. With regard to lecturer practices, there was disagreement about whether an EMI lecturer should be a NS or not; however, the students were all in agreement that the lecturer's proficiency should be high to avoid concentration loss and facilitate better interaction. Finally, students considered the informal atmosphere in the EMI cohort to be an advantage.

15 Conclusions

While this chapter provides an answer to the research questions, it also offers further insights that this dissertation has shed light on, over and beyond the original questions posed. It presents an overview of suggestions for future research, mostly founded on the limitations identified, and finalises with a concluding statement.

15.1 Synthesis of findings and discussion

The aim of this study was to investigate whether EMI has an impact on content learning outcomes in the study programme Corporate Communication at the UAV. To address these research questions, this study adopted a mixed method enquiry, with each method contributing to answering the research questions.

The first research question posed asked **to what extent are student learning outcomes in EMI and in L1 medium courses different**. The results of the pre- and post-tests, as well as an overview of all of the grades of the first-year graduates and the themes that emerged from the focus groups all help to answer this research question.

The results from the post-test established that there was a knowledge increase in each of the student cohorts in both languages of instruction. However, the only class where there was a statistically **significant** increase was in the *Visual Communication* lecture, and this was in the EMI cohort. In the *Framing and Priming* lecture, EMI students fared better and in the *Online Communication* lecture, the students' performance was equal. However, the only lecture where the L1 classes displayed superior results was in the *Media Relations* class. It should be noted though that the important difference between this and the other EMI cohorts is that this lecture is in an EMI module in the German-taught degree programme, whereas the other three lectures were embedded in an entire EMI BA programme. This has important implications, namely that those students who are not used to learning in the medium of English require further didactic support. The lecturer of *Media Relations* delivers most of her lectures in the EMI BA degree programme and it can be

assumed that the novelty of EMI instruction for these students was not sufficiently taken into account.

The analysis of the overall grades as presented in Chapter 13.3 showed that the EMI students achieved an average grade of 1.84 compared to 2.08 in the L1 programme. These data must be interpreted with caution, as this was the first EMI cohort to graduate from the new BA programme taught in English, and so lecturers may have been more lenient with these students, as implied by the students themselves in the focus groups. Nevertheless, academic experts review exam papers before they are released for quality assurance purposes and these academic experts normally review both language of instruction cohorts. As such, if there had been evident proof of easier assessment from a lecturer, the academic expert would normally have addressed this, as it was important from the outset to maintain the same standards in both media of instruction. At the same time, lecturers mark exams and other assignments independently and there is naturally some subjectivity present. Only if a student sits a paper at the final (third) attempt are the papers reviewed by two other examiners. Moreover, there are only a few lecturers who teach in both media of instruction and each lecturer has his or her own subjective beliefs about what constitutes an outstanding grade. This is especially the case in the field of social sciences, where, as the Chapter 7.1.3 highlighted, assessment rubrics may be ambiguous and there are few dichotomous right or wrong answers.

With regard to EMI student thoughts as to whether they consider their learning outcomes to be different, there is a clear indication that it depends on the module in question. Emerging themes from the focus group discussions indicate that those more numerical modules posed a greater challenge, but students of communication generally tend to find these modules harder. Moreover, students considered they had acquired superior soft skills and were in agreement that they matched the L1 cohort CC learning outcomes.

Taken together, these findings suggest that EMI **does not have an impact on learning outcomes** in the CC degree programme. In contrast, the findings indicated that student performance is superior in EMI instruction in this context. These findings are consistent with the conclusions drawn in a study by Dafouz and Camacho-Minano (2016: 62), who found that EMI students performed better in three out of four academic years, as well as with the

findings of the study in 2015 by del Campo and colleagues, whose paired investigation of 15 students indicated that the EMI students performed better. The research undertaken by Joe and Lee (2013), who also conducted a pre-and post-test of student learning, further showed that EMI students performed better. However, these findings are all in contrast to earlier studies which pointed to similar learning outcomes, e.g., Dafouz (2013), Klassen (2001) and Gerber et al. (2005). All of the studies which suggested EMI results in inferior learning outcomes, described in my literature review in Chapter 6.3.2 (e.g., Hellekjær 2010; Knapp 2011; Pulcini & Campagna 2012; Sert 2008, Tatzl 2011), are all based on self-reported perceptions of EMI content learning outcomes, which are naturally subjective. While Arkin and Necdec (2015) tested content using stimulated recall after the lecture, this was voluntary in nature and the lectures were constructed for the investigation.

Turning to the second research question, which asked **to what extent lecturing practices are different in L1 and EMI in corporate communication lectures**, both the data from the contrastive linguistic analysis of lectures and the themes emerging in the lecturer interviews serve to address this.

Overall, the contrastive results of the frequency of use of discursive aspects point to a more diversified language employed in the L1 German lectures of all features examined. Surprisingly, the GTC employed more CDFs overall, but the CDFs EXPLORE, DESCRIBE, and CATEGORIZE appear more frequently in the English corpus. The use of structuring devices was more common in GTCs, which is the most noticeable finding. There is a distinct propensity for lecturers to employ both referential and rhetorical questions to promote content learning in both languages of teaching. This finding is in contrast to the statements made in the interviews; in both languages of instruction, nine lecturers clearly indicated that they employ the same pedagogic methods. This suggests that lecturers are unaware of their own practices in classroom language use.

A comparison of the findings with those of other studies as discussed in the literature in Chapter 6.2 reveals some interesting similarities and differences. With regard to the atmosphere in the EMI classroom, my observations are in line with the findings of Dafouz and Sánchez (2013), who noted a non-hierarchical environment as reported in the lecturer interviews and student focus groups. This is mainly due to the use of the formal second

person personal pronoun in German, which has been shown to express formality, power, politeness and social distance (e.g., Sinnott 2013: 54). However, these findings contrast with the more formal atmosphere as noted by Thøgersen and Airey (2011), Tzoannopoulou (2017), Jiang and Zhang (2016) and Sert (2008). A note of caution is due here since it must be noted that the lecturers selected for this study were particularly confident and proficient in English (see Table 11.4 on page 148).

Research studies reviewing pragmatic features showed that successful lectures are often those with a variety of interactive features (e.g., Gotti 2014). Sánchez (2016: 264) found that interactive features were used in EMI settings to secure extra time, whereas in the L1 classroom they were used to achieve linguistic goals. This, she suggests, is because in each language of instruction there are different teaching challenges and at the same time lecturers need to consider various discursive needs of EMI and L1 students. Specifically, in the L1 Sánchez (2016: 131) proposes that having to think and present content in one's mother tongue appears to be less demanding in terms of cognition and language; hence, lecturers have the means to express the same, or even more substantial, quantity of thoughts while requiring less thinking and production time. While my investigation does not zoom in on the goals of interactive features like Sánchez, the greater variety of interactive features in the *Visual Communication* lecture may have contributed to the success of those EMI students in the post-test with exactly the opposite outcome (fewer features, worse result) in the *Media Planning* lecture. Yet the results of the other two EMI lectures, where there were fewer features but similar or better results, point to a source of uncertainty in this statement.

With regard to the use of questions, the literature review revealed that questions aid lecture interaction (e.g., Bamford 2005). One key finding from Dafouz and Sánchez (2013) was that the more questions posed, the greater the likelihood of student response. Moreover, they found that questions used as confirmation checks were employed more frequently. Additionally, in her dissertation, Sánchez (2016) found that questions were posed more frequently in EMI lectures. Generally, in this investigation there was more of a balance between the languages in the frequency of questions posed, however, as discussed in Chapter 13.2.1, there were far more open questions in the GTC lectures, which might point to a similar tendency in the ETC lectures for questions to be used more as fillers.

An additional interesting finding in this investigation concerns the use of metadiscursive devices. In general, structuring devices were utilized 26% more in German lectures, largely in the form of retrospective markers, topicalisers, sequencers, and prospective markers in that order. The absence of closing and opening markers was a common occurrence in both instruction languages. These findings are consistent with the work of Dafouz and Núñez (2009), who also found that L1 lecturers employ a greater number and variety of metadiscursive devices.

As far as I am aware, I have yet to find a study which has contrasted the use of CDFs in an EMI and in an L1 in oral classroom discourse at tertiary level. The research undertaken by Doiz and Lasagabaster (2021) linked the use of CDFs and student competencies in history lectures and found that there are more secondary level CDFs in use, which was also the case in the present investigation. Other studies, e.g., Dalton-Puffer et al. (2018) and Dalton-Puffer and Bauer-Marschallinger (2019), observed the frequency of use of the CDF construct in a CLIL setting. The contrastive investigation of the use of CDFs in student writing by Breeze and Dafouz (2017) showed the value in the frequency in the use of CDFs in distinguishing between successful and poor student writing when comparing EMI and L1 (in this case Spanish). As such, the contrastive review of CDFs of the present study, which showed more frequent use of CDFs in the L1, particularly REPORT and EVALUATE, is entirely novel.

My literature review pointed to inconclusive findings with regard to the use of repetition in the EMI classroom. Whereas Sánchez (2016) found that repetition was used more in the L1 lecture, the comparative study undertaken by Thøgersen and Airey (2011) indicated exactly the opposite. This present investigation concurs with the findings by Sánchez, as lecturers used repetition and paraphrasing more frequently in the L1 lectures.

Finally, the research into length of delivery carried out to date by Thøgersen and Airey (2011) and Arkin and Necdec (2015) indicated that EMI lectures took longer to deliver. This contrasts with the study by Aguilar and Rodríguez (2012), who report that lecturers deliver faster in English due to a lack of ability to rephrase or explain. In this current investigation, there was only one lecture which took longer in EMI (Online Communication, 12 minutes longer), whereas the other lectures were 5, 19 and 20 minutes shorter in English. In this investigation, two lecturers thought their German delivery was faster, and one saw

the slower pace of the EMI lectures as a benefit for the ETC, since it allowed students to think more about what the lecturers were saying. Only one lecturer thought the English delivery was faster.

In sum these findings suggest that compared to the L1 classroom, **there are considerable differences in lecturer rhetorical practices in the EMI classroom. In two out of four of the lectures students performed slightly better or the same as their L1 counterparts.** In the only lecture where a similar number of rhetorical devices was employed as the L1 lecture, students performed significantly better. Furthermore, in the lecture where there were considerably fewer rhetorical devices, EMI students did not perform as well. This latter, rather contradictory result is most probably also due to the lack of experience of these students in the EMI classroom. Importantly, these findings should be taken with caution, as there were other contextual influences, such as the time of day when the lectures were delivered.

Undoubtedly, the most challenging research question to address concerns **the relationship between learning outcomes and lecturing practices.** This question can be answered by summing up the post-test results and comparing them to the didactic practices as analysed in depth in Chapter 13.2, and partially by triangulating this discussion with themes emerging in the qualitative interviews and focus groups.

The first lectures analysed, namely *Online Communication*, revealed that the post-test results of both cohorts were identical and this could be attributed to chance. This language analysis reveals an intriguingly distinct choice of rhetorical devices in each cohort. Lecturer 1 tended to employ the CDFs EXPLAIN AND EVALUATE in the GTC, as well as more referential and rhetorical questions, sequencers, and topicalisers. In the GTC, there were more instances of the CDFs DESCRIBE and EXPLORE, as well as display questions, and retrospective and prospective markers were more evident. In the ETC, Lecturer 1 used repetition and paraphrase more frequently. In summary, the findings from the lecture *Visual Communication* demonstrate that this is the only lecture where there was a significant difference in knowledge increase in the ETC. In comparison to the other lectures studied, the linguistic analysis reveals a more even distribution and variety of linguistic devices in both languages of instruction. In the ETC, Lecturer 2 used the CDFs DEFINE and EVALUATE as well

as referential questions more regularly, whereas in the GTC, structural markers were used more often. Based on this data, a plausible explanation for the students' superior success in the ETC could be the increased use of CDFs and referential questions. To summarize the findings from the *Framing and Priming* lecture, students fared better in the post-test in the ETC (+6.2pp); however, the linguistic analysis provides no explanation, as it shows that linguistic devices were employed more frequently in the GTC. There were more instances of REPORT and EXPLAIN, as well as more referential questions and retrospective markers. Although the lectures were designed similarly, there were minor variances in terms of the amount of content delivered (as seen in the corpus examples) and the length of time employed to deliver the content. Furthermore, the exemplary question examined provides no additional explanation as to why the students in the GTC scored better, as this example also demonstrated that there are other factors at play. The lectures of *Media Planning* were a particularly fascinating subject of analysis because they indicate that students had more difficulties with EMI modules if they are normally taught in their L1. According to the linguistic analysis, the ETC students may also have performed worse because the lecturer used fewer CDFs, which, combined with fewer open questions, more rhetorical questions, and fewer other language resources, may have contributed to their poor performance. Naturally, the lecture in the GTC was longer, but the learning objectives were the same irrespective of lecture length.

These findings, particularly those of the lecture *Visual Communication*, where more rhetorical devices were used and where there was a significant increase in student knowledge in the post-test, might suggest that **learning outcomes can be improved with a conscious use of the CDFs DEFINE AND EVALUATE and more referential questions.** Notwithstanding this, a note of caution is due here due to the context. On the one hand there was a small cohort size in the ETC in this practice lecture, but at the same time the students carried out the test very late in the evening. Interestingly, the statements made in the interviews suggested that teaching in English was easier due to ubiquitous English research, materials, and examples; however, these beliefs do not match with practice, as 16% more examples were given overall in the GTC lectures. While lecturers believed that there is less interaction in the ETC, at the same time they felt overall that the informality created a superior atmosphere conducive to more interaction. The lecturers were divided in

their thoughts as to whether they believed the EMI students achieved the same learning outcomes.

15.2 Significance and implications

Ths findings of this dissertation have a number of practical and theoretical implications. The former will be discussed using the ROAD-MAPPING framework as a guideline and the latter will consider the theoretical framework and the studies which contributed to establishing the methodology as an underpinning.

15.2.1 Education management contribution

With regard to the *Roles of English* and from the *Language Management* perspective, additional implications beyond the research questions can be gleaned from the investigation. These findings are particularly insightful, as this investigation focussed on a first-cycle programme, which is not offered as EMI as often as second-cycle programmes (Wächter & Maiworm 2014: 65) and in Austria (Chapter 9.2). The studies by Maiworm and Wächter showed that education management often regard EMI as more suitable at master's level, which might have become a self-fulfilling prophecy. Based on the findings of the interviews and focus groups, an increase in EMI at the first-cycle level could be considered for greater expansion. Most importantly, in this study, EMI had no effect on learning outcomes at the programme level; hence, the notion that it is more appropriate at the master's level is debatable. This was also confirmed by the students in the focus group discussions in their self-reported perception of their own learning outcomes, and although some lecturers considered it more appropriate at master's level, this particular programme of CC was considered very relevant for EMI education.

Following on from this, the importance and originality of this study lies in the context of investigation, namely in the *Academic Discipline* of Corporate Communication within the wider soft and applied (Biglan 1995) field of social sciences. There have been some studies researching EMI learning outcomes in the social sciences, for example Dafouz, Camacho and

Urquia (2013) reviewed the learning outcomes in the lectures *Finance, History* and *Accounting* and found that higher results were obtained in Finance and Accounting (p.233). The study undertaken by del Campo and colleagues (2015) looked at the overall performance of *Business Administration* students and found that the EMI students had a higher grade point average (p.77). Other studies pointing to better performance were undertaken in the pure and hard sciences, e.g., Gerber et al. (2005) in *Mathematics*; Joe and Lee (2013) in *Medicine*; and pure and applied, e.g., Klassen (2001) in *Engineering*. Some studies in the social science field of Business Administration pointed to inferior learning outcomes; these were conducted by Sert (2008) in *Economics*, Arkin and Nedec (2015) in *Human Resource Management*, and the investigations carried out by Knapp (2011) and Hellekjær (2010) spanned several disciplines. As such, an investigation focussing on learning outcomes in *Corporate Communication* at a UAS in Austria is completely novel. The nature of the BA programme of CC at the UAV is its unique positioning as a general introduction into this field covering various soft (e.g., social skills), numeracy based (e.g., statistics, accounting), creative (e.g., copy workshop, video workshop) and academic skills (research skills, BA thesis). The overall grades as presented in Chapter 13.3 showed that the EMI students performed better, with only the grades of statistics and research skills in the fourth semester being worse. Taken together, these findings confirm the absolute suitability of CC for EMI education at **Bachelor** level.

The findings from the qualitative study provide a positive picture of the acceptance of EMI by both *Agents*, lecturers as well as students. The statements made in the interviews suggest that lecturers find teaching in English easier and importantly, that they would voluntarily choose to teach in English rather than their L1 for future courses. Furthermore, students overwhelmingly perceived EMI to be a positive offer with no impact on learning outcomes, moreover, providing students more opportunities in the global workplace, which touches on the *Internationalisation and Glocalisation* perspective.

Turning to *Practices and Policies*, one of the main contributions of this dissertation is that it informs education managers of the importance of differentiating training policies between EMI courses taught at modular level to EMI as an entire degree programme. Furthermore, this investigation found that if lecturers were aware that by providing sharper definitions, more evaluation of content delivered and greater use of (referential) questions,

student learning outcomes could be improved. Bringing this finding to EMI lecturers' attention and training them in implementing this would not involve a great deal of investment for education managers. Indeed, the lecturers at the UAV were enthusiastic about the EMI training that the university currently offers, and slightly adapting this offer to include these rhetorical improvements would be a simple but effective way to improve student-learning outcomes in EMI. These insights can be transferred by education policy makers for other HEIs.

The final contribution is that this study of **content** learning outcomes is the first of its kind in **Austria** at a university of applied sciences. This investigation will provide education managers with guidelines on how to implement EMI as a language policy with due consideration of the the key agents, lecturers and students, and how to ensure that the learning outcomes match, if not surpass, the learning outcomes of the GTCs.

15.2.2 Theoretical contribution

This dissertation differs from others in that it includes a corpus of naturalistic classroom dialogue from four almost identical lectures delivered by the same lecturer, which is unusual and to which it is usually difficult to acquire access. This corpus improves the findings' reliability and validity considerably. There have been a few contrastive investigations into learning outcomes, e.g., Suviniitty (2012), Dafouz, Camacho and Urquia (2013), del Campo and colleagues (2013) and Joe and Lee (2013). The study by Arkin and Necdec, although contrastive, made use of lectures that were constructed for the investigation. Others used questionnaires and other qualitative methods to come to self-reported perceptions of learning outcomes in EMI (e.g., Hellekjær 2010; Knapp 2001; Pulcini & Campagna 2012; Sert 2008; Tatzl 2011). As such, this investigation contributes significantly to the growing body of highly reliable contrastive studies.

Another central innovative feature of this study is the fact that it is the first contrastive study of EMI and L1 zooming in on several rhetorical devices and teaching practices in tertiary education. This current study reviewed differences between the extent and use of CDFs, questions, metadiscursal structuring and other rhetorical devices. Other

investigations to date have looked at these features individually but not taken together. For example, CDFs have been examined by Dalton-Puffer (2007), Dalton-Puffer and Bauer-Marschallinger (2018) and more recently by Doiz and Lasagabaster (2021). The use of questions has been taken up by researchers, (e.g., Bamford 2005; Chang 2012; Dafouz & Sánchez García 2013; Gotti 2014; Morell 2004; Suviniitty 2012a) as have structural markers (Dafouz & Núñez 2010). Moreover, this is the first contrastive study of CDFs of natural classroom speech at tertiary level where the CDFs were counted and analysed.

Furthermore, to the best of my knowledge, researchers have not yet investigated the convergence of CDFs, questions and metadiscursive devices, as highlighted by the present study. For instance, the findings in Chapter 13.2.1 indicated that lecturers used the CDF EVALUATE as a sequencer to structure discourse (p. 180), or the CDF EXPLORE was often realized as a referential question (p.194).

The findings will make an important contribution to the practical use of the ROAD-MAPPING framework (Dafouz & Smit 2016; 2020) in research contexts. To the best of my knowledge, there have been no researchers to date who have linked the framework with the phenomenological research approach. By considering all dimensions, it is easier to satisfy phenomenology's criterion for a rich portrayal from all viewpoints. Since many phenomenology scholars regret that a specific methodology is lacking, I would even venture to say that this framework could provide the proposed method for the "phenomenon of EMI". When conducting research utilizing the ROAD-MAPPING framework, by recognizing the additional phenomenological components, such as "completely embracing the phenomenological attitude" and "bracketing," may be beneficial additions to improve the researcher's technique. It is conceivable that some crucial details could have been overlooked due to my role as a faculty member of staff, had I not used this research approach.

The authors suggest that the framework can be utilized to help in research design, data analysis, and/or discussion of findings (Dafouz & Smit 2020: 76). The framework was used as an aid in several instances in writing this dissertation. Firstly, in Chapter 8 it was used to synthesize the findings from the literature review. More significantly, it was a great aid in Chapter 9.3 when describing the object of investigation and helped considerably to shed light

on aspects at interplay in EMI at the UAV. Additionally, the framework was used to help structure the first-cycle codes as described in Chapter 12.1. To my knowledge, this is the first time the framework has been used for data analysis in this way. Although the subsequent discussion of limitations reveals that this presented some difficulties, the novel application may inform researchers that the framework should be utilized with caution for qualitative research. Furthermore, the framework was a useful guide for discussing the results of the qualitative investigation of lecturer interviews and focus group discussions. As such, this is the first study to utilize the framework for structuring the literature review (Chapter 9.3), data collection methods (Chapter 12.1) and discussion of results (Chapters 14.1 and 14.3) and for exploring the contribution to education managers as described previously (Chapter 15.2.1). In concurrence with Komori-Glatz (2017: 252-278), I agree that the framework allowed for a more structured scientific approach and allowed me to consider their investigation holistically.

To date, research with a focus on language outcomes and stakeholders' perceptions has predominated the EMI research agenda. The fundamental challenge with research into content learning outcomes is that it necessitates an interdisciplinary approach that is difficult to organize. Since they are experts in their fields, EMI academics are rarely drawn to this kind of research (although there are a few exceptions e.g., John Airey). As a result, research on attitudes, beliefs, and perceptions around EMI is typically carried out by applied linguists who are able to recruit EMI stakeholders from their institutions. As such, this dissertation is an answer to researchers who have called for further enquiry into content learning outcomes in EMI (e.g., Hellekjær 2010; Dafouz 2014). As an EMI content lecturer and an educational linguist researcher, the unique contextual setting includes a wide range of data sources, including a substantial natural corpus, which enhances the validity of the research. Furthermore, mistakes in data interpretation could be prevented due to my thorough understanding of the academic environment and the curriculum.

Another noteworthy contribution are the findings emerging due to the triangulation of data, which was made possible by the study's various vast and detailed data collection methods. Of particular significance is the Chapter 14.2, which contrasts the perceptions of lecturers about EMI education programmes with actual practices and adds to the growing body of research into teacher beliefs and practices. Triangulation of data was used again to

inform the analysis of overall student grades by accessing insights from the student focus group discussions and lecturer interviews.

15.3 Limitations and outlook for future research

The limitations and future research will be discussed firstly from a contextual, then conceptual and finally from the methodological perspective as carried out by Richter (2015: 240).

The context of the investigation was a UAS in Austria. Although gaining access to four identical lectures was the main contribution of this study, these four lectures were not selected out of choice; rather, they were the only ones available to me at the time of data collection. All four lecturers' English proficiency is excellent, and they were particularly confident teaching in English; in fact, all of them in the interviews stated they would opt to teach in English for future courses if they had the choice. As such, a more representative selection of lectures/lecturers might have made the study more balanced. Furthermore, all four lecturers/lectures took up a similar theoretical topic and so future research in learning outcomes in CC would benefit from a closer review of more numerical or creative subjects, which are also significant for success in CC and are a critical part of the curriculum. As the focus of the study was CC, the transferability to other disciplines may be limited, as my literature review confirmed that there are different learning and teaching styles in other disciplines and the transferability of skills is contentious. Likewise, the study was at a UAS where cohort sizes are smaller, which encourages more interaction per se, so caution should be taken when considering these findings for other HEIs, particularly more traditional RUs.

From a conceptual perspective, the ROAD-MAPPING framework was highly useful for structuring many discussions in this dissertation and ensuring that the phenomenological aim was met. However, using the framework as a basis for the first-cycle codes created challenges in conducting the data analysis, as the framework could be considered too rigid for a rich qualitative study. Furthermore, the overlapping themes in many dimensions, as depicted in Figures 14.1 (p. 223) and 14.2 (p.248), proved not to add any value to the discussion; rather the figures showed how messy these overlaps are. This proved to be

difficult when deciding in which dimension of ROAD-MAPPING the ensuing themes should be discussed. This issue was similarly raised by Hüttner and Baker (forthcoming) who suggest it is important to recognize that categorizing data is a subjective process that can be carried out in a variety of ways by different researchers in various contexts.

The present study was subject to a number of potential methodological weaknesses. Unfortunately, I was only able to hold two focus group discussions with students, although effort was made to recruit more students for an additional group discussion. Ideally, focus groups should be conducted until findings become repetitive and no new information is obtained, as suggested by Vaughn (1996: 49), with normally at least two to four groups. Thus, a third focus group discussion would have enriched the findings and ensured that saturation had been met. Furthermore, it would have been useful for a focus group discussion with students who had already studied at least some semesters in their L1 so that the statements could have been founded on experience, rather than on how they thought it might be to study in their L1. This should be possible, as many students at the UAV study for one or two years at a RU before joining the UAV and mostly this is in their L1.

Concerning the pre- and post-test of student learning in the practice lectures, although this procedure is the strongest of quasi experimental designs in terms of reliability, they are subject to some methodical weaknesses, such as various sources of random error in measurement (Rogers & Révész 2019: 134). Moreover, the students may not have been motivated to do their best in the pre- or post-test because the assessments were not related to grades, which raises some concerns about reliability. On the other hand, it is possible that the students were acutely aware of the test and put in a maximum of effort. Nevertheless, internal validity of this quasi experiment was given, due to the post-test being conducted immediately after the lecture, and other steps were taken to ensure internal validity by carefully piloting the test, adhering to the procedure, and having the accurate data analysis checked by a statistician. Replication of the pre-and post-test in future cohorts would enhance the external validity and hence transferability of these findings. Moreover, replication of such pre-and post-tests in other subject areas within CC, as described above, would also add to the validity of the statement that EMI does not negatively impact learning outcomes in this discipline. Finally, although this investigation aimed to capture what students had learnt in the lecture without interference of other factors (e.g., age, gender,

aptitude), by virtue of the post-test, these lectures were a very small part of the degree programme. A longitudinal study of paired students, as conducted by del Campo and colleagues (2015) should be possible at UAS in Austria due to the data available from the admissions tests and would shed further light on contrastive learning outcomes.

The study would also have benefitted from a further consideration of the longitudinal perspective. As reported by Rogers and Révész (2019: 136), longitudinal techniques are better suited to detecting longer-term effects of L2 development and so a longitudinal element would have enriched the study. Unfortunately, in the interviews lecturers were not asked if they considered that the students improve over time in the EMI classroom, which in retrospect would have been interesting in light of the information revealed in the literature review that EMI students do become accustomed to EMI (e.g., Evans & Morrison 2011) and the focus group discussions with students who stated that the first semesters were the most challenging.

Although the central contribution stemming from the rhetorical analysis results from the rich review of CDFs, questions, and metadiscursive devices, this analysis also posed a challenge and could be considered a weakness of the methodology. As discussed previously, studies to date have focussed on one aspect and this naturally ensures a more thorough review and analysis. Considering all aspects while coding each sentence was a formidable task and although due care was taken with inter-rater reliability checks, there were certainly some blurred lines in coding, particularly when coding the CDFs. A fruitful area for further work would be to investigate further the employment of CDFs with questions and other rhetorical structuring devices, as this has been unexplored to date. The current investigation noted these combinations by chance in the analysis of the data, and did not dedicate due time and consideration to the overlaps and learnings we might draw from this. It would be interesting to assess if conscious use of such combinations of rhetorical devices enhance learning outcomes. Additionally, as the lectures were videotaped with the lecturers' gestures being captured, this data is ideal to conduct a contrastive EMI and L1 multimodal investigation of semiotic resources, as suggested by Bernad-Mechó and Fortanet-Gómez (2019: 338).

As with all such studies, other perspectives would have enriched the study; particularly an ethnographic review would have been beneficial. More class observations from other lectures and lecturers with more detailed consideration of student/lecturer interaction and observations of other CATs would have been useful.

Despite this holistic investigation, other further questions remain. The most pressing of these emerging from this investigation is the need to sharpen the research focus on the different forms of EMI as outlined by Knapp (2011:55), as students have different needs. Research to date rarely distinguishes between these different forms and as such any findings of studies have to be taken with caution by education policy makers to ensure that they are relevant to the programmes in question.

Finally, future areas of research might consider content learning outcomes and language learning outcomes together. Research normally falls into one or the other; this study did not engage with language learning outcomes. The recent idea of the possibility of a combination of language and content in higher education, conceptualised as ICLHE, needs further exploration. Schmidt-Unterberger (2018) suggests that this is not possible to implement in HEI, yet the author of this study has recently worked with an ESP lecturer and created some modules with both language and content learning outcomes into the new 2023 curriculum at the UAV in the degree programme CC, and so this would provide an ideal opportunity to explore learning outcomes outside of the normal language/content dichotomy.

15.4 Concluding statement

Although the previous discussion highlights the limitations and advises that the findings should be taken with caution, the study nevertheless provides a comprehensive assessment of content learning outcomes in a UAS in the discipline of CC. The findings highlighted that EMI does not impact learning outcomes in this discipline and showed that there are stark differences in content comprehension between students studying in a full EMI programme compared to just a module; while this may seem obvious, these differences are rarely taken into consideration in pedagogic practice. Additionally, the investigation explores content learning outcomes at Bachelor level which is under-researched.

This contrastive investigation adds values in that it draws on a variety of data sources; from student grades, interviews with lecturers and focus group discussions with students. The phenomenological approach using the ROAD-MAPPING framework is the first of its kind to implement the framework in different areas to add structure to the investigation and discussion. As such, this investigation adds to the growing body of research using the ROAD-MAPPING framework for investigating EMI. Furthermore, the application of the CDF-construct at the tertiary level had not yet been thoroughly examined.

This present study should prove to be particularly valuable for higher education policy makers when introducing EMI, and highlights the importance of lecturer support, particularly in rhetorical practices when delivering in L2 English. The findings are a clear sign that EMI education in the discipline of CC at Bachelor level is not only favourable in terms of learning outcomes, but welcomed by students and lecturers alike.

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Appendices

Appendix 1: Overview of EMI courses offered in Austria (September 2020)

Institution	Univ Type	Location	Cycle	Programme Title	Notes
Modul	Private	Vienna	Bsc	International Management	Further tourism programmes in English
Modul	Private	Vienna	Msc	Business Management	
Modul	Private	Vienna	PhD	Business & Socioeconomic Sciences	
FH Campus Vienna	ÜAS	Vienna	MBA	Economics & Governance	Focus on life science, technology, construction
					In Association with Webster University
Webster University	Private	Vienna	BA, MA, MBA	Various	Around 8 first cycle programmes
MCI Innsbrück	UAS - Int. Entrepreneurial School	Innsbrück	BA,	Business Admin Online	
			Ba	Business & MM	
			MA	Entrepreneurship & MM	
			European MA	Health Economics & MM	(AT, NL IT, NOR)
			MA	Int Bus & MM	
			MA	Strat MM & Law	
			MBA	International Business	Online
IMC Krems	ÜAS	Krems	BA	3 Business programmes, 2 Leisure Industry Programmes, 1 life science	
			MA	3 Business programmes, 1 Leisure Industry Programmes, 1 life science	
FH Kärntner	ÜAS	Spittal	BA	Intercultural MM	
			MA	Int. Bus MM	
FH Oberösterreich	ÜAS	Steyr	BA	Global Sales & Marketing	
			MA	Global Sales & Marketing	
FH NÖ	ÜAS	Wiener Neustadt	BA	Business Consultancy International	
			MA	Business Consultancy International, Marketing Analytics, Treasury & Investment	2 Further tech programmes
FH BFI	ÜAS	Vienna	BA	European Economy and Business MM	
			MA	European Economy and Business MM	
FH Kufstein	ÜAS	Kufstein	MA	International Business Studies	
FH Joanneum	ÜAS	Graz	MA	Business in Emerging Markets	
			MA	European Project & Public Management	
			MBA	Int. Hospitality & Spa MM	

Appendix 2: Pre-test questions – pilot study

Voluntary Questionnaire My research is an ongoing enquiry into the difference in learning outcomes between studying in the medium of English compared to studying in the mother tongue. This lecture will be recorded with view to analysing differences in content and delivery (on the part of the lecturer) when the same content is delivered in English and German. There is a short quiz before and after the lecture which will assist me in checking how much you have learnt and understood the lecture. Please answer the questions as accurately and honestly as possible; the answers are anonymous and this has nothing to do with the course evaluation. The information will be made anonymous and secure and will be destroyed after the project. Thank-you for your assistance! Age: _____ Sex: _____ M / F (please circle) What is your mother tongue (native language): _____ How many years have you been learning English? _____ At home your language is: _____ What other languages do you speak? _____ Did you go to a bi-lingual school or attend a class of English "als Arbeitssprache"? Y/N _____ What grade did you have in your A-level (Matura) certificate for English? _____ Do you have any other education / training other than A-level / Matura? _____	Select one of more answers; circle the answer you think is correct or answer with one or two words: 1) What is the internet? a) A technical infrastructure. b) A medium for exchanging information c) A platform for different media 2) Devices which store, transmit and receive information are referred to as a) First-order media b) Second-order media c) Third-order media 3) Where has internet its origins? _____ 4) In which year did the first website (www) go online? _____ 5) Who developed it and where? _____ 6) In Austria, how many people use the internet (in 2019) a) 68% b) 78% c) 88% 7) Do you think that the growing flow of information increases or decreases social inequality? _____ 8) <u>Describe the demographics of a typical online user in the first years of the internet (e.g. M/F, educated)?</u> _____ 9) Do you think that interpersonal interaction has a stronger or weaker effect on shaping public opinion than mass media outlets? _____ 10) A "filter bubble" can be described as a) A website algorithm that informs people the latest news. b) A website algorithm that selectively guesses what information a user would like to see based on the user's history. c) A website algorithm that engages like-minded individuals in discussions. 11) "Echo chambers" narrow or widen one's view of the world? _____
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- 12) Why is information about the duration of internet use important to marketers?
- 13) How much time do you think under 30s spend on the internet?
 - a) 4 hours
 - b) 5 hours
 - c) 6 hours
- 14) What year did the smartphone overtake the laptop as the most important internet device?
 - a) 2015
 - b) 2016
 - c) 2017
- 15) Can you name any motives for using social media?

Thank-you for your time – **it is much appreciated!**

Appendix 3: Informed consent form

Questions	Responses 33
Informed Consent- 24.2.2021 This lecture (24.2.2021) will be recorded (audio and video) as part of an ongoing comparative study of learning processes and learning outcomes when learning in English (L2) as well as in the mother tongue (L1). The aim of this research, which I am doing for my PhD dissertation at the University of Vienna, is to analyze content-related and subject-specific differences in language use on the part of the lecturer. I am recording this lecture and the counterpart in German to investigate if there are any differences in content, teaching style etc. Although your statements are not relevant for research and will not be analyzed, only those of the lecturer, it is practically impossible not to record them during the lecture. Therefore, I ask you to agree that your voice will be recorded if you have questions or answer questions during the lecture. Any data collected will be anonymized and destroyed after the project has ended. With this consent form you also agree that the researcher can review the written group work done in the lecture. If you have any questions, please contact Kirstie Riedl (researcher). kirstie.riedl@fh-wien.ac.at / mob: 069040476025	
1. With this you acknowledge that you can revoke your consent at any time, that you have understood the aim of the examination, you are aware that you will not benefit directly from the investigation, that it has no influence on your grading, your voice is recorded and all data collected are treated confidentially and anonymized. ☐ I agree ☐ I disagree	

19.2.2021 Einverständniserklärung Diese Vorlesungen (16/19.2.2021) werden im Rahmen einer vergleichenden Untersuchung der Lernprozesse und Lernergebnisse beim Lernen in Englisch (L2) sowie in der Muttersprache (L1) aufgezeichnet (Audio und Video). Ziel dieser Forschung, die ich für meine Doktorarbeit an der Universität Wien mache, ist es, inhaltliche und fachspezifische Unterschiede im Sprachgebrauch des Dozenten zu analysieren. Ich nehme diese Vorlesung und die Vorlesung auf Englisch auf, um zu untersuchen, ob es Unterschiede im Inhalt, Unterrichtsstil usw. gibt. Obwohl Ihre Aussagen nicht für die Forschung nicht relevant sind und nicht analysiert werden, sondern nur die des Dozenten, ist es praktisch unmöglich, sie während der Vorlesung nicht aufzuzeichnen. Daher bitte ich Sie, zuzustimmen, dass Ihre Stimme aufgezeichnet wird, wenn Sie während der Vorlesung Fragen haben oder Fragen beantworten. Alle erhobenen Daten werden nach Projektende anonymisiert und vernichtet. Mit diesem Einverständnisformular erklären Sie sich auch damit einverstanden, dass der Forscher die in der Vorlesung geleistete schriftliche Gruppenarbeit überprüfen kann. Bei Fragen wenden Sie sich bitte an Kirstie Riedl (Forscherin). kirstie.riedl@fh-wien.ac.at / mob: 069040476025 1. Damit bestätigen Sie, dass Sie Ihre Einwilligung jederzeit widerrufen können, dass Sie das Ziel der Forschung verstanden haben, dass Sie nicht direkt von der Untersuchung profitieren, dass sie keinen Einfluss auf Ihre Bewertung hat, dass Ihre Stimme aufgezeichnet wird. Alle gesammelten Daten werden vertraulich behandelt und anonymisiert. ☐ Einverstanden ☐ Nicht einverstanden
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Appendix 4: Pre-Post questions *Online Communication* (English version)



Online Communication / English / Pre-test

This teaching unit will be recorded as part of an ongoing comparative study of learning processes and learning outcomes when learning in English (L2) as well as in the mother tongue (L1). The aim of this research, which I am doing for my dissertation at the University of Vienna, is to analyse content-related and subject-specific differences in language use on the part of the learners.

There is a short quiz before and after the lecture which will assist me in checking how much you have learnt and understood the lecture. Please answer the questions as accurately and honestly as possible; the answers are anonymous and this has nothing to do with the course evaluation. The information will be made anonymous and secure and will be destroyed after the project.

Thank you for your assistance!

1. Your anonymous code: please use the first 2 letters of your home town and the first 2 letters of one of your parents. (PLEASE REMEMBER IT!)

<https://www.office.com/online/communication/English/Pre-test>

20.08.20, 17:48 Online Communication / English / Pre-test

2. Your age

3. Your Sex

☐ Male

☐ Female

4. What is your mother tongue(s) (native language)?

5. How many years have you been learning English?

<https://www.office.com/online/communication/English/Pre-test>

20.08.20, 17:48 Online Communication / English / Pre-test

6. What language do you speak at home?

7. What other languages do you speak?

8. Did you attend a school outside of Austria? If yes, where?

9. Did you go to a bilingual school or attend a class of English "als Arbeitssprache"?

☐ Yes

☐ No

10. What grade did you get in your A-level (Matura) certificate for English?

11. Do you have any other education/training other than A-level / Matura?

12. What is the internet? (2 answers possible)

☐ A technical infrastructure

☐ A medium for exchanging information

☐ A platform for different media

<https://www.office.com/online/communication/English/Pre-test>

17.48 Online Communication / English / Pre-test

13. Devices which store, transmit and receive information are referred to as:

☐ first-order media

☐ second-order media

☐ third-order media

14. In which year did the first website (www) go online?

Correct answers: 1991

15. Who developed the WWW and where?

Correct answers: Timothy John Berners-Lee, CERN, CH

<https://www.office.com/online/communication/English/Pre-test>

17.48 Online Communication / English / Pre-test

16. In Austria, how many people use the internet (in 2019)?

☐ 68%

☐ 78%

☐ 88%

17. Do you think that the growing flow of information increases or decreases social inequality?

☐ increases

☐ decreases

Appendix 5: Pre-Post questions *Visual Communication* (English version)

 Visual Communication / English / Pre-test This teaching unit will be recorded as part of an ongoing comparative study of learning processes and learning outcomes when learning in English (L2) as well as in the mother tongue (L1). The aim of this research, which I am doing for my dissertation at the University of Vienna, is to analyze content-related and subject-specific differences in language use on the part of the lecturer. There is a short quiz before and after the lecture which will assist me in checking how much you have learnt and understood the lecture. Please answer the questions as accurately and honestly as possible; the answers are anonymous and this has nothing to do with the course evaluation. The information will be made anonymous and secure and will be destroyed after the project. Thank-you for your assistance! 1. Your anonymous code: please use the first 2 letters of your home town and the first 2 letters of one of your parents. (PLEASE REMEMBER IT!)	6. What language do you speak at home? 7. What other languages do you speak? 8. Did you attend a school outside of Austria? If yes, where? 9. Did you go to a bilingual school or attend a class of English "als Arbeitsprache"? ☐ Yes ☐ No
18 Visual Communication / English / Pre-test 2. Your age 3. Your Sex ☐ Male ☐ Female 4. What is your mother tongue(s) (native language)? 5. How many years have you been learning English?	17.58 Visual Communication / English / Pre-test 10. What grade did you get in your A-level (Matura) certificate for English? 11. Do you have any other education/training other than A-level / Matura? 12. What do adult internet users spend most of their time doing online? ☐ Listening to music ☐ Listening to podcasts ☐ Watching online videos 13. Can you name the three modes of communication? Correct answers: verbal, nonverbal, visual
14. Images are viewed earlier, longer and more precisely than text: ☐ True ☐ False 15. Which statement is not true about Visual Agenda Setting ☐ Increases the attention of recipients ☐ Decreases the memory of content consumer ☐ Influences the perceived meaning 16. When images promote attention and increase emotional involvement it is called: ☐ Visual Priming ☐ Visual Agenda Setting ☐ Visual Framing	
Visual Communication / English / Pre-test 17. What is Fake News NOT about: ☐ influencing political views ☐ diverting attention from real news ☐ driving up click-rates 18. Do you think that images increase trust generally in communication processes? ☐ Yes ☐ No ☐ Maybe 19. Is Fake news a new phenomenon? ☐ Yes ☐ No ☐ Maybe	

Appendix 6: Pre-Post questions *Priming and Framing* (English version)

Priming & Framing / English / Pre-test

This teaching unit will be recorded as part of an ongoing comparative study of learning processes and learning outcomes when learning in English (L2) as well as in the mother tongue (L1). The aim of this research, which I am doing for my dissertation at the University of Vienna, is to analyse content-related and subject-specific differences in language use on the part of the lecturer.

There is a short quiz before and after the lecture which will assist me in checking how much you have learnt and understood the lecture. Please answer the questions as accurately and honestly as possible; the answers are anonymous and this has nothing to do with the course evaluation. The information will be made anonymous and secure and will be destroyed after the project.

Thank-you for your assistance!

1. Your anonymous code: please use the first 2 letters of your home town and the first 2 letters of one of your parents. (PLEASE REMEMBER IT!)

8. Did you attend a school outside of Austria? If yes, where?

9. Did you go to a bilingual school or attend a class of English "als Arbeitssprache"?

10. What grade did you get in your A-level (Matura) certificate for English?

Priming & Framing / English / Pre-test

2. Your age:

3. Your sex:

4. What is your mother tongue(s) (native language)?

5. How many years have you been learning English?

6. What language do you speak at home?

7. What other languages do you speak?

Priming & Framing / English / Pre-test

11. Do you have any other education/training other than A-level / Matura?

12. What is Priming?

☐ A word, stereotype that can activate schemas of a cognitive network

☐ An implicit memory effect in which exposure to a stimulus influences a response to a later stimulus

13. Can you name 2 types of Priming?

Correct answers: Semantic, Conceptual, Phonologic, Repetitive, Backward, Associative, Masked, Perceptive, Non associative

14. When people have a good memory for items at the end of a list, this is known as the

☐ Primacy effect

☐ Regency effect

Priming & Framing / English / Pre-test

15. Priming is just about the effects in the media and is not concerned with brand owner's website creations?

☐ True

☐ False

16. Framing affects the audience in

☐ HOW to think about a topic/story

☐ WHY they think about a topic/story

Priming & Framing / English / Pre-test

17. Framing is about the

☐ Accessibility effect

☐ Applicability effect

18. The ELM model stands for

☐ Execution Likelihood model

☐ Elaboration Likelihood model

☐ Elaboration Liability model

19. What is the most important function of language?

Correct answers: Connecting people, exchange of information and experiences

Priming & Framing / English / Pre-test

20. Rational thinking occupies how much of the brain?

☐ 5%

☐ 10%

Appendix 7: Pre-Post questions *Media Relations* (English version)

 **PR / Media Relations**
Pre-test

This teaching unit will be recorded as part of an ongoing comparative study of learning processes and learning outcomes when learning in English (L2) as well as in the mother tongue (L1). The aim of this research, which I am doing for my dissertation at the University of Vienna, is to analyse content-related and subject-specific differences in language use on the part of the lecturers.

There is a short quiz before and after the lecture which will assist me in checking how much you have learnt and understood the lecture. Please answer the questions as accurately and honestly as possible; the answers are anonymous and this has nothing to do with the course evaluation. The information will be made anonymous and secure and will be destroyed after the project.

Thank-you for your assistance!

PR / Media Relations Pre-test

1. Your anonymous code: please use the first 2 letters of your home town and the first 2 letters of one of your parents. (PLEASE REMEMBER IT!)

2. Your age

3. Your Sex

4. What is your mother tongue(s) (native language)?

PR / Media Relations Pre-test

5. How many years have you been learning English?

6. What language do you speak at home?

7. What other languages do you speak?

8. Did you attend a school outside of Austria? If yes, where?

9. Did you go to a bilingual school or attend a class of English "als Arbeitssprache"?

10. What grade did you get in your A-level (Mature) certificate for English?

11. Do you have any other education/training other than A-level / Mature?

12. Do you think that in light of new media, the task of journalism is still the same?

13. Roughly how many people still read a newspaper?

14. Do you know any aspects of the code of ethics for journalists? (just add key words)

15. When journalists decide on media content it is called:

16. What effect does PR have on the formation of opinions and attitudes?

17. The determination hypothesis is about the diversity of topics in the media. Roughly how much content stems from PR?

18. The interdiffusion model describes:

19. Which is NOT part of Media Relations?

20. Can you name some PR tasks in media relations? (just key words)

21. When issuing a press release, do you think it is wise to send additional information in the form of attachments?

Appendix 8: Interview guide

Interview Guide

Background to the research

Address the course the lecturer teachers start with general discussion of their teaching experience in English – if the first time, if regular teaching

e.g. translation of slides, new

different content due to EME? E.g more international examples

Different terms?

Adapt teaching style? Conscious or on reflection ?

Do you find it more of a challenge teaching in English?

What happens if you can't find a word? Do you think it is ok to use German at all? Does that ever happen? Do you think you should correct any English if students say something wrong? I.e. any language guidance/teaching role?

Do you think you go into the same level of depth?

Do you think it teaching is better for certain subjects/modules/levels?

Do you think the students have the same knowledge in both cohorts? Different levels of student English proficiency – cause any problems?

More effort work, teaching in English? Need better rewards for this? Teaching in English as a choice or because no other courses were available / on offer?

Most challenging aspects about teaching in English?

Different methods in the English cohort? More/less formal?

Different examples?

Any negative aspects? If you had the choice would you teach in German or English?

Is it important for your career advancement to teach in English (if internal lecturer and relevant)?

Do you generally think that there should be more or fewer courses offered in English in Austria?

Anything you would like to add?

Training ? importance?

Appendix 9: Codebook qualitative interviews

Name (theme)	Comment (codes and/or merges)	Code Groups (Dimensions)	Example
Theme Native English	Merged - not worried not a NS	Roles of English Academic Disciplines Agents	I don't mind if my English is not perfect
Theme - all disciplines in English	EME - all disciplines	Roles of English Suitability of EME	Everything in English, now that I'm thinking about it
Theme - CC in English		Roles of English Academic Disciplines Suitability of EME	Come on, the whole CC world is international and in English
Theme - code switching	Attitudes towards code switching	Language Management	I hope I am not doing that because I would think that's not okay.
Theme - differences in content	Same/different content	Academic Disciplines Practices & Processes	If I teach the same stuff like in our BA cohort and I, my aim is to teach them the same things you know because they are supposed to learn the same
Theme - difficult teaching	18.12.2021 10:24:16, merged with Theme - prefers teaching EME altho more difficult 18.12.2021 10:37:09, merged with Theme - EME language issues	Agents Practices & Processes	I also prefer to teach in English, but of course I'm aware of the fact that it's, of course, easier to teach in your first language, of course, for language wise that's, particularly if you have if there's a gap between semesters of courses and you haven't thought in English, for some time than that can be challenging of course yeah to find the right words and...
Theme - EME better students	17.12.2021 11:26:36, merged with Theme - better students 27.12.2021 11:26:36, merged with Theme - better students	Agents Theme / better students Perceptions of students	but still I I can't see a big difference and if there's a difference than I would I would even dare say that the English cohort is even a bit better in terms of...
Theme - EME less interaction	17.12.2021 11:12:57, merged with Theme - less interaction	Academic Disciplines	but it was still not a lot of interaction. No.
Theme - EME more interaction		Academic Disciplines Agents Practices & Processes Theme / interaction	In in English and again, and maybe that's because of the flow that English has, for me, and that it. I think it allows for students and, for me, really, really nicely to have to have this discussion and to maybe set up discussions and ask questions in between,
Theme - EME more prep work	18.12.2021 10:10:02, merged with Theme - prep translating 18.12.2021 10:03:15, merged with Theme - EME start from scratch 18.12.2021 10:42:36, merged with Theme - more work	Agents	Yes, it is absolutely more work in this specific case I translated, so I had to read them in German and then translated to English
Theme - fear of domain loss		Roles of English Agents Attitudes towards English	I don't know I mean this is a general question, you know how how dominant should English be, in spite of my love of English I'm not sure.
Theme - important for career	EME- important for international career	Internationalisation & Globalisation Agents	To make a career, yes.
Theme - Roles as ELT	Doesn't correct language, Corrects language	Agents Practices & Processes	No, that's not my business, you know, this is not my business to do so. First of all, this is not what I'm there for. Second it's not my mother tongue and maybe I tell them something wrong.
Theme - Perceptions on language proficiency	01.10.2021 15:31:07, merged with Theme - too late to improve English	Roles of English Internationalisation & Globalisation Agents Perceptions of students	Well it's it's more of a challenge for me, but also like to teach in English because I want to I want to yeah I want to keep up with my with my English or even improve my English further.
Theme - perceptions on practices in lecture theatre	18.12.2021 10:05:27, merged with Theme - EME faster delivery 01.10.2021 16:15:11, merged with Theme - faster in English 18.12.2021 10:05:27, merged with Theme - formality not just about du/sie 18.12.2021 10:05:27, merged with Theme - humour 18.12.2021 10:05:27, merged with Theme - use of questions 18.12.2021 10:06:33, merged with Theme - informality negative 18.12.2021 10:06:33, merged with Theme - informality positive 18.12.2021 10:11:24, merged with Theme / EME more casual 18.12.2021 10:12:16, merged with Theme - strictly no code switching 18.12.2021 10:41:06, merged with Theme - different in German	Practices & Processes In the lecture theatre	when I speak in German I'm faster in my speech pattern compared to in English, so this is probably one thing that in German, I might be just a little bit faster and to rush through things just.
Theme - prefers EME because does it more		Agents	I feel slightly more confident teaching in English, I don't know why, possibly because I've done that longer.
Theme - same learning outcome		Academic Disciplines	No, no, I think it's the same level of competence
Theme - same/different workload	More prep	Agents Practices & Processes	If I prepare my slides the first slides in English, I don't think it's more work Okay
Theme - suitability in international subjects	18.12.2021 10:38:30, merged with Theme - EME international business	Academic Disciplines Theme - EME international disciplines Suitability of EME	I would say, of course, all the all the subjects actually which to have an international approach would be would be probably would be suitable for for entirely in English like finance, international finance ,investment and these things.
Theme - suitability of cycles	18.12.2021 10:35:35, merged with Theme - EME better 2nd cycle	Roles of English Academic Disciplines Agents Suitability of EME	I think it doesn't make much difference, so I think it's not so much about if it's a bachelor and master's degree
Theme - support for teachers		Agents Language Management Practices & Processes	Yes, last semester, I had some workshops about the, especially for teaching in English. If it's not your mother tongue and they were at the beginning, I thought Okay, what we are perhaps attempt for but probably not so much, but in in the end, I had the feeling that it was really hard for, and there were some small like really small like tips and hints and things like that, but they gave me more they made me more confident
Theme - same/different content	18.12.2021 17:19:56, merged with Theme - PP - same content	Academic Disciplines Practices & Processes In the lecture theatre	Well from the didactics, so what I'm doing the approach it's pretty much the same so also when I know compare these two courses I just do just the same with the students.
Theme - formality of discourse		Roles of English Academic Disciplines Language Management	More informal English more formal in German and that's what I meant with I'm not the same person in when when I talk and that's when I differ I do think.
Theme - Ease of teaching due to international/conferences etc	Merge - because material in English	Academic Disciplines Language Management Practices & Process Int.Gloc	It's so much easier in English because everything is published in English so that's actually easier in an English cohort than a German cohort because

Appendix 10: Focus group discussion guide

	
<u>Kirstie Riedl – Dissertation</u> Discussion Guide – Focus Groups	
Date:	10th / 14th June
Participants:	10th June – 6th semester students 14th June – 2nd / 4th semester students
Introduction: Introduction of presenter (2 sentences each) and brief explanation of discussions: English medium instruction (EMI) is a growing pedagogical practice. At the macro level, governments often see EMI as a panacea for economic growth in order to tap into globalisation; educating young people with an international mindset and English language proficiency to be able to compete in the world market. At the micro, institutional level, the rationales for introducing EMI programmes are primarily in order to enable mobility and accessibility into the research community for both students and staff and facilitating collaboration with other universities. There has been considerable research as to how EMI impacts students with conflicting outcomes. This investigation focusses mainly on learning outcomes in EMI compared to those in the German taught cohorts. It is a multi-method study - reviewing lectures in English and German, interviewing lecturers but also gaining students insights – hence these focus groups. <i>We would like to briefly reiterate that discussions will be recorded and hope this continues to be okay with everyone. All comments will be made anonymous!</i>	
Contents	<i>Always ask for examples and/or reasons why!</i>
Motivations for studying in English	- Why did you decide to study Corporate Comms in English and not in German? - What are the advantages or disadvantages of studying CC compared to Kommunikationswirtschaft? - What do you think you will gain personally from this study programme?
Perceptions of competencies	- Do you think you learnt the same content as in the German cohort (Note for moderator: the content is a mirror image) - Do you think you are / will be better general corporate comm. Experts than in the German cohort? - What do you think are the different skills? Better / worse? - What you have / would you participate(d) more in class in your mother tongue? - Are there any times when you have (had) problems with the content in English?

	
<u>Kirstie Riedl – Dissertation</u>	
Perceptions of lecturer competencies	- How do you perceive lecture delivery in English? Do you think it is the same as in the German cohort (probe – per DU und per SIE – distance / formality – impact on learning) - Do you think the lecturers deliver the same detail in English as in the German cohorts? Same examples? Better/worse? - Do you think lecturers English competency has an impact on content learning? - Are there different teaching practices in English taught programmes? - Do you perceive native or non-native lecturers as more suitable to teach in EMI programmes?
Learning Online	Do you think online learning has helped or hindered learning in EMI classes? With the ongoing pandemic, would it have been better to opt to study in German?
Workload?	- Do you think you work harder / have more work in the EMI cohort? - What do you do differently to the German counterparts?
Reflection	- Would you still study CC, knowing what you know now? - Do you think you have better career chances than those in the German cohort? - Anything you would like to add?

Appendix 11: Codebook focus group discussion

Name (theme)	Code Groups (Dimensions)	Example
Difficulties v Ease EMI	Roles of English Academic Disciplines	I don't think that language made any difference here I think it would have been the same if it would have been in German.
Impact on CC skills	Academic Disciplines Practices & Processes	I think that is an advantage, the advantage that we really, really have in our English cohort with the soft skills, we have learned and we have acquired and basically how to tackle certain issues.
Subjects	Academic Disciplines Int. & Gloc.	
Perceptions on international Career	Roles of English Int. & Gloc.	what I think I can say, is that we are definitely better equipped to work in an international environment.
Perceptions on career in DACH region	Roles of English Int. & Gloc.	so what I do think is that we are not necessarily better equipped than the German cohort, but probably just differently equipped, because I guess when it comes to working in PR, writing press releases, or as a copy writer, working all day in a German speaking environment, the German taught cohort actually prepares you better for that, while our cohort gives us a more international focus, maybe also more cultural awareness,
NS v NNS lecturers	Roles of English Practices & Processes	I don't think that they have to be native speakers, but it is important that they can explain different models or topics well in English
Atmosphere in class	Language Management Practices & Processes	I've noticed is that the native English speaking population in general kind of has this kind of entertainer vibe to them more than, for instance, such might lean into conservative culture that we have in Austria.

Appendix 12: Final codebook (contrastive analysis of lectures)

Confirmation	Indicates the lecturer agrees with student answer		yeah definitely I mean I mean this year it grew a lot, and so that maybe in the in the numbers for every 2021 it's going to be higher, but yeah last year was only at 8%. (REPORT - EX)	Ja, das finde ich ja ein sehr guter Punkt.
Openers	Formal Beginning of a class		so today we're going to talk about visual communication and so I'm going to start the course with talking about why we talk about visual communication when the course is called online communication. And so that's kind of the start and a theoretical input and I try to bring some examples	Genau und dann werde ich jetzt einfach mal die erste Präsentation freigeben, damit ihr das sehen könnt und wir beginnen eben mit der Einführung, warum wir über visuelle Kommunikation sprechen.
Sequencers	Mark particular positions within a series		And then we're going to talk about that afterwards, and then the last part is going to be about pictures and how they make us trust in things.	Und das letzte ist dann das Bilder eben dieses große Potenzial haben emotionalisierende Inhalte zu transportieren und Emotionen auszulösen.
Topicalisers	Indicate introduction of new topics / topic shifts		And so let's jump right in	Zum Abschluss ist der Lehrveranstaltung habe ich noch ein Video
Prospective Markers	Refer forwards to future topics		And then, in the next part I'm going to have a short introduction into what is visual communication. And then why that became so important in the last few years	da werden wir dann heute erm später am Ende Vorlesung darauf zu sprechen kommen
Retrospective Markers	Refer backwards to previous topics		, we talked about that last semester	
Closing Markers	Indicate the formal closing of the lecture			Das war's jetzt mit der Vorlesung von meiner Seite
Recapitulation Markers	Summarise the main ideas in the lecture		So that was the brief introduction into why we're talking about visual communication in this online communication course.	das war auch in dem Prozess, den wir am Anfang besprochen haben
DA - Instructions			I created a forum on moodle that you can put your thoughts into, you don't have to write full sentences, you can just write bullet points whatever you think is best. I would say that I'll give you until seven so, then you can get up a bit you can walk around a bit and think about that, and please at seven I want. A short text or short bullet points from everyone into moodle forum and then we're going to start with the next part on how come visual communication has become so big in the past few years.	Dieser Text ist auch Prüfungsliteratur, dann habt ihr schon was für die Prüfung vorher gelesen und dann ganz zum Abschluss gibt es noch einen Teil über den Effekt den Bilder auf uns haben.
DA-Para	Paraphrasing _{DAF} ^{P1}		The picture that I put in the background here is the oldest picture that we have that humans made. It's called when you translated to English Red Fist, it was found in Spain does anyone have an idea of how old this painting might be? When when was that that red hand painted? (DAQ REF / EXPLORE)	und wenn wir von Fake News und Desinformation sprechen ist ein Punkt in der Definition und zwar ist es wichtig an dieser Definition die manipulative Absicht (DEFINE) Also in den Medien und im Internet besonders in den Social Media die manipulative Absicht verbreitete, Falschmeldung
DA-Rep	Repetition _{DAF} ^{P1}		...but I was pretty impressed with how old that was and how long ago humans actually already started making visuals, and so this is the oldest one that we know the oldest one that we found it was found in Spain, in the cave of La Castillo. And then so visual communication is very old, and it is one of three types of communication (CAT)	Also, dann habt ihr, werdet ihr sagen da im oberen Teil des hätte ich auch geschätzt, ich habe mich auch ziemlich vertan, wir sind in Österreich da eher beim unteren Drittel mit fünfeinhalb Stunden, wobei ich da jetzt noch mal anmerken muss an das ist Jänner 2020. Ich glaub, das wird dieses Jahr anders ausschauen würden nicht glaubt, dass diese Zahlen dieses Jahr gestiegen sind erm alleine, weil wir einfach durch die Situation mehr zu Hause verbringen mehr Zeit zu Hause arbeiten, das wäre nur meine Vermutung habe ich bin gespannt auf die Zahlen, wenn sie veröffentlicht werden. Genau, also der Durchschnittsösterreicher ist da fünfeinhalb Stunden online + EVAL + REPORT
DAQ-CI	Yes/No answer expected _{DAF} ^{P1}		Nobody read section 2?	Ist die Präsentation jetzt sichtbar?
DAQ-Dis	Display - check if students know material _{DAF} ^{P1}		Who do we which people do we find on Twitter?	was machen die neuen Medien mit den Menschen versteckt da vielleicht dahinter?
DAQ-Ind	Action required (e.g. thumbs up) _{DAF} ^{P1}		Sorry, can you only put the last question again.	Könnt ihr mal kurz ein Zeichen geben, ob ihr schon da seid, es immer ein bisschen schwierig ohne den Kameras. Einfach kurz Damen hoch oder Kamera ein. Ich sehe schon, es sind schon viele da.
DAQ-Op	Various info sought _{DAF} ^{P1}		so if you want to share what kind of pictures are it?	Was ist Was ist in ihren Gruppen so aufgefallen, gab es irgendwas das überrascht hat?
DAQ-Ref	Refential - unknown info/experience _{DAF} ^{P1}		I like to ask Is there anyone who's not using Google as a search tool? Is there anyone who's using something else?	Wer von euch ist es 100% sicher, dass dieses Bild gefälscht ist?
DAQ-Rhe	No response expected _{DAF} ^{P1}		so the next question is, what are we actually doing online? So I put the numbers here for Austria..	Das sind 90% im Internet täglich und dabei ist die Frage, wie lange machen wir das eigentlich am Tag, also wir verbringen relativ viel Zeit online an
DAQ-St	Student asks question _{DAF} ^{P1}		Student : Could we also say signs?	Student: Ich hätte soeine Frage.. ist Text auch visuell oder warum ist

CATEGORIZE	Classify; Compare, Contrast, Exemplify, Match, Structure, Categorize, Subsume ^{(P1)SEP}	Using numbers, statistics, lists	And then so visual communication is very old, and it is one of three types of communication.	Grundsätzlich unterscheidet man oft Kommunikation in diese drei Arten, also verbale nonverbale und visuelle Kommunikation. Erm es ist aber jetzt nicht so, dass man das immer ganz streng voneinander getrennt sehen soll muss kann. Es wird oft unterteilt, weil es dann einfacher ist darüber zu sprechen, bzw. es ist einfacher dann zu sagen;
DEFINE	Define, Identify, Characterize ^{(P1)SEP}		Visual communication is also significantly faster than verbal communication	und wenn wir von Fake News und Desinformation sprechen ist ein Punkt in der Definition und zwar ist es wichtig an dieser Definition die manipulative Absicht.
DESCRIBE	Describe, label, identify, name, specify ^{(P1)SEP}		And so we see that a lot of what we do is visual a lot of what we do online is connected to some form of visual communication, be that videos, be that sending pictures, be posting pictures.	Das gleiche funktioniert auch gestützt. Also, wenn man den Probanden Probandinnen einen Hinweis gibt, es auch da kann man Bilder einfach besser erinnern und merken als Text. Bilder erzeugen auch eine höhere Akzeptanzm (DEFINE) und das hängt auch mit dem Punkt 5 (SEQ) zusammen, da geht es um diese Augenzeugenschaft. Dadurch, dass Bilder diesen Eindruck einer sinnlichen Unmittelbarkeit geben, dass man sich quasi reinversetzen kann, dass man das Gefühl hat man sieht das mit eigenen Augen, gibt es hier auch ein höheres Vertrauen,
EVALUATE	Evaluate, argue, judge, take a stance, critique, comment, reflect, justify ^{(P1)SEP}		The next one, I found rather interesting, (+Sequencer)	Und das finde ich es ein sehr spannendes Beispiel eben dadurch wie man durch Bilder Dis-Information an antreiben kann
EXPLAIN	Explain, reason, express, cause/effect, deduce, draw conclusions ^{(P1)SEP}		when they go online always look, for information that's fits to what they already know what they have a knowledge about it Okay? (RHET) These two things	. Und dann gibt's noch erm mit dem Emotionen sehr viele Einflüsse, dass sie dir jetzt viele gestrichelte Pfeile weil es sehr schwierig ist, Emotionen zu erforschen, wenn man vermutet, dass Emotionen oder die Emotion, die das Bild in uns auslöst auch beeinflusst, wie wir das Bild interpretieren.
EXPLORE	Explore, hypothesize, predict, speculate, guess, estimate, stimulate ^{(P1)SEP}		That was the first most important things about visual communication so how come we use it (RECAP), that much how come, it is so important right now? (RHET)	Fehlt euch vielleicht eine Netzwerk auf dieser auf dieser Auflistung fehlt euch was wurdet ihr das Gefühl haben eigentlich drinnen sein? (DAQ REF)
REPORT	Report, inform, summarize, recount, narrate, present, relate ^{(P1)SEP}	This is often overlaps with other examples as the example shows	you saw these statistics are very similar statistics last week in Lecturer U classes. But we do spend a lot of time online, a lot of people are online and that's numbers for Austria so that's 88% of Austrians are using the Internet (REPORT EX) and so, this is why online communication is just more and more important (EXPLAIN) but I guess, I do not have to tell you that (EVAL)	Das sind dann so erm Augenstudien, d.h. man misst, wohin die Probanden die Probandinnen bei einem Bild als erstes schauen und da erkennt man z.B. hier auf dem Bild rechts zuerst, es ist das Gelbe mit auf die Gesichter geschaut. Zuerst das Bild angeschaut und da wird auch viel länger drauf geschaut als auf den Text danach, deswegen ist das Wahlplakat und

Zusammenfassung

Die vorliegende Untersuchung ist ein Vergleich von Lernergebnissen in auf Englisch unterrichteten Modulen des Studiengangs Kommunikationswirtschaft an der FHWien der WKW, Fachhochschule für Management und Kommunikation, in Wien. Es gibt bislang noch keine eindeutigen Forschungsergebnisse darüber, ob English Medium Instruction (EMI) das Lernen von Inhalten beeinflusst. Insbesondere in Österreich wurden nur wenige Untersuchungen zu den Lernergebnissen von Inhalten vermittelt auf Englisch, insbesondere im betriebswirtschaftlichen Bereich der Kommunikationswirtschaft, durchgeführt. Diese Studie wird zu einem tieferen Verständnis wie der inhaltlichen Lernergebnisse beim Lernen in einem EMI-Kurs beiträgt. Durch den Einsatz von qualitativen und quantitativen Methoden geht diese Studie der Frage nach, inwieweit sich die Lernergebnisse in der Betriebswirtschaftslehre von EMI-Studierenden von jenen unterscheiden, die in der L1 unterrichtet wurden. Sie untersucht die Beziehung zwischen Lernergebnissen und didaktischen Zugängen und analysiert darüber hinaus, inwieweit es didaktische Unterschiede zwischen L1 (Muttersprache) und L2 EMI-Unterricht (als Zweitsprache) gibt. In der Untersuchung wurde die ROAD-MAPPING – Methode (Dafouz & Smit 2016; 2020) als theoretischer Analyserahmen und Zugangspunkt angewandt.

Die qualitative Studie umfasst Interviews mit elf L2-EMI-Lehrenden, um deren Didaktik näher zu beleuchten sowie studentische Fokusgruppen, die die Daten bereichern und sowohl auf die studentische Perspektive der Lehrpraktiken als auch auf die Selbsteinschätzung des eigenen Lernens fokussieren. Die kontrastive Untersuchung verwendet ein einzigartiges Korpus von vier Vorlesungen, die sowohl auf Deutsch als auch auf Englisch von denselben Lehrenden gehalten wurden. Die Häufigkeit der Verwendung von Cognitive Discourse Functions (CDFs, Dalton-Puffer 2013), Fragen und verschiedenen anderen metadiskursiven Merkmalen wurden linguistisch analysiert. Ergänzt wird diese Analyse durch die Auswertung eines Prä- und Post-tests zu Beginn und Ende der aufgezeichneten Vorlesungen, um die tatsächlich gelernten Inhalte zu erfassen. Darüber hinaus wird ein Überblick über die Noten der Studierenden sowohl in der L1- als auch in der EMI-Kohorte des Studiengangs präsentiert und verglichen.

Diese phänomenologische Untersuchung ist aufgrund ihrer Methodenvielfalt und des vergleichbaren Korpus von Vorlesungen, die in Bezug auf den vermittelten Inhalt nahezu identisch sind, einzigartig. Darüber hinaus wird aufgrund des vergleichbaren Korpus beispiellose kontrastive Studie des (natürlich) gesprochenen Unterrichtsdiskurses vorgelegt, die einen Beitrag zur Untersuchung des Lehrenden Diskurses mit Hilfe des CDF-Konstrukts, einer Überprüfung der gestellten Fragen und der Metadiskursinstrumente leistet. Diese Überprüfung verschiedener Merkmale eröffnet neue Forschungswege zur Untersuchung der Konvergenz des CDF-Konstrukts mit anderen sprachlichen Mitteln. Durch die Verwendung des ROAD-MAPPING-Rahmens als Hilfsmittel für die Literaturrecherche, die Verwendung in den Kodierungen (im ersten Zyklus) und die Diskussion der Ergebnisse trägt diese Studie außerdem zum Verständnis seiner Vielseitigkeit in einer phänomenologischen Studie bei. Die Ergebnisse liefern neue Einblicke für Manager in Bildungsbereich, in Bezug auf die

Qualitätssicherung qualitativ hochwertiger inhaltlicher Lernergebnisse bei der Einführung von EMI-Kursen auf Modul- und Programmebene.