SUPPLEMENTO

Critical Issues in English – Medium Instruction at University
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INTRODUCTION

EMI – A Tool for the Internationalisation of Higher Education

Jennifer Valcke, Amanda C. Murphy, Francesca Costa

Over the past two decades, EMI has emerged as a tool for the internationalisation of higher education as a necessary response to the forces of globalisation. As a result of the development of higher education in the same period in Europe and the rest of the world, EMI has become a growing trend. Through a change in the medium of instruction, Higher Education Institutions (HEIs) in Europe and beyond have initiated paradigm shifts in the delivery and services of higher education in order to enhance the quality of teaching and learning. Indeed, the question of language leads university teachers, as well as university leadership, to consider the linguistic, pedagogical and cultural implications of this new context, as well as to rethink the professional development of university teaching staff.

The papers presented in this volume mostly stem from the themes that emerged during the symposium “English-Medium Instruction in Higher Education” organised by the Centre for Higher Education Internationalisation, in collaboration with the Department of Linguistic and Literary Sciences and the Centre of Linguistics at the Università del Sacro Cuore, Milan in May 2016. Invited scholars dealt with topics such as the different approaches to English-Medium Instruction (EMI) in the USA, Europe and Italy in particular, the importance of the continuing professional development of teachers for EMI, the emerging new profile of teacher trainers and the changing role of language experts within university contexts, the differing linguistic demands of academic disciplines, and the communicative ability of non-native English speaking teachers and the challenges their students face.

The first part of the symposium closed with a round table, during which four professors from different disciplines reflected on the question: What are we changing when we teach in English? It is with this contribution that the volume opens, because while describing problematic issues that are shared across countries and cultures, each speaker provided a different view of the challenges of EMI in their own context. These differences in describing

the points of view of the lecturer, the student and the institution, can partly be explained by their disciplinary culture, as well as a highly individual viewpoint.

The professor of Management pointed out three major changes: the change in target audience for the university triggered by offering courses in English, and the entrance into a different market and a different type of competition; the change in the contents of the course, both in terms of the subjects taught – for example, English is no longer treated as an evaluated discipline, which frees up credits for other subjects – and in terms of the way each subject is adapted to a different audience; the change in faculty – English Taught Programmes (ETPs) attract a younger and more international staff, who adopt a more inter-active teaching methodology. The professors of Maths and Physics were concerned about mastering all the linguistic aspects that are not subject-related, but which communicate ideas and concepts linked to real life; interestingly, they were uneasy about the model or variety of English they were (mis)representing. They also looked with foreboding to a future era when students might choose universities on the basis of the quality of the English offered, rather than on other more academic merits.

The professor of Engineering, who declared that his variety of the language was ‘international English’, pointed to the difficulties of juggling a class where the competencies of the students from all around the world differ vastly, and crucially, to the different styles of reasoning they are accustomed to. While Southern Europe tends to adopt a deductive, top-down approach from principles to rules to problems, students from countries like Vietnam or South America or even English-speaking countries are impatient when they hear the principles, and do not feel they are learning unless they start from practical problems. He also noted the different expectations as regards the length of the degree course – Italian engineering degrees are more open-ended than in other countries, whereas when foreign students enrol, they need to know the year in which they will graduate. This threatens to lead to a lowering of standards to enable students to pass exams and graduate faster.

Finally, the Professor of General and German linguistics expressed his view on the deeper questions of using a foreign language, and the need for a speaker to feel comfortable in a language in order to communicate effectively. On the one hand, if an audience sees an uncomfortable speaker, they will typically not be drawn into the speaker’s discourse, which obviously has consequences for effective learning and teaching. On the other, a speaker needs to be able to express not only content but also emotion to create an interpersonal relationship with the audience. Communication, also in the classroom, is first and foremost communication with another person – interpersonal communication – and this must not be lost if effective communication is to come about.

The fact that language plays such a predominant role in the international classroom prompts the question: How should HEIs respond to an academic culture that is increasingly globalised, and the needs of students with diverse linguistic and cultural backgrounds? Many HEIs have responded to globalisation by adopting internationalisation strategies, such as promoting ETPs in order to attract international students. Today, the sociolinguistic
reality of using English as a *lingua franca* calls for a re-appraisal of language competence, stepping away from native speaker norms and embracing different varieties of English as they are used around the world. In this respect, the anxiety expressed by some EMI teachers regarding the variety of English they speak might be appeased if they conceptualised a fully competent speaker of English as an *international* language as a speaker with a wide vocabulary, accurate grammar, easily understood accent, and who may or may not originally be a native speaker.

The volume opens with an edited transcription of the Round Table to provide a sense of how the local context is both unique and universal. The logic thereafter moves from the standpoint of an institution, weighing up the pros and cons of introducing EMI, to the standpoints of lecturers and of students. The volume closes by reflecting on the linguistic landscape that begins to change as EMI is adopted on a campus.

Starting from the institutional point of view, Costa discusses the trend in Italy of introducing ETPs to encourage the growth of Maths and Physics Faculties, and reports on the interview with a Dean of a Faculty planning to adopt ETPs, and a questionnaire delivered to its future possible clients. While the Dean expresses concern about the possible simplification of contents, it emerges that the students hope to gain proficiency in English through attending ETPs, but would ideally sit exams in Italian. The data points to a slightly more open attitude among students of Physics rather than Mathematics in this regard.

Broadening the discourse beyond Italy, Lasagabaster and Pagèze discuss the various positions European HEIs have adopted with regards to ETPs. These vary considerably, ranging from parallel language contexts in Northern Europe, where recent language policies have reinforced the importance of the national language(s) in the academic domain, to a maximalist approach to EMI, where English is seen as a vehicle for globalisation and as inevitable. Research on EMI in Italy and southern European contexts has reinforced the idea that English must co-exist with local language identities, local higher education practices, and local attitudes to multilingualism. While Content and Language Integrated Learning (CLIL), with its focus on learning and multilingualism, has been enforced by the Italian Ministry of Education, EMI remains associated with imperialism and disputed to

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2 Penny Ur defines English as a Foreign Language (EFL) as a language taught/learned in order to interact with the native speakers of the language, while she defines English as a Lingua Franca (ELF) as a language used for communication between speakers who share no other common language (P. Ur, *English as a Lingua Franca and Some Implications for English Teachers*, 2009, https://www.tesol-france.org/uploaded_files/files/Coll09-Ur_Plenary_Handouts.pdf) (last accessed: January 18, 2018).


some extent, as exemplified by the much-publicised court case involving Milan Polytechnic, where professors rebelled against the imposition of EMI\(^9\) and the present ruling imposes parallel language use. Nevertheless, EMI has proliferated throughout HEIs in Italy, with the vast majority of universities offering ETPs (75\% of universities in the North, 88\% in the Centre and 100\% of universities in the South), although the latest survey of ETPs\(^10\) shows a stabilising of the increase of courses, after the boom in the first decade of this millennium.

Continuing professional development is a rather contentious issue that cannot be avoided if EMI is to be successfully implemented, since it is now clear that there is a need to modify teaching and implement new pedagogies for international classrooms. According to Long’s contribution to this volume, training university teaching staff is not only a linguistic affair, since teaching staff who have a C1 or more on the CEFR scale still experience difficulties in their oral proficiency and find certain aspects of teaching particularly challenging. There is a strong need for the continuing professional development of teaching staff to be systematic and holistic, based on research, and a robust institutional language policy. However, the majority of university teachers are not keen to receive pedagogical training in teaching through a foreign language\(^11\). This is why close collaboration should be fostered between content and language teachers\(^12\), so that the latter can advise the former on how to benefit from using the language more effectively – in particular in suggesting specific training on certain features of pronunciation and communicative ability. With regards to pronunciation, very few studies\(^13\) pay attention to the impact of pronunciation during lectures. The efficacy of teachers does not lie in their capacity to provide native-like explanations, but rather in the negotiation and construction

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of knowledge by means of various initiatives and activities, and this is where training them to use the language efficiently acquires full importance.14

As Long demonstrates, a new profile for EMI teacher trainers is beginning to emerge, where such individuals would provide training in terms of higher education pedagogy, the mechanisms behind language acquisition, the development of communicative competence, knowledge of academic language, the cultural dimensions of the international classroom and the language of the university classroom.

The spoken production of EMI lecturers remains an area requiring research. The contribution by Broglini and Murphy presents an initial study of an aspect of EMI spoken discourse that deserves attention, namely, metadiscourse. In their paper they analyse a corpus of four EMI lessons to observe how the lecturers structure their discourse, with particular focus on connectives, framing markers, code glosses and self-mentions. The study details how the range of metadiscursive types used to organise the lectures is rather narrow, and that self-mentions occur frequently as a strategy to render the lecture less formal. It suggests that EMI lecturers could benefit from some training in the area of metadiscourse markers to enhance the clarity of their discourse, and enliven and vary their oral production.

In the contribution by Wilkinson & Gabriëls, the perspective of the student is explored, particularly regarding the perception of an effect of EMI on learning strategies. Through a series of semi-structured interviews, the authors uncover questions such as linguistic assymetries in an EMI setting between native and non-native speakers and differing levels of language competence between students, which need to be overcome if they are to focus on content learning. All the students interviewed report differences in their learning strategies in an EMI lesson, although students with higher language abilities naturally focus on content more easily.

Straddling both the student and the institutional perspective, Costa & Mariotti contribute to the debate on the reduction of content in EMI, demonstrating that there is evidence of some detriment in learning outcomes when comparing parallel groups studying either through English or Italian. Interestingly, this is not the case in all disciplines or at all levels of education; previous research15 16 has shown no detriment reported for Economics and International Relations as a subject area. Costa & Mariotti here contrast scientific disciplines with humanistic ones, and find detriment in the learning of Geometry and Physiopathology. While the debate continues, and further research is clearly necessary, it


is evident that HEIs must make informed choices as to the selection of appropriate courses for EMI, taking into consideration the importance of language in the discipline.

In the final paper of this volume, Helm & Dalziel offer a novel analysis of the linguistic landscape of an Italian university. The linguistic landscape (the language visible in public spaces) is also considered to be a place of identity construction and representation; a university adopting EMI may thus become an ‘arena of contestation’, where the linguistic landscape offers evidence of competing languages, and partially documents the language policy being adopted. Linguistic landscaping is a new methodological approach to observing the EMI context, a way to observe “the changing face of Italian universities in their quest for ever increasing internationalisation”.

The volume draws on original research which points to the critical challenges HEIs are facing as they embark upon EMI, and we trust that the contributions will highlight the challenges and opportunities that the predominant role English plays in the furthering of internationalisation within universities. We also hope that this volume will contribute to further research and lines of investigation for the enhancement of the quality of teaching and learning in higher education contexts.
The Round Table was set up to provide a variety of answers to the same question: What are we changing when we teach in English? Representatives from four different disciplinary areas took part, three from Milan – Management, Engineering and Linguistics – and two – Maths and Physics – from Brescia. The issues that were brought up overlap to some extent, but each disciplinary area pointed out something original, indicating areas for future research. The speakers’ contributions have been edited slightly, but some elements of spoken discourse have been preserved for the sake of authenticity.

Stefano Baraldi – professor of Management, Università Cattolica, Milan

The first thing I would like to say, in all honesty, is that I’m far from being an expert on EMI. I’m a Professor of Management, so my field of interest embraces subjects like Accounting and Budgeting, and other such matters. I’d like to recount what we learned from the experience over the last six years of developing an English taught programme within our School of Economics.

In 2008, not a single course was offered in English by the School of Economics to our 9000 students. In 2017, more than 40 courses entirely taught in English will be offered by our School within the Bachelor’s in Economics and Management, and the Master of Science in Management. In my capacity as coordinator of the latter, I will summarise our experience and focus on what we did and didn’t change when we decided to teach in English.

To start with the postgraduate programme, before 2009 there were 4 programmes in Milan, all taught in Italian: in Economics, which attracted 200 students, Economics and business legislation – 150 students, Business Markets and Strategies – 100 students, and Business Management – 300 students. In 2009 a small number of new courses taught in English were introduced in the Business Management programme and the students enrolled in this programme were allowed to attend some of their courses in English. The proportion of English taught programmes was very small: 9 out of 114 courses were offered within Postgraduate programmes, accounting for about 8% of our courses. One year later, two distinct curricula were introduced in the programme of Business Management and Economics to provide students with the opportunity to complete their track by attending only English taught courses, which meant an increase in our English taught courses. By
2013, 28 out of the 125 courses offered by the School of Economics within Postgraduate programmes were taught in English, accounting for 22% of our overall programmes.

Not surprisingly, a considerable number of students took the opportunity to enrol in an international curriculum, particularly in the programme of Business Management. For this reason, two years ago the School of Economics decided to launch a new Postgraduate programme, the Master of Science in Management, entirely taught in English, for a maximum of 100 students. At present, 32% of the courses offered by the School of Economics (42 out of 131) are taught in English. The Master of Science in Management accepted 100 students, both in 2014 and 2015, and received twice as many applications. Every now and then, my Dean asks me “Stefano, why don’t we double the capacity of the programme? Let’s think it over, it’s a good idea” and so on. So that’s our story.

What did we change on this journey that has brought our School to increase its English taught programmes from 0 up to 32% of its courses in the last six years?

From my standpoint, the best way to provide you with a comprehensive and hopefully insightful map of the many changes we experienced is to focus on two programmes, the programme of Business Management and the Master of Science in Management. They have a lot in common: they are general management programmes, they both provide students with the opportunity to specialise in different areas – such as Accounting and Finance, Marketing, Human Resources and so on –, they both address the same employers – business organisations –, they are taught by the same faculty, and, previously, even shared the same coordinator – me.

The former is taught in Italian and the latter is taught in English, so any difference between the two is necessarily due to what we changed when we started teaching in English.

In my opinion three major differences, in addition to language, can be found between these two twin programmes.

a. The first difference is a matter of target and markets. The two programmes basically target different markets: the Master of Science in Management has been intentionally designed to enrol and attract international students, namely those students – either Italian or not – who are looking for a multicultural learning environment. In this way we plan to increase the percentage of students coming from other countries up to 40% in the next three years: we are now near 25%. So, without being obsessed like many in the world of business with customer centricity, customer intimacy, and customer loyalty, we strongly believe that this makes a great deal of difference. If you are targeting different markets, you have to meet different needs, satisfy different customers, compete with different players, develop and deliver a unique value proposition, and ultimately offer different programmes.

b. Second, the structure of the two programmes is quite different. Within the Master of Science in Management, the final thesis accounts for only 12 credits instead of 24, and no credit is granted for the development of linguistic or IT skills. On the other hand, all the students are intensely involved in the so-called Business Labs, which are, in my view, one of the most distinctive features of the programme. A Business Lab basically
consists of a set of field work activities accounting for 28 credits, and focuses on a specific business setting. For the time being, we have five Business Labs – consulting companies, multinational companies, luxury and fashion, small and medium enterprises, health care organisations. The reasons for introducing a Business Lab into this programme are twofold: on the one hand, to give students the opportunity to gain a thorough understanding of a specific business setting, and learn how to be a good manager in different kinds of business organisations. On the other, to give students the opportunity to put theory into practice, and gain practical experience by working side by side, day by day with a group of leading companies.

c. Each Business Lab works as follows: first of all, three leading companies act as partners in each Lab. These range from Ernst & Young to Gucci, from Piaggio to the privately-owned hospital Humanitas. Second, not more than 20 students are admitted to each Lab so as to promote active learning, stimulate teamwork and close interaction with the partnering companies. All the students admitted to the Business Lab attend an introductory course in which about 50% of classes are held on site, jointly by managers and professors. 40% of the students’ final grade refers to a group assignment commissioned by one of the companies participating in the Lab on different subjects, such as The adoption of a new performance measurement tool at Piaggio, The development of a corporate academy for Comau, and The positioning of Pirelli’s employer brand. Lastly, in each Lab some students are selected for an internship in the first or second company, while the remaining students are included in the team responsible for delivering a project commissioned by the third company.

d. The third area of difference refers to the overall learning experience of the students. In this regard, I would say that the Master of Science in Management benefits from a higher faculty-student ratio, 50% higher than the faculty-student ratio that we find in the Business Management programme. The MSc students also benefit from an increasing number of visiting professors, and the emergence of what I call internal, international faculty, namely a group of usually young professors who are more than willing to focus their teaching activities on the courses taught in English. They also benefit from a course calendar organised in terms of quarters, not semesters, where each course accounts for 60 hours, eight hours a week for eight weeks, with one empty week for the mid-term test. Finally, they also benefit from the support of a dedicated team consisting of five Business Lab owners, two people who coordinate the internships and field projects, one person responsible for the learning environment, and administrative staff. This, in a nutshell, is what we learned from our experience with the Master of Science in Management: teaching in English is far more demanding than teaching in Italian.
Alfredo Marzocchi – Former Dean of the School of Mathematics, Physics, and Life Sciences, Professor of Mathematics and Physics, Università Cattolica, Brescia

It’s a difficult question for us to answer, because we don’t yet have a programme run only in English. We are thinking about a Master’s programme in English for Physics, but we are in some doubt about it, and I will try to explain why.

I have some personal experience, because two years ago I decided to teach 20 hours in English of a 60-hour course. The first thing I noticed is that I was much slower than normal, so I could say fewer things. This can be an advantage, because too much material is dangerous in Maths and Physics. But the other problem I encountered, which is my greatest worry, is that we don’t just explain formulas, we have to transmit the ideas behind them. The formulas and the reasoning is already written in the notes – the students could, in principle, only learn the notes. But we have to transmit ideas, and bridge the gap between us and the students, and for that we need words, we need a common language, not only a specific language. It’s not a matter of writing or saying “Square root of x, y or z”. The students understand things like that in a moment. The problem is when you have to make a comparison, or explain why a definition is said in a certain way and not in another way. That’s difficult and that’s when I noticed that the students were asking each other “What did he say?”. They were not concerned about the meaning of what I said, but by the words – they wanted to understand the words first. Then other words came into play, and so they lost the ideas in the end.

Sometimes I had to repeat the same thing in Italian during the next lesson to see whether they had understood the ideas. I teach Applied Mathematics, things like fluid dynamics, elasticity – and you can explain a viscous fluid only when you have examples – I have to make a bridge with everyday life and ordinary ideas.

So, the first thing that I noticed was a reduction in speed, which can be good, and a certain lack of expressions, words, and metaphors that I think we’ll need in the future if we want to teach Mathematics and Physics in English.

From another point of view there’s also the problem of pronunciation, of how we are teaching. Are we also teaching English, or only concepts? I don’t like to teach mistakes, even if they are in English, and if I have to speak with Italian accent, I don’t think that this is the right thing to do with a student, because otherwise we will all become like our Prime Minister Renzi! Joking aside, I am convinced that sooner or later we will have to teach almost everything in English, but then the problem will be how. Now, it’s good to have everything in English, because English is still English, but in ten years I am convinced there will be an English A, English B, English C, and people will choose the university by the level of English that is taught, because students also want to learn English; it must be not an obstacle.

From the positive point of view, I must say our students read books in English naturally. Sometimes I also put French or German books on the booklist. That can cause some problems, but not many, because when you read the formulas, the ideas can be deduced. But the big problem is understanding speech: I think that our teachers need to receive training in that. It cannot only be a matter of intention, of good will on the part of the individual. There must be a teaching programme for university teachers, otherwise I think sooner or later we’ll have serious problems.
Luca Lussardi – Assistant professor of Geometry, School of Mathematics, Physics, and Life Sciences, Università Cattolica, Brescia

My first experience was in Germany, where I taught Advanced Engineering in Mathematics for Master students in Automation and Robotic Engineering. I don’t know how to evaluate this experience, because English was a common language between the students and me, because they came from countries like India and Pakistan. My experience in Italy comes from the University of Verona which has a Master’s course in Mathematics, taught in English where my course was in Differential Geometry. At the time, I taught the same course in Italian at the University in Brescia, so I had the same level of students with exactly the same course and the same programme. At the end of the course I realised at the exams that the students in Verona were weaker than the students in Brescia, although they had the same background.

In principle, I think that it is a good idea to start teaching in English, but it depends strongly on the subject. I agree with what Alfredo said, that it is not sufficient to just explain formulas, but we have to explain concepts besides formulas, and in some parts of the course I have difficulty explaining this, and this may reflect on the level of understanding of the subject among the students. Even if the teachers know English very well, the students may not, so either way, something may get lost of the concept.

Francesco Ballio – Professor of Hydraulics at Milan Politecnico (Polimi) and Rector’s Delegate for International Relationships with Iran and Gulf countries

I started teaching my first course in English ten years ago, and since then I’ve always taught at least one or two courses in English, and the others in Italian. A few years later I designed and then ran a new Civil Engineering course completely held in English at the Politecnico. Now I spend more time on the perspective of internationalisation, promoting our courses, but I still teach.

My intention is to provide some hints of my own experience both as a teacher and head of a degree course. To start with, a few numbers to provide an overall perspective on Polimi, the Politecnico.

We started an internationalisation strategy in 2003, and since then international students have increased, as have courses taught totally in English. At present, most of the Bachelor courses are taught in Italian, but we have three courses in the architectural field which are taught in English. At the Master of Science level, we have 30 Masters of Science taught in English (which is the majority of the courses), while at PhD level 100% of our courses are in English. In terms of student numbers, 25% are international students at the Master of Science level, and 30% at the PhD level. All in all, we are talking about 4000 international students enrolled at Polimi, and 1000 more exchange students. On average, between the Bachelor, Master of Science and PhD levels, we have about 12% international students.

To come to my experience. Imagine that you are teaching a class in English to students you taught last year in Italian, so there are just Italian students, no international students. The first point is teacher-student and student-teacher communication, as mentioned previously.
Of course, there are some difficulties, things which I will never be able to learn in English, like a multiplication table – I can’t say my tables in English, I have to translate them into Italian, and I’m not able to say my phone number. It’s like nursery rhymes – you learn nursery rhymes in your native language, and that’s it. But there is also a problem with technical vocabulary. When I teach my courses in English, students then do not know how to say certain things in Italian, which is not exactly an ideal situation. But apart from the basic communication skills, these things can be overcome.

Another thing is that you are less intelligent in languages that you know less, because you are not as quick. I worked in Germany for a year while I was learning German, and I can still feel the embarrassment of being stupid, because I didn’t speak the language fluently. It’s difficult, sometimes impossible to live in English what you live in Italian, but on the other hand, that’s exactly what we want to push our students to do, to learn how to overcome these difficulties. So, although it is a difficulty, the difficulty is also part of our intention.

Another thing that changes is the class dynamics. If you have very few students, it doesn’t matter, because in that case you speak with them individually or in small groups, but for the average class, for what we call a small class (which is about 30) the dynamics change. The students are shyer, for one thing. It’s not nice to make mistakes in English, but on the other hand my English is international English. There are two different languages, and I speak international English, I don’t speak English.

Another difference regards resources. For example, I like to call non-academics to give seminars in my courses, and teaching in English reduces this possibility, because many people from companies wouldn’t speak English, so the possibility of selecting a seminar is now also filtered by language skills. This is not a big issue, but it is an issue.

This is an imaginary scenario of teaching in English to a class of Italians that you have already taught in Italian. But what happens when you really do have 50% international students, or even 90%, as might happen in the future? Then you face new problems, and real changes. First of all, heterogeneity increases, and there are two kinds of heterogeneity. The first is entrance competencies. I know what to expect from Italian students because 75% of them come from the first level degree at Polimi, and most of the others are Italian students coming from an Italian system, which is more or less equivalent, while foreign students really arrive with different competencies. They have already studied many things, but in a different way, while they have not studied things that you would expect them to have studied. If you think you should select only students who have equivalent entrance competencies, you can forget foreign students, simply because you don’t know or you do not understand what they have done. If you look at the names of the exams they have taken, what does that tell you? I have had to select students in the past, and it is very difficult to understand what their level is.

The second point is the heterogeneity of the approach. I typically adopt the central-European deductive approach, top-bottom, from general principles to rules, and then to problems. Most of these students will either come from English-speaking countries or Eastern countries which have adopted a bottom-up approach: they start from problems, and then move onto formulas, solving the problems, and sometimes they elaborate some general concept. That’s not the same.
What often happens is that I teach my lesson, and after ten minutes they say “No result yet? Come on, are you teaching me something or are you just talking?” That’s their type of approach, and it’s not easy to deal with because I’m not happy with it: they just like to find the formula and produce a result which looks adequate for that kind of problem, but that is not the point for me. This is a big difference, but it’s relevant to Engineering, not all subjects, and I cannot tell what it would be like in Philosophy, for example.

If I have a Serbian or a Russian or a German student, there’s no problem, they will have the same mentality as we have. But with a student from New Zealand or China or Vietnam or South America, there really is a different approach. This is the big problem in my opinion and it has consequences. Of course you have to try to use this diversity as a value, not only as a problem. For example, if you increase the amount of group work you do with these students, then the diversity can be a value when you make students interact with each other. But you must be able to do group work, and not have a class of 100 students. Other minor problems to be mentioned are the fact that when you speak to an international group, your case studies cannot only be Italian. If you speak about legislation, Italian legislation means nothing to them. So you need to adapt a bit, and this requires study.

I’d like to make two more points: expectations from students differ for many reasons, but one big difference is the fact that for Italians the nominal duration of the degree course is two years, but it could be three, depending on how the exams go. For the international students, it’s not the same, they expect to pass the exam the first time, and the idea that you may repeat it doesn’t go down well. This has to be handled somehow. In the end – here I perfectly agree with my colleague – you lose a bit of your evaluation criteria, otherwise it won’t work. Whether your teaching effectiveness is lowered depends on how much you have worked on the list of problems that I’ve mentioned, but the evaluation criteria will be a bit lower, otherwise you have a real problem.

Finally, something about the structure of the degree course. Speaking as the head of a degree course, I can say that you need to design courses that have some flexibility. You also have to work hard with your colleagues and convince them that it’s a good idea to teach in English despite all these problems. Most of them will not see the big advantages which Rectors and Deans sometimes try to depict, sometimes not. You can have better PhD students, but the course needs to be very attractive, which also means providing scholarships; this way you will be able to really select good students.

Giovanni Gobber, Dean of the School of Foreign Languages and Literatures, and Professor of General and German Linguistics

How can the content of my lesson change according to a change of the language I use? I feel there is a different approach to the subject.

When using English, you first have to make clear what the connections are between the parts of your discourse. I find it quite interesting to investigate the fact that when you use English you are, in a certain way, forced to make explicit what can remain implicit in another language. The relations between chunks of meaning, what you call utterances or parts of
texts, should be made explicit, and this is important for the text itself, for the audience, and for you, the speaker, because the speaker is forced to have a clear idea of how the text is built up.

So you have to build up a coherent whole first, and to me this is a considerable advantage that using English can have. On the other hand, I feel a bit uncomfortable when using English because I am forced to concentrate on the content, on the rational part, more than on the emotional part. Emotions are less expressed in a second language, and so the attitude towards the audience, and involving the audience can become more difficult. You must be comfortable with the language you are using in order to establish a deeper relationship with the audience.

One should develop this ability, which is not only a matter of language, but a matter of how comfortable you feel with the language. English cannot be used as a kind of foreign language, like a huge list of expressions that you are able to put together. This is of course important when you first approach another language, but no matter how developed your lexical or your grammatical competence is, the most important thing, in my view, is that you feel comfortable with the language in general. Oral competence should be developed, because it helps you develop your attitude. This has to do with individual experience.

I notice that the audience becomes aware of this; those who participate in the lesson become aware of your involvement with the language, and this creates a deeper involvement in the matter. In order to get people to understand what I’m saying, the element of emotion is quite important. It’s also really important that the audience can interpret what is implicitly communicated, and a part of this implicit communication has to do with your attitude towards the subject, the audience and towards the language in a very general sense. This is a part of communication.

When we use our first language, we may not be aware of this, because the implicit components are part of the common ground of the audience and of the speaker. When using a language that is not the first language of the participants, such as English as a common language, it becomes a kind of bridge between different common grounds. There are implicit components in this common ground. So apart from the content of the text, there are dimensions of communication that are implicit, and are part of a common ground, such as that which is shared by the people participating in the communication. This part is of great importance for mutual understanding.

Different languages have different ways of looking at the world, but when communication occurs one person meets another, which is what is called intercultural communication. I prefer to call it *interpersonal* communication, because when we meet other people, we have to try to understand them. That’s a task for all teachers, in any language, whether your first or your second. If you are not ready to meet other people, the audience, the lesson can go badly, even in your first language. So perhaps more than concentrating on English, the point should be how we communicate with others. Using another language can be interesting, because you can become aware of this fact, that communication is about meeting other people, meeting others.
The introduction of English as an academic language in a Faculty of Physics and Mathematics in Italy

Francesca Costa

The use of English as a medium of instruction at university level has increased dramatically in the last 15 years all over Europe. English-taught programmes are often imposed top-down, and this article presents one of the very few cases in which the process and decision-making have been documented, in terms of a pre-feasibility study conducted through a student questionnaire and interview with the Dean. The research is set within the Italian context of a Faculty of Mathematics and Physics. Results reveal that in general students have a positive attitude towards this implementation, but many adjustments still need to be carried out.

**Keywords:** EMI, English as an academic language, Mathematics and physics

**Introduction**

Five years after the much-contested decision of the Politecnico di Milano to offer their second-cycle degree programmes entirely using English as an Academic Language, English-taught programmes in Italy (ETPs) have increased and become almost the norm. Despite all these years of prolonged and unresolved debate, around 85% of universities are in the process of implementing these types of programmes.

The object of this study is an Italian university which, partly for the utilitarian reasons of attracting foreign students and professors in order to survive, has made the institutional choice to introduce ETPs in the Faculty of Mathematics and Physics, where the enrolment level is not very high.

ETPs are often implemented top-down, but in very few cases have the process and decision-making, in terms of a pre-feasibility study by means of a student questionnaire and interview with the Dean, been documented. This type of documentation is precisely the object of this research. A few studies have investigated students’ linguistic profiles and attitudes towards already existing ETPs (see section on students’ questionnaires) in the

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Italian context, even though none of them was complemented with an interview with the Dean nor taken the form of a pre-feasibility study. These previous studies showed some common results, with students generally being satisfied with English-taught courses, even if they think there is room for improvement in lecturers’ linguistic competence.

The context for this study is a Mathematics and Physics faculty founded at the beginning of the 1970s in which, at the time of writing, there are no ETP courses. The procedure in this case mainly involved gauging the interest of students (as they would be the first to experience these courses) through a questionnaire. To better understand the rest of the procedure of ETP introduction and to complement the study, the Dean of the faculty was also interviewed.

The first part of this article deals with the use of English as an Academic language and the context of Science Faculties in Italian universities. The second part focuses on the results of the empirical study (student questionnaire and interview with the Dean).

2. *The use of English as an Academic Language*

It is a fact that, above all for scientific subjects, English is the most common language, even for non-native speakers. It is widely used in scientific publications and at international conferences. This linguistic monopoly has come to impact not only several fields of learning but also teaching activities in these fields, as shown by the enormous growth in recent years in ETPs. Thus paradoxically the concept of the internationalisation of universities (an objective of the Bologna Process), which in theory was supposed to lead to multilingualism, has been reduced to the Englishisation of the curriculum.

Regarding this issue, several researchers feel that English will engulf the other languages, while others are less dire in their predictions, foreseeing at most a diglossic future with the co-existence of two languages (in this case English and Italian). Ammon and McConnell claim, on the other hand, that Anglification exists only in certain fields of learning; in the Hard Sciences publications are mainly in English, while in the Humanities they are mainly

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*reception of English-medium instruction in Italian universities, in English in Italy, C. Boggio – A. Molino ed., Franco Angeli, Milano (in press).*


* J. Coleman, *English-medium teaching in European higher education.*

in the L1. They also note that native speakers “control the rules” of publications (p. 21), a view in some way softened by Gotti and Montgomery, for whom the Non-Native-Speaker (NNS) using English brings cultural elements that enrich the English-written texts he or she produces.

Precisely because the use of English as an Academic Language is still an area of debate, it is very important to analyse local contexts and needs in which ETPs could be implemented. Pre-feasibility studies that analyse stakeholders’ views are thus very important in the decision-making process.

3. Scientific Subjects in Italian Universities

This part of the paper will provide an overview of the context of the study with data regarding scientific subjects in Italian universities in general and specific data on the courses and programmes offered in English at such institutions.

According to ISTAT data referring to 2012-2013, for a vast subject group in which Mathematics, Physics and Informatics are also taught in English, enrolment in the first-level degree (Bachelor) and the second-level degree (Master) in Italy amounted to 9,677 students. The total number of students enrolled in all areas of study in Italian universities is 278,866, with only only 3.5% of students choosing scientific subjects.

According to Censis, for the 2014/15 academic year, 49 universities offered degree programmes in Mathematics and 42 in Physics. Therefore, around half of the universities in Italy offer degree programmes in Mathematics and Physics.

One fact that emerges immediately from these data is that in Italy Mathematics and Physics might not be the most commonly chosen among students, although there has been an increase from 2001. This creates problems of survival for some faculties, which must come up with ways to attract more students, one of which is the offering of ETPs. This is testified by a study carried out by the CRUI. In 2012 the following universities offered ETPs in Mathematics and Physics:

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13 CRUI provided an updated version in 2016 but no data were available as regards Bachelor Degrees, nor were the titles of the programmes stated.
Table 1. Mathematics and Computer Science 2011-12
(only institutions denominated as universities – excluding summer schools)

<table>
<thead>
<tr>
<th>University</th>
<th>Bachelor Degree</th>
<th>Master Degree</th>
<th>PhD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bolzano</td>
<td>Bachelor in Computer Science and Engineering</td>
<td>Master in Computer Science</td>
<td>Research Doctorate in Science and Informatics Technology</td>
</tr>
<tr>
<td>Bologna</td>
<td>Bioinformatics</td>
<td>Mathematics and Application</td>
<td></td>
</tr>
<tr>
<td>Camerino</td>
<td>Application Computer Sciences</td>
<td>Mathematical Engineering</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Distributed Systems and Ubiquitous Computing</td>
<td>Global Software Engineering</td>
<td></td>
</tr>
<tr>
<td>L’Aquila</td>
<td>Computer Science</td>
<td>PhD Computer Science</td>
<td></td>
</tr>
<tr>
<td>Milan</td>
<td>Mathematical Models and Methods in Engineering</td>
<td>Mathematics</td>
<td></td>
</tr>
<tr>
<td>Politecnico of Milan</td>
<td>Computer Science</td>
<td>Basic Sciences</td>
<td></td>
</tr>
<tr>
<td>Padua</td>
<td>Mathematics and Networking</td>
<td>Master of Science in Mathematics</td>
<td></td>
</tr>
<tr>
<td>Pisa</td>
<td>Computer Science and Networking</td>
<td>Master in Computer Science</td>
<td></td>
</tr>
<tr>
<td>Trento</td>
<td>Master in Computer Science</td>
<td>Computer Science</td>
<td></td>
</tr>
<tr>
<td>Venice</td>
<td>Bachelor Degree</td>
<td>Master Degree</td>
<td>PhD</td>
</tr>
</tbody>
</table>

Table 2. Physics (only institutions denominated as universities – excluding summer schools)

<table>
<thead>
<tr>
<th>University</th>
<th>Bachelor Degree</th>
<th>Master Degree</th>
<th>PhD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Camerino</td>
<td>Physics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ferrara</td>
<td>Physics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>L’Aquila</td>
<td>Physics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Padua</td>
<td>Astronomy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tor Vergata in Rome</td>
<td>Physics for Instrumentation and Technology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turin</td>
<td>Science of Materials</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Politecnico of Turin</td>
<td>Physics of Complex Systems</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The data in Tables 1 and 2 refer to 2012, but similar data (for all faculties) indicate that by 2015 around 90% of Italian universities offered ETPs, which shows that such programmes are rapidly rising.\(^{(15)}\)

4. Students’ Attitudes Studies in the European Context

In order to outline relevant studies for this research, students’ perceptions at university level were examined. The results of these studies can be grouped under the following categories: student expectations; the advantages and positive aspects of the courses; constructive criticism of the courses.

**Student expectations.** Two studies from the Netherlands\(^{(16)}\), among the first carried out, revealed that students expected to learn English in addition to subject-matter content. Moreover, students thought their lecturers would have a high level of competence in English, would be able to adapt their teaching methods to such courses, and would represent a role model. Lecturers, on the other hand, felt that their proficiency in English was good enough.

**Student-perceived advantages.** The advantages that emerge in particular from studies carried out in Spain cover a broad range of language and content aspects. From the language point of view, students report improvements in vocabulary\(^{(17)}\), pronunciation, listening and grammar, in that order.\(^{(18)}\) In the study by Dafouz et al., the lecturers (n. = 70) felt up to the


task and thought their receptive skills in English were good enough, although they felt that an improvement in their speaking skills might be needed. From an attitudinal perspective, a large majority of students (71% of respondents) reported increased motivation and felt that these courses led to increased student participation.

Criticisms and needs. A 2011 study of a Master’s level engineering programme in Austria\(^1\) found students lamenting the fact that the course content had to be simplified and, at the same time, also that there was a heavier workload for courses in English. The study also involved eight lecturers who were satisfied with their teaching even though they did not feel completely adequate as regards productive skills and found it hard to cope with classes of students with different levels of English. Moreover, in a 2012 CLIL study at the tertiary level\(^2\), students felt that the course was too slow. There were complaints about the teachers’ level of English although the lecturers themselves were not aware of these problems. Some of the lecturers, though, declared uneasiness in the use of paraphrases. Some of the students stated the need for a glossary, materials in English and more class interaction. In a survey of the Belgian context involving graduate-level programmes\(^3\), students responded that English-taught courses required more concentration and effort; at times they were also critical of the lecturers’ pronunciation, and even the lecturers had reservations about their speaking abilities; however, some students viewed the latter aspect in a positive light, as this made it easier to understand lectures.

5. Methodology of the Study

A questionnaire was sent out to investigate the opinion of students regarding the future introduction of ETPs in the Mathematics and Physics Faculty at a university in Northern Italy. As a complementary study, the Dean of the Faculty was also interviewed.

To undertake the survey a questionnaire was prepared, based on several questions that drew on previous studies in the literature (see section on students’ questionnaire). The questionnaire contains 13 questions, one of which is open-ended (see Appendix).

The questionnaire was delivered on paper personally to 135 attending students (studying either Mathematics or Physics in a first-cycle or second-cycle degree programme), all of whom responded. There are 234 students in the faculty, and thus the sample survey represents good coverage and is representative of the total number of students (58%). The SPSS programme was used for the data analysis.

The survey is divided up in the following manner: 65.2% of the respondents are from the Mathematics programme, while 34.8% are from Physics (Table 3).

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The Introduction of English as an Academic Language

Table 3. Maths and Physics Students.

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physics</td>
<td>47</td>
<td>34.8</td>
</tr>
<tr>
<td>Maths</td>
<td>88</td>
<td>65.2</td>
</tr>
<tr>
<td>Valid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>135</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The degree programmes of the respondents can be broken down as follows (Table 4): 77% are doing the first-cycle degree while 23% the second-cycle degree.

Table 4. Bachelor’s and Master’s Students.

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master</td>
<td>31</td>
<td>23.0</td>
</tr>
<tr>
<td>Bachelor</td>
<td>104</td>
<td>77.0</td>
</tr>
<tr>
<td>Valid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>135</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The data analysis took two main directions. First and foremost, a univariate descriptive analysis was carried out on all the questions, following which an inferential bivariate analysis was done on several of the key questions in relation to the type of student (first-cycle degree or second-cycle degree; Mathematics or Physics). Some of the bivariate analyses led to statistically significant results using Chi-Square tests.

The interview with the Dean was sent by email and was written by him directly in English. A content analysis was carried out22.

6. Interview with the Dean and Context of the Study

In order to provide an overview of the institutional choices that a university has to carry out to implement ETPs, an interview with the Dean of the Faculty was conceived.

He first presented the ideas for the upcoming year: «in the next year we will offer a Bachelor (first-degree) programme in Mathematics with two sub-programmes, one in Maths and one in Physics, and two second-degree programmes, one in Mathematics and one in Physics».

When asked the reasons why there is a willingness to implement ETPs, the Dean said that it was for utilitarian reasons: «as for my personal opinion, I would not start a complete English-taught programme, and perhaps my colleagues would agree, but our Faculty is in some sense compelled to: since we are lacking Professors, and, due to the restrictions imposed by the Education Ministry, we cannot start a first-degree programme in Physics, therefore we must transform our Physics second-degree programme into a full-English taught one, in order to be able to count on two more visiting Professors. Moreover, both our University and the Education Ministry strongly sponsor the introduction of ETPs, so

we hope to get some extra resources on this basis. Finally, since our University will start a Development Plan with, among others, the goal of increasing international exchanges of students (which in turn implies a better international ranking), we want to contribute to this».

When asked if he feared the implementation, his view was that English is not always an advantage (i.e. for future teachers and for certain kind of fields). «It depends: I have many fears. My biggest fear is that there will be less chances for those who don’t really need a deep knowledge of English in their future working experience (as, for example, high school teachers: the required level for the teacher is far below what would result by a full ETP, but on the other hand a full ETP is in my opinion much more difficult). Also for future researchers I don’t see only advantages: there are branches of Physics, such as Theoretical Physics, which are very difficult to understand already in native language. To hear them in English will be an additional obstacle, and since Professors will take this into account, the result will be a lower level of understanding of the whole matter. This is, at least, my fear. But I have also a hope: I hope that a full ETP will attract foreign students, but if it is not to be the case, then it would be reasonable to re-discuss these changes».

When asked about the institutional path to be followed in order to implement ETPs he said: «we will simply present the proposal to the Faculty, then next to the University Senate, and subsequently the whole proposal will be examined by the Education Ministry».

When asked about the results of the student questionnaire he spoke of problems present in the literature (see section on students’ questionnaire) related to other contexts (pronunciation, fluency, watering down of content and adaptation time). «[…] I expected both enthusiasm and fear. Enthusiasm is comprehensible since ETPs seem to help in a future career […]. Fear is also very understandable: when I teach, for example, I notice that many students copy what I write on the blackboard, try to understand the correctness of the reasoning or of the Mathematics involved and sometimes write a short comment. All this will be slowed down by the need of comprehension of the English, until the terms are fully and fluently understood, and only at that time will there be perhaps an acceleration. Incorrect pronunciation, moreover, may worsen the problem. Another aspect is the oral exam: learning by heart many technical terms is already hard, but to tie them together in a decently fluent way is much more than this. So, as I said, the whole will result in a simplification of the subject matter, which may result in less prepared students».

When asked the way the lecturers reacted to ETPs he answered «some of them are very enthusiastic: of course, they are those who haven’t got any difficulties in using English. Others are quite against the idea, but as I explained above, we have no choice. Finally, some of them see it the right way, in my opinion: English must be present but it must be an opportunity, not an obstacle. I am sure that having notes in English and only a part of the programme in English could be largely sufficient. None of my colleagues had courses in English but every one of us can successfully interact and communicate with foreign colleagues in English. We learned it on the go. Perhaps it could be made better, but the problem is the price we have to pay». 
7. Summary of the Questionnaire Data

The first analysis is univariate and provides an overview of all the questions included in the questionnaire. In order to make the description more relevant, the questions have been grouped into the following four topical macro categories (corresponding to varying numbers of questions on the questionnaire): student interest (questions 1, 2 and 7), previous student experience (3, 4, 5, 6 and 12), current student experience (10 and 11), and future plans (questions 9, 8 and 13) with regard to ETPs.

7.1 Univariate analysis.

Student interest (questions 1, 2 and 7)

Student interest in EMI (English-medium Instruction) was assessed through three questions: 1) Are you interested in courses (Mathematics or Physics) taught in English?; 7) Would you enroll in a degree programme taught only in English? A third question was linked to the previous two: whether or not students thought courses taught in English helped or hindered learning 2) Do you think a foreign language helps or hinders the understanding of the course content?

Student responses to the first question were clear-cut: 78.9% were in favour of such courses against 21.1% who were opposed to them (Table 5). For this and the subsequent questions it was decided to analyse only the valid responses, ignoring those few students (two) who did not respond. Thus, in general students were interested in taking courses given in English.

Table 5. Are you interested in taking courses (Mathematics or Physics) given in English?

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>28</td>
</tr>
<tr>
<td>Yes</td>
<td>105</td>
</tr>
<tr>
<td>Total</td>
<td>133</td>
</tr>
<tr>
<td>Missing</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>135</td>
</tr>
</tbody>
</table>

However, when asked if they would enrol in a degree programme taught only in English, student responses were more varied (Table 6). The majority of students (47.4%) were in favour of this, while 33.8% were opposed, a result which slightly contradicts that of the previous question; however, in this case we are dealing with a degree programme taught entirely in English, with regard to which students revealed more concern. 18.8% were in favour of this possibility only if given the choice to do their exams in Italian. Therefore, in general 66.2% of students were in favour of doing English-language degree programmes, but they would like to be able to choose whether or not to do the exams in English or Italian. In fact, the final mark is one of the most important aspects for students, who do not
want to be penalized for poor competence in English. Only two students did not answer this question.

Table 6. Would you enroll in a degree programme taught only in English?

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>exams in Italian</td>
<td>25</td>
<td>18.5</td>
<td>18.8</td>
</tr>
<tr>
<td>No</td>
<td>45</td>
<td>33.3</td>
<td>33.8</td>
</tr>
<tr>
<td>Yes</td>
<td>63</td>
<td>46.7</td>
<td>47.4</td>
</tr>
<tr>
<td>Total</td>
<td>133</td>
<td>98.5</td>
<td>100.0</td>
</tr>
</tbody>
</table>

In apparent contradiction with the two previous responses, when students were asked if they thought language helped or hindered learning (Table 7), a clear majority (74.6%) took the latter position. This probably reflected the main fear of students: not being able to understand and learn subjects taught in another language adequately enough.

In short, students desired course offerings with more ETPs as they have come to realise that English is necessary in the labour market, even while they fear their English skills are not up to the task, which is also demonstrated by the fact they seek the security of choosing the language in which they will be examined. Only five students did not respond to this question.

Table 7. Do you think a foreign language helps or hinders the understanding of the course content?

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facilitates</td>
<td>33</td>
<td>24.4</td>
<td>25.4</td>
</tr>
<tr>
<td>Hinders</td>
<td>97</td>
<td>71.9</td>
<td>74.6</td>
</tr>
<tr>
<td>Total</td>
<td>130</td>
<td>96.3</td>
<td>100.0</td>
</tr>
</tbody>
</table>

7.2 Past experience (questions 3, 4, 5, 6, 12)

In terms of students’ past experience with ETPs, the relevant questions were: 3) Have you ever taken courses given entirely or partly in English?; 4) How would you assess the effectiveness of any courses you have taken which were given in English?; 5) What were the positive features of the courses given in English?; 6) What were the negative features of these courses?; 12) Did you use English texts in the writing of your first-cycle degree thesis?

The first, more exploratory question revealed that around half the students (48.1%) had already taken courses given in English, while 51.9% had not (Table 8). All the students answered this question, which was not limited only to university courses; thus, some students may have taken such courses during high school.
Table 8. Have you ever taken courses given entirely or partly in English?

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>70</td>
<td>51.9</td>
</tr>
<tr>
<td>Yes</td>
<td>65</td>
<td>48.1</td>
</tr>
<tr>
<td>Total</td>
<td>135</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The second question aimed at finding out the students’ opinion about such courses (Table 9). Most students held that ETPs were good (43.1%), which, when added to the 38.5% that considered them to be fairly good, represented 81.6% of respondents. 6.2% considered such courses to be excellent while 9.2% viewed them as sufficient. Only 3% of the students considered them to be poor or insufficient.

Table 9. How would you assess the effectiveness of any courses you have taken which were given in English?

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor</td>
<td>1</td>
<td>.7</td>
<td>1.5</td>
<td>1.5</td>
</tr>
<tr>
<td>Insufficient</td>
<td>1</td>
<td>.7</td>
<td>1.5</td>
<td>3</td>
</tr>
<tr>
<td>Sufficient</td>
<td>6</td>
<td>4.4</td>
<td>9.2</td>
<td>12.2</td>
</tr>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fair</td>
<td>25</td>
<td>18.5</td>
<td>38.5</td>
<td>50.7</td>
</tr>
<tr>
<td>Good</td>
<td>28</td>
<td>20.7</td>
<td>43.1</td>
<td>93.8</td>
</tr>
<tr>
<td>Excellent</td>
<td>4</td>
<td>3.0</td>
<td>6.2</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>65</td>
<td>48.1</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>Missing</td>
<td>1</td>
<td>.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>70</td>
<td>51.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>135</td>
<td>100.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

When asked to state the positive features of such courses (more than one answer was possible here), 55.4% of the answers mentioned the specific terminology as the main advantage of ETPs, 20% mentioned both the specific terminology and pronunciation, and 15.4% both the specific terminology and the slower pace in the explanation of concepts (Table 10). As can easily be seen from the data, most respondents held the learning of specific lexis to be fundamental, because this entails the epistemology of a particular discipline.
Table 10. What were the positive features of the courses given in English?

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slower pace</td>
<td>1</td>
<td>.7</td>
<td>1.5</td>
<td>1.5</td>
</tr>
<tr>
<td>Pronunciation</td>
<td>1</td>
<td>.7</td>
<td>1.5</td>
<td>3.1</td>
</tr>
<tr>
<td>Specific terminology</td>
<td>3</td>
<td>2.2</td>
<td>4.6</td>
<td>7.7</td>
</tr>
<tr>
<td>lower pace</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>pronunciation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specific terminology</td>
<td>13</td>
<td>9.6</td>
<td>20.0</td>
<td>27.7</td>
</tr>
<tr>
<td>pronunciation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specific terminology</td>
<td>10</td>
<td>7.4</td>
<td>15.4</td>
<td>43.1</td>
</tr>
<tr>
<td>Slower pace</td>
<td>36</td>
<td>26.7</td>
<td>55.4</td>
<td>98.5</td>
</tr>
<tr>
<td>Specific terminology</td>
<td>1</td>
<td>.7</td>
<td>1.5</td>
<td>100.0</td>
</tr>
<tr>
<td>Slower pace</td>
<td>69</td>
<td>48.1</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>greater clarity</td>
<td>70</td>
<td>51.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>135</td>
<td>100.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Regarding the negative aspects (Table 11), 56.1% of answers brought up the difficulty in understanding the lessons, 19.3% the difficulty in both understanding and pronunciation, and 12.3% the difficulty due to pronunciation. It should be noted that 57.8% of the students did not answer the question, presumably signifying they had no difficulties in this type of course.

Table 11. What were the negative features of these courses?

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Note-taking</td>
<td>1</td>
<td>.7</td>
<td>1.8</td>
<td>1.8</td>
</tr>
<tr>
<td>Comprehension</td>
<td>32</td>
<td>23.7</td>
<td>56.1</td>
<td>57.9</td>
</tr>
<tr>
<td>Comprehension</td>
<td>11</td>
<td>8.1</td>
<td>19.3</td>
<td>77.2</td>
</tr>
<tr>
<td>pronunciation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Everything</td>
<td>1</td>
<td>.7</td>
<td>1.8</td>
<td>78.9</td>
</tr>
<tr>
<td>Nothing</td>
<td>4</td>
<td>3.0</td>
<td>7.0</td>
<td>86.0</td>
</tr>
<tr>
<td>Pronunciation</td>
<td>7</td>
<td>5.2</td>
<td>12.3</td>
<td>98.2</td>
</tr>
<tr>
<td>Specific terms</td>
<td>1</td>
<td>.7</td>
<td>1.8</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>57</td>
<td>42.2</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>69</td>
<td>51.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Missing</td>
<td>9</td>
<td>6.7</td>
<td></td>
<td>57.8</td>
</tr>
<tr>
<td>Total</td>
<td>78</td>
<td>57.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>135</td>
<td>100.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
When asked whether they had used English texts in writing their first-cycle-degree thesis, 74.2% of the students who answered the questionnaire said they had while 25.8% said they had not (Table 12). 77% could not answer the question as they had not yet completed their degree programmes. Thus, English is clearly a working language for students given that the scientific disciplines are mainly presented in English.

### Table 12. Did you use English texts in the writing of your first-cycle degree thesis?

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>8</td>
<td>5.9</td>
<td>25.8</td>
</tr>
<tr>
<td>Yes</td>
<td>23</td>
<td>17.0</td>
<td>74.2</td>
</tr>
<tr>
<td>Total</td>
<td>31</td>
<td>23.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Missing</td>
<td>1</td>
<td>.7</td>
<td></td>
</tr>
<tr>
<td>not yet</td>
<td>103</td>
<td>76.3</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>104</td>
<td>77.0</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>135</td>
<td></td>
<td>100.0</td>
</tr>
</tbody>
</table>

#### 7.3 The present (questions 10, 11)

The following questions concerned the students’ present circumstances: 10) Did you have a general level of English competence when you entered university? If so, what was it?; and 11) Do you use English texts to prepare for exams?

The question regarding competence in English was the most difficult one to analyse since, being open-ended, the students gave a wide variety of answers (Table 13). The levels were determined as: scholastic, intermediate and advanced. It should first be noted that 33.3% of the students did not respond to the question, either intentionally or because they did not know their level. The majority of students (51.1%) assessed their level as basic while 47.8% as intermediate. In general, the levels were not high, though this likely was due to the open-ended nature of the question, which led students to underestimate their level.

### Table 13. Did you have a general level of English competence when you entered university? If so, what was it?

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced</td>
<td>1</td>
<td>.7</td>
<td>1.1</td>
<td>1.1</td>
</tr>
<tr>
<td>Intermediate</td>
<td>43</td>
<td>31.9</td>
<td>47.8</td>
<td>48.9</td>
</tr>
<tr>
<td>Basic</td>
<td>46</td>
<td>34.1</td>
<td>51.1</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>90</td>
<td>66.7</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>Missing</td>
<td>45</td>
<td>33.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>135</td>
<td>100.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Regarding the use of English in preparing for exams (Table 14), 50.4% of students said they use English while 49.6% said they do not.
Table 14. Do you use English texts to prepare for exams?

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>67</td>
<td>49.6</td>
</tr>
<tr>
<td>Valid Yes</td>
<td>68</td>
<td>50.4</td>
</tr>
<tr>
<td>Total</td>
<td>135</td>
<td>100.0</td>
</tr>
</tbody>
</table>

7.4 The future (questions 8, 9, 13)

To examine how students viewed their future in terms of ETPs the following questions were included: 8) Do you believe your English skills will improve by taking courses in English?; 9) Would you be happy having a non-native-speaking teacher?; and 13) Would you be interested in taking supplementary language courses to go along with the courses given in English?

When students were asked whether they thought EMI improved their level of English, their answers were unequivocal: 94.8% said “Yes”, showing they grasped the importance of learning a language (Table 15).

Table 15. Do you believe your English skills will improve by taking courses in English?

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>7</td>
<td>5.2</td>
</tr>
<tr>
<td>Valid Yes</td>
<td>128</td>
<td>94.8</td>
</tr>
<tr>
<td>Total</td>
<td>135</td>
<td>100.0</td>
</tr>
</tbody>
</table>

When asked their feelings about having a native-speaking teacher, 74.8% answered negatively thus opting for a non-native-speaking teacher, presumably because the latter is easier to understand and thus provides more reassurance to students (Table 16).

Table 16. Would you be happy having a non-native-speaking teacher?

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>do not mind</td>
<td>2</td>
<td>1.5</td>
</tr>
<tr>
<td>Valid Yes</td>
<td>32</td>
<td>23.7</td>
</tr>
<tr>
<td>Yes</td>
<td>101</td>
<td>74.8</td>
</tr>
<tr>
<td>Total</td>
<td>135</td>
<td>100.0</td>
</tr>
</tbody>
</table>

There is instead a clear division among students when it comes to their interest in taking supplementary language courses (Table 17). 56.5% were interested in such courses while 43.5% were not. The fact that more students were not interested in these courses is perhaps due to the additional workload they would entail. Only four students failed to respond.
Table 17. Would you be interested in taking supplementary language courses to go along with the courses given in English?

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>57</td>
<td>42.2</td>
<td>43.5</td>
</tr>
<tr>
<td>Valid</td>
<td>74</td>
<td>54.8</td>
<td>56.5</td>
</tr>
<tr>
<td>Missing</td>
<td>4</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>135</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

8. **Bivariate Analysis**

For the bivariate analysis only some of the parameter relationships were chosen to cross-check in part based on the quality of the data and the type of questionnaire. Only the cross-checked data that showed statistical significance are described here. In order to have a more intuitive interpretation, the data are presented by means of pie charts.

It was decided to cross-check interest in ETPs (question 1) with both belonging to the Faculty of Physics rather than Mathematics and being enrolled in the first-cycle or second-cycle degree programme in order to see if there were differences in the different cohorts of students. The data show an association between belonging to one faculty as opposed to another, in that physics students were more willing to take part in this type of teaching (83.7% - Figure 1). On the other hand, there was only slightly more interest (though not significant) in EMI among second-cycle students than among first-cycle ones.

![Figure 1. Bivariate analysis (interest and type of faculty).](image)

However, when the need for supplemental language help (question 13) is cross-checked with past experience (question 3) there is an association, in the sense that those with prior language-learning experience declared they were less interested in such support (52.31%) (Figure 2). This may signify that those who had already experienced ETPs felt more secure and had less need for language help. Therefore, one may conclude that an initial language course for those doing an ETP for the first time could be useful, while for those who have
had this experience for some years already a form of adaptation to the foreign language and a gradual intensifying of the language element in the ETPs could be introduced, thus rendering a supplemental language course less useful.

Figure 2. Bivariate analysis (interest in supplemental language help and prior experience).

The bivariate analysis between questions 1 (interest) and 8 (language learning in ETPs) reveals a strong association between those answering “Yes” to the former and those who felt this type of course brought with it advantages in language learning (81.75% - Figure 3); on the other hand, those answering “No” felt ETPs entailed no such advantage. Therefore, the most motivated students thought they would also gain in terms of language learning by participating in ETPs.

Figure 3. Bivariate analysis (interest in ETPs and concomitant language learning).

The bivariate analysis between the question if students used English texts to prepare exams and whether or not they were doing a first-cycle or second-cycle degree showed an association between the latter degree and the use of English texts (Figure 4). 80.65% of
second-cycle degree students used English texts compared to only 41.35% of first-cycle students.

![Pie charts showing the percentage of students using English for Bachelor's and Master's degrees]

9. Final Considerations

This study focused on the prospect of implementation of English-taught courses of a whole faculty of Mathematics and Physics in Italy. In particular it took the form of a pre-feasibility study (completely unexplored in the Italian context) by means of students’ questionnaire and an interview with the Dean to gain insight into stakeholders’ ideas on the implementation of ETPs. The peculiarity of the study lies also in the bounded context that this Faculty represents and the reasonably high response rate of the students’ questionnaire (58%). Although whole country surveys are still very useful in detecting the trends of ETPs, local pre-feasibility studies can reveal more context-dependent needs. In this unique context, the interview with the Dean confirms that the reasons for implementing English as an Academic Language are mainly utilitarian and linked to the survival of the Faculty; therefore, at times, he revealed worries about the real added value of this type of teaching for the students. Data from the students’ questionnaires instead reveal several inclinations in the Mathematics and Physics Faculty with regard to ETPs.

The results highlighted two specific areas which could be further investigated in other studies: the need for flexibility in the use of English and Italian and the linguistic benefits the students might gain from ETPs.

Most students are interested in ETPs and would enroll in a degree programme taught entirely in English as long as the exams could be taken in Italian. This pattern could resemble the Danish parallel language\(^{23}\) use provided that the faculty offers some clear instruction on the use of the two languages. On this same vein, most first-cycle students used English in writing their theses, but less so in studying for their exams. This confirms, on the one hand, the strong presence of English in scientific fields, and on the other testifies to the fact that in Italy Italian is still used extensively in exam preparation. The situation is different

with regard to the writing of the final thesis, for which students are obliged to deal with the international literature.

Only half of the students had already had prior ETP experience, which they viewed quite positively. The positive assessment derived from the learning of specialist vocabulary and from pronunciation (fundamental aspects in order to master the discipline), while the negative view came from a fear of not being able to understand the lessons, in particular due to pronunciation. Therefore, students were happy to deepen their knowledge of language precisely in those areas which caused them less concern. In this sense, teachers need to pay particular attention to both pronunciation and the specific vocabulary for the discipline in question (see also Helm and Guarda)\textsuperscript{24}.

Students assessed their English level as mediocre, although they felt ETPs could help them improve their language skills. In this regard they understood the close link between content and language learning (see also Costa and Mariotti, in press)\textsuperscript{25}. Moreover, students in favour of ETPs also felt such courses led to language benefits. However, they were not interested in taking supplemental language courses, probably because they saw these as leading to a heavier workload. For this reason, teachers of content-based courses should be at least minimally prepared to deal with several language issues that can arise during their lessons.

Finally, there seemed to be a greater interest in English as an Academic Language on the part of Physics students, which hints at possible disciplinary differences (see also Airey)\textsuperscript{26} and to the fact that Mathematics uses a language of itself and might not be fully suitable.

Acknowledgements

I would like to thank Professor Elena Poli for her invaluable statistical help for this study.

\textsuperscript{24} F. Helm – M. Guarda, “Improvisation is not allowed in a second language”: a survey on Italian lecturers’ concerns about teaching their subjects through English, “Language Learning in Higher Education”, 5, 2015, 2, pp. 353-373.


Appendix

STUDENT QUESTIONNAIRE

The present questionnaire is part of a research project on student opinions about non-language content-based courses taught in English. The questionnaire is entirely anonymous. Please put a cross (x) over your answer and provide only one answer, except where otherwise indicated.

1) Are you interested in courses (Mathematics or Physics) taught in English?
   Yes [ ]  No [ ]

2) Do you think a foreign language helps or hinders the understanding of the course content?
   Helps [ ]  Hinders [ ]

3) Have you ever taken courses given entirely or partly in English?
   Yes [ ]  No [ ]

4) [if you answered “Yes”:] How would you assess the effectiveness of any courses you have taken which were given in English?
   Excellent [ ]  Good [ ]  Fair [ ]  Sufficient [ ]  Insufficient [ ]  Poor [ ]

5) [as above] What were the positive features of the courses given in English?
   [more than one answer is possible]
   [ ] learning of specific terminology
   [ ] concepts explained at a slower pace
   [ ] learning of pronunciation
   other (specify) ______________________________________

6) [as above] What were the negative features of these courses?
   [more than one answer is possible]
   [ ] slowing down of understanding
   [ ] teacher’s pronunciation
   other (specify) ______________________________________

7) Would you enroll in a degree programme taught only in English?
   Yes [ ]  Yes, but only if the exams are in Italian [ ]  No [ ]

8) Do you believe your English skills will improve by taking courses in English?
   Yes [ ]  No [ ]

9) Would you be happy having a non-native-speaking teacher?
   Yes [ ]  No [ ]

10) Did you have a general level of English competence when you entered university? If so, what was it?
11) Do you use English texts to prepare for exams?
Yes [ ] No [ ]

12) [second-cycle students only] Did you use English texts in the writing of your first-cycle degree thesis?
Yes [ ] No [ ]

13) Would you be interested in taking supplementary language courses to go along with the courses given in English?
Yes [ ] No [ ]

DEGREE PROGRAMME  TYPE OF DEGREE
[ ] Mathematics       [ ] First-cycle
[ ] Physics           [ ] Second-cycle
Teacher development for teaching and learning in English in a French higher education context

Joanne Pagèze, David Lasagabaster

Discussion of the impact of institutional initiatives on the development of EMI in the French context has been minimal due to the particular way in which EMI has emerged in France. The aim of this paper is to explore the impact of a teacher development initiative set up in 2014 at the University of Bordeaux in order to help disciplinary teachers make the transition to teaching their discipline in English. The objective here is to explore how local context is impacting this shift in teaching and learning practices through EMI.

Keywords: teacher development / EMI / France / Internationalisation

Introduction

While a number of studies have explored the impact of institutional initiatives on the development of English-medium instruction (EMI) in Southern European settings, discussion of such initiatives in the French context has been fairly minimal. This has been due in part to the particular way in which EMI has developed in France. Exploring how international and multilingual learning is emerging in local higher education contexts is key if we are to understand the forces of glocalisation at work in the internationalisation of higher education. With this in mind, the aim of this paper is to explore the impact of a teacher development initiative, Défi International, set up in 2014 at the University

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1 For clarity, here the term English-medium Instruction (EMI) is used to refer to disciplinary teaching and learning contexts where there is no explicit language learning objective led by disciplinary teachers. Content and Language Integrated Learning (CLIL) is used for teaching and learning contexts where the learning objective is explicit and shared between language and discipline.


5 For an overview of the situation in France see: G. Tailléfer, CLIL in higher education: the (perfect?) crossroads of ESP and didactic reflection, "Asp", 63, 2013, pp. 31-53.

of Bordeaux in order to help disciplinary teachers make the transition to teaching their discipline in English. The paper will first set out the language policy issues which have had an impact on EMI in French higher education and the inherent challenges for lecturers, before outlining how this specific context determined the set-up of the programme. The impact of the initiative is discussed through the results of a follow-up survey of participants subsequent to training. One of the main objectives of the programme is to stimulate and enable disciplinary teaching in English through adapted support for teachers. It will be argued that the enabling factor in this process is teachers being able to make the shift from seeing EMI teaching as a language problem to viewing it as a specific classroom situation and making pedagogical adjustments which are relevant to their disciplinary context.

2. English-Medium Instruction in European Higher Education

The growth of EMI across Europe in recent decades is a well-documented if controversial phenomenon linked to the internationalisation of higher education and increased competition between universities in the context of globalisation. Attitudes towards English-taught programmes vary considerably and tend to take up polarised stances between, on the one hand, a “maximalist” position where English is presented as the unique inevitable tool for the international spread of knowledge and, on the other hand, a more nuanced language ecology position where greater attention is given to the way English coexists with national languages in university programmes and settings. The “maximalist” position presents English as “globish”, detached from any cultural and political identity and seen as a vehicle for globalisation. By contrast, and notably in Northern European countries with long experience of EMI and well-established language policies, the use of English in higher education is considered from the angle of disciplinary and academic cultures (and within a certain European idea of multilingualism). Research on EMI in Southern European contexts, where it has emerged more recently, has reinforced the language ecology approach to EMI and highlighted how local language identities, local higher education practices, and local attitudes to multilingualism are determining factors in the

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11 J. A Coleman, *ibidem*.


way EMI\textsuperscript{14, 15} is implemented. However, this is not to underestimate the tension between the drive for programmes in English and a more multilingual perspective in these contexts\textsuperscript{16}. In all these respects, the emergence of EMI in national higher education contexts provides a fertile terrain for exploring glocalisation\textsuperscript{17} in education, that is, a negotiation between local identities and practices and a necessary adaptation to the forces of globalisation.

3. The medium of instruction in France – language, identity and legal issues

French universities are no different from their European counterparts, in that the push for internationalisation as well as the recent restructuring of many French universities has led to an increase in the number of university programmes taught in English\textsuperscript{18}. In fact, it would probably be more precise to say that this context has not led so much to an increase in EMI programmes but to a certain tension between the reality of the language “terrain” in French Higher Education and the top-down pressure to implement such programmes\textsuperscript{19}.

The Wächter and Maiworm report, for all its limitations\textsuperscript{20}, places France with Spain, Portugal and Italy as having a quantitatively low number of English-taught programmes. This relatively late development of EMI in countries whose domestic language is widely spoken worldwide is in marked contrast to the parallel language contexts of Northern Europe. France is the third country in the world for welcoming international students\textsuperscript{21} and French is the third language learnt in the world\textsuperscript{22}; so, offering programmes in EMI is not imperative for attracting international students. The relatively recent desire to develop EMI in French Higher Education then highlights that this is a push for a particular form of internationalisation, designed to promote the international profile of institutions in a globalised world, to target the recruitment of “excellent” students and staff, and generally to market universities as globally competitive institutions. In this context, it is difficult to hide the development of EMI behind the word “internationalisation”, since the practice is

\textsuperscript{14} E. Dafoz – U. Smit, Towards a dynamic conceptual framework...


\textsuperscript{17} R. Robertson Roland, Glocalization: Time-space and homogeneity-heterogeneity, “Global modernities”, 25, 1995; cited in E. Dafoz – U. Smit, Towards a dynamic conceptual framework...


\textsuperscript{20} For example, the survey does not take into account undergraduate programmes and bilingual modalities within degrees and thus surely misses much of what is done in “internationalisation at home” strategies.


\textsuperscript{22} Francophonie.org: https://www.francophonie.org/IMG/pdf/oif_syntheseFrancais.pdf (last accessed: April 14, 17).
clearly tied up with the market transformation of higher education and this has contributed to a certain tension around EMI in French HE contexts.

Another specificity highlighted in Wächter and Maiworm’s survey is related to language. France (along with Spain and Turkey) is one of the few countries where foreign students’ English-language proficiency is rated higher than that of local students. Data from the 2012 First European Survey of Language Competences\textsuperscript{23} indicates that just over 20% of French school leavers attain the B1-B2 bands of language competence in English. The wide variability in the level of competence in English among French students is a complicating factor in the integration of French students into programmes taught in English and is also dependent on the type of higher education institution. French universities are widely accessible to all school-leavers who have a baccalauréat and the fees are very low. By contrast, the elite "grandes écoles", mostly specialising in engineering or business studies, and the technical applied sciences institutes (IUT) are able to recruit selectively, with higher fees. In this context, recruiting students on the basis of language competence to EMI programmes can be seen to work against the principles of equality in education which form part of the ethos of French universities\textsuperscript{24}. The problem of language proficiency as a criterion for selection thus complicates the development of “internationalisation at home” or wider strategies designed to internationalise the university curriculum and is one of the reasons why EMI has tended to develop in isolated pockets at the level of Master’s programmes.

One aspect of this context has meant that EMI programmes are sometimes seen by institutions as a top-down means of improving student language competence. The immersion of students in an English-taught programme is thus framed as a kind of “sink or swim” approach to language learning which has raised legitimate questions related to quality\textsuperscript{25} – both in disciplinary learning and in classroom communication. The research literature on EMI in French higher education has thus tended to concentrate on whether


\textsuperscript{24} Linked to the egalitarian ethos of the revolution, French educational culture has always struggled to accept differentiation and particularism in education. For discussion of these issues with regard to European contexts see: J. E. Talbott, The politics of educational reform in France, 1918-1940, Princeton University Press, Princeton 2015; M. Maclean, Britain and a Single Market Europe: Prospects for a Common School Curriculum, Kogan Page, London 1990.

\textsuperscript{25} C. Truchot, L’enseignement en anglais abaisse le niveau des formations, La recherche", 453, 2011.
or not EMI is a good idea\textsuperscript{26}, its potential impact on language skills\textsuperscript{27} and how it should be implemented\textsuperscript{28}\textsuperscript{29}\textsuperscript{30}. 

As is often the case, discussion and analysis of CLIL in relation to EMI have taken place among language experts, while the implementation of EMI programmes, with either an implicit or explicit CLIL objective, has been driven by disciplinary programmes in a desire to internationalise. In contrast to Spain, very little classroom research has been done on EMI learning contexts in French higher education\textsuperscript{31}\textsuperscript{32}. Studies have usually delved into institutional policy and implementation. This interest in EMI is dependent upon its identification as a form of CLIL (EMILE in French) for which there is a strong research tradition in France, principally related to bilingual and multilingual learning contexts in schools which have the support of the Ministry of Education\textsuperscript{33}. In this scheme of things, CLIL takes the role of the “good guy” being associated with European multilingualism and focussed on learning, whereas EMI seems to be the imperialistic “bad guy” focussed on instruction and delivery of content in classroom contexts which lie beyond the grasp of language learning experts.

This situation has been further complicated by historical and legal issues related to the defence of the French language and the use of English in public life. French national identity was constructed through a linguistic unification that began well before the revolution, but which became an explicit governmental strategy from the revolution onwards. Education has played a major role in French nation building – in particular, schooling in French was imposed to the detriment of local languages. Linguistic plurality was seen to be contrary to the principles of state schools built on the principle of secular uniformity and this was linked to post-revolutionary egalitarian discourse. This founding unilingualism in state education was accompanied by an organised normalisation of language through the French Academy. As a consequence, an elitist and purist representation of the French language, subject to threat from other languages and other language uses, took hold and

\textsuperscript{27} C. Truchot, L’enseignement supérieur en anglais véhiculaire...
\textsuperscript{28} G. Taillefer, CLIL in higher education...
\textsuperscript{33} http://www.emilangues.education.fr/ (last accessed : April 17, 2017).
has played a defining role in French national identity\textsuperscript{34} \textsuperscript{35}. The emergence of European multilingualism in recent years has been influential in changing French policy with regard to the coexistence of languages, particularly for the positive acceptance of local languages and language diversity in school education\textsuperscript{36}, but as has been noted above, this approach to multilingualism and interculturality in learning has not extended to EMI – seen as another form of unilingualism in competition with French\textsuperscript{37}.

In the post-war period, the ideological dimension of the French language was a strong contributing factor in defensive language policies and attempts to legislate to protect the French language. From 1966, language policies were implemented to defend the French language against deterioration under the influence of the USA. In parallel, active policies to support francophonie across French-speaking countries and former colonies were put in place – language being considered a strategic means of maintaining French influence in the world. In 1994, the Toubon law imposed restrictions on the use of English in public life and education – at a time when the effects of globalisation were beginning to have an impact, English was seen as a cultural threat. For higher education, the Toubon law stipulated that French was the language for teaching, examinations and thesis defences. Exceptions could be made for language classes and for visiting professors. Research conferences and colloquia were in French or had to provide for translation into French\textsuperscript{38}.

These legal restrictions should have made it extremely difficult to implement EMI programmes. The law was however widely ignored and not applied in higher education settings, in particular in the elite \textit{Grandes Écoles} and in high-profile Masters programmes. Even where programmes were not explicitly international, the international nature of the disciplines – sciences and business studies, for example – led to the widespread informal integration of English into disciplinary learning. The internationalising momentum in higher education after the Bologna process quite simply worked against defensive language policy. In 2013, the Fioraso law adjusted the situation, as it allowed teaching in “languages other than French” in higher education\textsuperscript{39} with the provison that French language classes

\textsuperscript{39} “La langue de l’enseignement, des examens et des concours, ainsi que les thèses et mémoires, dans les établissements d’enseignement supérieur, peut être une autre langue que le français”, L. 761-1 du code de l’éducation 2013. Our italics.
would be compulsory. This change of policy was part of a wide-ranging programme of university reform encouraging universities to merge and reorganise in order to gain visibility and competitive edge. At the time of this change there were already more than 700 identified programmes taught in English. This adjustment in the law generated a little controversy in the media but was not met with wide resistance, instead generating a mixture of resignation and pragmatism with a clear divide between science and the humanities. The use of English in universities was seen as integral to the modernisation of universities – a necessary evil or an opportunity depending on one’s point of view.

The tension over the use of English in higher education is not unique to France and, in fact, this has been a controversial issue in many contexts; however, what is particular to the French context is that the tension has been played out explicitly and publicly, in policy and legislation, over several decades, with two strong world languages in competition for global influence, with French very much in the defensive position. There is a certain paradox in this, since, as has been pointed out, language has not prevented French higher education from internationalising. In fact, the tension is not so much caused by language as by different world views on higher education and culture in a period of accelerating globalisation – the use of English is framed as cultural loss. This is further complicated by the historical and founding unilingualism of French education. It is difficult to envisage a coexistence of languages, since a multilingual perspective is not available in the same way as it might be in multilingual communities, for example in Spain, where, for various historical and political reasons, universities have explicitly encouraged multilingualism – although the teaching reality may be quite different.

These legal issues may not have been effective in preventing the development of EMI but they have had a clear impact on its development in France. Until this explicit change in the law, EMI could really only emerge in small elite pockets where the international nature of the discipline and the competitive academic willpower (or more simply, power) of highly motivated individuals could implement it. This in itself has had an impact on the way EMI has been implemented, often with a “do now, ask questions later” philosophy to the detriment of quality. Institutional strategies and support systems, teacher training

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42 Ibid., p. 160.
45 Although even in multilingual contexts this coexistence may be more complex: A. Doiz – D. Lasagabaster, Teachers’ beliefs about translanguaging practices in Translanguaging in higher education: Beyond monolingual ideologies, Multilingual Matters, Bristol 2016, pp. 155-174.
46 G. Taillefer, CLIL in higher education..., p. 9-10.
and continuous improvement policies for EMI would have been a direct infringement of the law, even though in many institutions there was top-down encouragement of EMI.

4. The challenges for lecturers with regard to EMI in French universities

For lecturers, the process of individual adjustment to teaching in English is often a negotiation between disciplinary and national academic identities. There is a tension between disciplinary excellence in highly internationalised disciplines where English is a pre-requisite and local academic contexts where issues of language competence, cultural loss and quality of communication work against the use of English. It can be argued that this is played out in an opposition between research and teaching practice. Lecturers situate their language competence within their academic expertise and their capacity to publish and communicate in English within their disciplinary context. Teaching in English implies a transfer and extension of disciplinary and language skills to the classroom, but how this might be done well remains to be seen.

In French higher education, university lecturers receive no pedagogical training and they are recruited on the basis of disciplinary research expertise. This means that university teaching in France is a relatively poorly defined ‘technology’ despite the current impetus and interest in developing university pedagogy across European higher education. Although the form of university teaching is changing, or rather is under pressure to change, it is still seen as a private and individually determined activity authorised by disciplinary knowledge. One consequence of this is that it reinforces the idea that the teaching of one’s discipline in English requires a simple translation of content into the vehicular language – an approach which has been identified as slowing the development of international programmes of quality. This is compounded by the traditional lecture format of teaching which is still the dominant form of university teaching in France. The perceived role of the teaching professor is as a model of disciplinary communication and is not so much focussed on the learning process as on delivery of content.

An idea of linguistic perfection is linked to the posture of university teachers. For many, their English skills are “good enough” for research communication but not for teaching, where a “native speaker” model seems necessary. If students and teachers are using a “weaker” language, then surely conceptualisation will suffer. The close identification of French language mastery with educational quality can mean that using another language


will transform the very nature of the discipline taught and the institution where it is taught. This becomes even more of an issue in a context where a wide variability in English language skills undermines both the students’ and the teacher’s confidence in quality learning through English. In this scenario, lecturing in English is framed as a deficit – as put bluntly by one of the participants in the study, as “a poorer version of me”.

A lack of characterisation of university teaching is problematic for the development of EMI because a wide body of international research has underlined that teaching methodology plays a determining role in the quality of EMI teaching.\(^{50}\)\(^{51}\)\(^{52}\) In particular, an actively student-centred approach that compensates for and supports the extra cognitive load that the second language places both on learners and on teachers is required. This means paying attention to timing within the class, scaffolding, and access to and use of learning supports, to name but a few. Attention, listening stamina and note-taking are more fragile and this also needs to be taken into account. Interaction may be less spontaneous and needs to be managed and planned for, and so group dynamics take on a new importance.

For communication in English, it is less a question of having perfect command of English than having a good ability to communicate and ‘comfortable intelligibility’ with regard to pronunciation and intonation. While certain language aspects are important (pronunciation and intonation, ability to ask and answer questions, use of classroom English, managing meta-discourse etc.), what emerges from research in this field is that an active learner-centred pedagogy, adapted to the specific classroom context of lingua academica is a key factor for success in EMI teaching.

“In short, the teacher can no longer assume (for purely linguistic reasons) that students understand the content of the course.”

These pedagogical aspects are not immediately perceived by teachers, not because they lack interest in learning and teaching, but rather because for them disciplinary teaching is primarily about their capacity to impart knowledge through language, a vehicle for the transmission of knowledge. Teacher development for EMI settings thus needs to help lecturers appreciate EMI as a specific classroom teaching situation which is enabled by an academic and disciplinary expertise in communication, since it is this expertise which enables the teaching of the discipline through English.


\(^{54}\) P. Ball – D. Lindsay, *Language Demands and Support...*, p. 53.
5. The context of this study - Défi International, University of Bordeaux

In 2014, the University of Bordeaux, in its current organisation, was created as the result of a merger of three local university institutions. This process was supported by a strategic investment fund, the Initiative of Excellence (IdEx), put in place by the French government to facilitate the development of a small group of large world-class universities from existing higher education structures. At the University of Bordeaux, there are currently 50 complete international programmes at the bachelor’s, master’s and doctoral level, 12 of which are EU supported programmes. Increasing this number and developing existing programmes has become a key objective for the university. Défi International, a cross-campus programme to support the development of EMI, was set up in 2014 with IdEx funding. The programme provides language and pedagogical training for teachers and supports the development of programmes taught in English. This setting thus provides a good example of how the 2013 Fioraso law allowed for strategic planning for EMI development within a wider policy of internationalising higher education.

Défi International was developed at the Département Langues et Cultures (DLC) by a team of English for Specific Purposes (ESP) teachers. Since 2006, this department had been involved in CLIL courses and English teaching in international programmes for the Life Sciences faculty. It has considerable experience of ESP teaching and a close relationship with the specialists in the disciplines and faculties for which it provides English teaching for students. This is a familiar and logical evolution in the development of EMI, as the development of an appropriate pedagogy for a group of learners within specific disciplinary genres has always been at the core of ESP practice. The programme was developed after a wide review of the literature on EMI and CLIL in university settings and a benchmarking visit to the University of Jyväskylä, Finland. What emerged from a study of the context was a consensus on the need to take into account both linguistic and pedagogical aspects of teaching and learning in a second language and to develop a teaching methodology that compensates and supports the extra load that EMI places on learners and teachers. The next step was to put in place a programme adapted to the needs and profile of university lecturers in their local context.

There are eight strands to the programme: (1) support for programme design and development, (2) rereading of materials, (3) individual coaching, (4) lunchtime conversation sessions, (5) classroom pairing of disciplinary teachers with English teachers, (6) evaluation and follow-up of international programmes, (7) an online Moodle resource and (8) a 3-day intensive course, Teaching Academic Content through English. This multi-

54 G. Taillefer, CLIL in higher education...
57 Klassen, Rasanen, Airey, Dafouz, Wilkinson, Doiz, Lasagabaster, Sierra, etc.
faceted approach is aimed at supporting not only those teachers already involved in clearly identified international programmes, but also at widening understanding of the context of international classrooms and extending the circle of lecturers who might feel able to teach in English. As has been discussed above, national policy has meant that the practice of EMI is relatively under-documented and controversial in France. EMI programmes are often seen as niches of excellence, confined to highly internationalised disciplines and have thus had little impact on the wider community of university teaching staff. In this context, it seemed important to enable lecturers to develop an understanding of how teaching in English might work and to measure their ability to use English in the classroom. For example, conversation classes provide teachers with access to language practice and are a first step towards commencing training for EMI teaching. Similarly, classroom pairing of language teachers and disciplinary teachers enables teachers to explore the impact of disciplinary teaching through English in a low-risk environment and with language support. The various strands of the programme contribute towards making EMI a more visible and inclusive university practice and aim at developing a community of practice for EMI across the university.

The 3-day course *Teaching Academic Content Though English* with a triple focus on language, classroom communication and pedagogy is the core activity of the programme. Participants are immersed in an English-speaking international learning context for 3 days in which they alternate between the roles of teacher and student. They work on key language issues which impact on classroom teaching, experience and test out different pedagogical strategies that support teaching and learning in English (flipped classroom, interactive lecturing, jigsaw reading tasks, experimenting with group dynamics, etc.) and test their skills through micro-teaching activities. This rather intensive experiential training course is designed to open up the context of EMI and inspire lecturers to reflect on their disciplinary teaching practice and the impact teaching in English would have on that practice. There are 16 places on each course which is run in four sessions, two in each semester. There is no prescribed language level or test of English prior to registration for the course, since it was felt that this would discourage teachers from applying – applicants are clearly informed that the training is focussed both on language and pedagogy and that this implies being able to interact effectively in English. Groups of participants are of mixed disciplines and levels of experience – some teaching in English already, some planning to teach in English, others simply motivated and curious about the context. This mixed learner profile is an important aspect of the training, as comparing experience and practices with those of others contributes to the reflective process. The objective of the course is to enable lecturers to make the shift from seeing EMI teaching as a language problem centred on teacher performance to a specific classroom situation for which they are able to make pedagogical adjustments which are relevant to their disciplinary context.

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59 At one point a suggested B2 level was present on the web page for 24 hours – in a short time this generated a flurry of worried emails – *I’m not sure my English is good enough*. A self-limiting lack of confidence in English skills seems thus to complicate language planning for EMI.
6. The study: research questions, participants and data collection

Since its implementation in 2014, 184 lecturers have followed the intensive course. All participants complete a self-evaluation of their English level prior to training. After each session, participants complete a questionnaire and in the months following the course, lecturers are followed up with further questionnaires at various points. Lecturers who are teaching in English are invited to reflect on their teaching experience via email questionnaires. Where possible, classroom observation and teacher interviews are conducted. Follow-up workshops where teachers can share their experiences are also organised.

The participants come from a wide range of disciplines: Biological Sciences (27%), Technology, Engineering and Materials Sciences (22%), Law, Economics, Management (20%), Health Sciences (15%), Social Sciences and Humanities (16%), Literature and Languages (1%). The proportional divide is not surprising – highly internationalised scientific disciplines see English as a disciplinary given and have been the first to move to teaching in English. Academics within those disciplines see the ability to teach in English as a relevant professional skill.

The data presented here is taken from two sources. The first set of data is taken from the pre- and post-training questionnaires which are designed to define the learner profile and track the learner experience of the 3-day intensive course: 167 respondents out of 184 participants completed the self-evaluation questionnaires before training, whereas 169 out of 184 participants completed the post-training questionnaires.

The second set of data, which is the main focus of this paper, is responses from a follow-up questionnaire which was carried out after the first six training courses. The survey was designed to address the following research questions.

– What adjustments to their teaching practice did lecturers make for teaching through English, if any?

– What impact did participating in Défi International training have on their conception of teaching through English, if any?

Thirty of the 91 lecturers who had completed the course completed the follow-up questionnaire. All questionnaires were sent via Google forms and were constructed with both closed and open questions.

Findings

In this section, we will focus on the three most notable aspects of the information gathered through the aforementioned questionnaires: lecturer profiles, teaching practices, and use of English. The first aspect (lecturer profiles) was based on the pre- and post-training
questionnaires, whereas the other two (teaching practices and use of English) were analysed through the follow-up questionnaire in the semesters following the training.

6.1 Lecturer profiles (pre- and post-training questionnaires)

The self-evaluation questionnaires completed prior to the 12 course sessions give an indication of how the lecturers perceive their language ability and situate it within their university practice. 167 respondents were presented with the ALTE descriptors for language competence and invited to choose the descriptor which best corresponded to their level in English. The strongest competence is unsurprisingly in reading (63.2 %) and listening (62%) with participants rating themselves as B2 or above for comprehension skills. For spoken interaction, the participants’ confidence drops to 48.2% and for extended spoken production only 44.1% of participants rate their skills at B2 or above. In contrast, when it comes to writing, 52.9% rated their ability at B2 or above. The self-evaluation therefore indicates a lack of confidence in skills which lecturers perceive to be essential for university teaching.

To gauge their experience of using English, which might contrast with their own perception of their ability to use the language, the participants were also asked to position themselves on a scale of 1-5 with regard to their professional daily use of English, 1 indicating that they never used either written or spoken English in their professional life, and 5 that they used English intensively every day. Less than half of the participants placed themselves at 4 or 5 on the scale (43.7%), 20.6% at 3, while 32.8% indicated that their use of English was only very occasional. 41.2% had spent an extended period in an anglophone working context (not necessarily an anglophone country) but 39.4% had never had an extended experience of this type. Finally, the participants were invited to give an indication of their lack of confidence in their ability to use English (1 = very confident, 5 not confident at all). Only 35.7% placed themselves at 1 or 2, with 19.2% taking the middle ground and 44.8 % at 4 or 5, indicating that they felt ill at ease and lacking in confidence with regard to their ability to use English. These responses show that despite professional exposure to the language, confidence in language ability is fragile among these university lecturers.

Finally, the participants were invited to add comments on their profile as users of English. 31 out of 167 respondents chose to do this and a recurrent theme was a clear distinction between the use of English for research purposes versus for personal communication, namely a lack of confidence in their capacity to use English despite an often intensive professional use of the language.

“My main problem with English is that once I leave my “research” context and have to take part in discussions, I feel quite ill at ease and the words come less easily (whereas I use the same vocabulary easily in conversations on research themes!).”

60 “Mon problème majeur avec l’anglais est que lorsque je sors du contexte ‘recherche’, je me sens plutôt mal à l’aise sur une discussion, les mots me venant moins facilement (alors que j’utilise facilement le même vocabulaire pour des conversations en relation avec la recherche!).”
“My level of spoken (American) English is high enough to understand and be understood easily but my vocabulary and my grammatical expressions are quite poor. I regularly call upon outside companies to correct and enrich the text of my publications before submission. I have been teaching in English for 8 years at Master’s level.”

They were then invited to select answers from five possible motivations to answer the question: Why have you signed up for this course? The most popular response was ‘I want to improve my speaking and listening skills in English’ (28%), followed by ‘I am going to teach in English in the future’ (23%), with responses then shared evenly between ‘I would like to teach in English in the future’ (19%), and ‘I want to find out how to adapt my teaching for the new context of EMI’ (19%). The lowest response rate (11%) was for ‘I am already teaching in English and want to reflect on my practice.’ This is primarily because just under a third of teachers participating in the programme are already teaching in English. Teacher motivation for coming into training is thus motivated by the desire to improve language skills and in particular to develop flexibility in interaction. While they feel able to function in their research setting, their responses show that they believe that the level required for teaching in an EMI programme is much higher than their current actual command of English. Their comments bring to light that they lack confidence in the quality and flexibility of their English for teaching.

Responses from post-training questionnaires indicate a shift in perspective following the training. Participants are asked which aspects of the intensive course they found most useful. Experimenting with group dynamics, Flipped classroom for EMI and Interactive lecturing are placed first by respondents, followed by English pronunciation and intonation and Micro-teaching. Classroom English is placed in fifth position before Student evaluation and Developing tasks from written materials. These responses indicate a shift in perspective as a result of the training, moving them on from their initial concern about their language skills to the classroom situation of EMI and being able to identify aspects of language that support classroom communication. Having clearly identified issues of relevance to a classroom methodology for EMI during the course, the extent to which teachers are willing and able to adjust their teaching practice still requires further investigation.

6.2 Teaching practices (follow-up survey of classroom practice and impact)

The 30 respondents had all taken the course in the previous academic year. Nine were teaching their discipline in English in an international Master’s programme taught entirely in English, 4 were teaching in English at bachelor’s level in international options within francophone programmes, 9 were teaching occasionally in English in seminar sessions, and 8 were teaching in English at that time. The respondents were teaching in a variety

61 “Mon niveau d’anglais (américain) oral est suffisant pour comprendre et me faire comprendre aisément mais mon vocabulaire et mes tournures grammaticales sont assez pauvres. J’ai régulièrement recours à des sociétés externes pour corriger et enrichir le texte de mes publications avant soumission. J’enseigne en anglais depuis 8 ans en master.”
of disciplinary areas: Science and Technology (6), Biological and Medical Sciences (18), Law and Political Sciences (3), History (1), and Business Studies (2). The proportional breakdown of disciplines reflects the wider group who have come through the programme. It is important to note that although there is a higher proportion teaching sciences in English, 6 were teaching in social sciences and the humanities. The disciplinary breakdown needs to be taken into account because disciplinary knowledge structures have an impact on classroom discourse, the teaching format and language load.

In the follow-up survey the lecturers were asked if they had tested some of the pedagogical tools and strategies that were presented in the training as being supportive of EMI learning. 14% had tested flipped pedagogies, 55% interactive lecturing, 55% jigsaw reading activities, and 13.8% reported testing other methodological tools they had seen during the course. 90% of respondents said that following the training they had changed their teaching approach in French and/or English. All respondents reported feeling more confident in teaching their discipline through English.

The respondents were then asked in open questions to describe what they had put in place in their teaching, what impact they felt the training had had on their teaching and on themselves as teachers. Finally, space was given for open observations from respondents. The responses have been read and compared carefully to identify common themes.

The lecturers teaching in international programmes reported a variety of modifications, but the most common were adjustments to timing of information with careful presentation of material both during and before teaching and the introduction of peer-to-peer checking at key stages within the lecture format, as summarized by the following participant:

I added interactions into my lectures straight after the training course in the second semester of 2015. That allowed me to revisit the pedagogical objectives on a number of levels and to re-focus my speech. It also allowed me to design a better exam and prepare them for it. The evaluation of my teaching was positive at the end of the year, with some students asking for even more interaction. So, this year I have included more interaction, which was easier to design than last year; I now know how to respond better to any mistakes in their answers. And so, I’m still refining the content in view of the objectives. The student participation is really satisfying.

These relatively minor adjustments were reported to have a positive impact on learning. Similarly, the addition of group work in seminar sessions was implemented to encourage

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63 "J’ai ajouté des interactions dans mon cours en amphi dès la sortie du stage au second semestre 2015. Cela m’a permis de revoir les objectifs pédagogiques à plusieurs niveaux et de recentrer mon discours. Cela m’a aussi permis de mieux concevoir l’examen et les y préparer. L’évaluation de mon enseignement a été positive en fin d’année, certains élèves demandant même plus d’interactions. Cette année j’ai donc ajouté des interactions, cela m’étant plus facile à concevoir que l’année dernière. Maintenant je sais mieux gérer les erreurs dans les réponses. Et donc, je raffine encore le contenu en vue des objectifs. La participation des élèves est vraiment satisfaisante."
interaction. In International Master’s level programmes, flipped methodology was tested as a means of helping students contextualise course content before class and to generate more active classroom participation:

Flipped class with docs prepared in advance by the students, small group work to encourage feedback from each student and allow students to complete each other’s understanding⁶⁴.

Warm-up, breaks every 15 minutes for quiz/questions, flipped classroom, open debate. I launch a question of interest in the field and I split the classroom into 2 groups: the pros and the cons. They do not decide the group they end into. So, they must find arguments, sometimes against their own feeling. They love it.

These changes may not on the surface seem to lighten the language load on the students – group discussion on complex subjects is a higher order cognitive and linguistic task. However, it is the diversity of activities and active student-centred approach which teachers cite as having a positive impact on their EMI classrooms. More generally, teachers report making changes to the traditional lecture format to diversify the presentation of information in response to the specific context of the EMI classroom.

I have realised that I should reduce the volume of information in lectures and check more that they have understood the concepts contained in the lecture because the students’ English isn’t necessarily very good and a long speech without any break is not necessarily effective⁶⁵.

The responses indicate that teachers have reflected on the language load of the teaching for both students and themselves.

However, respondents who were not teaching in EMI settings also reported that they had implemented changes in their teaching that had made a positive impact. The following account shows how careful consideration of timing of information and management of communication has transformed a classic lecture format in French:

I have found a renewed enthusiasm for lecture hall teaching, which I had ceased to enjoy. I had been feeling that I had lost their attention and I had quite a bit of absenteeism. The student interactions have allowed me to check on their understanding and adapt my lecture better. The minute for thinking that I give them before they reply to a question allows them to discuss the matter among themselves

⁶⁴ “Classe inversée avec docs préparés par les étudiants à l’avance, travail en petits groupes pour favoriser le retour d’expérience de chacun et que les étudiants se complètent les uns les autres dans leur compréhension.”
⁶⁵ “Je me suis rendue compte que je devais réduire le nombre d’information en cours magistral et plus vérifier l’acquisition des concepts en cours d’intervention car les étudiants ne sont pas forcément très bon en anglais et qu’un discours trop long sans pause n’est pas forcément productif.”
and give me a micro-break, which I find beneficial. I no longer feel that I am exhausting myself trying to hold their attention without much success. Many of the respondents underlined their previous lack of contact with pedagogical methodology and that the training had inspired them to test out new methodologies.

The course was, first and foremost, a training course in pedagogy for me. It filled the vacuum left by the lack of training for university lecturers and researchers.

It had a considerable impact, because it showed me that you can achieve the same outcomes with other methods besides just lecturing.

Those who were already innovating in the classroom felt validated (“confortée”) in their choices and able to go further, as one respondent put it, “It allowed me to better situate my practice among other things...” Similarly, the contact with colleagues from other disciplines was cited as an impetus for experimentation since participants were “able to benefit from experience and advice from other teachers from other disciplines.”

Of the 30 respondents, 12 had sought to benefit from other strands of the programme to support their teaching through English, through individual coaching or by attending conversation workshops or follow-up sessions to share practice. The training had thus given them a pretext for rethinking their teaching strategy more generally with a more student-centred approach and use of peer-to-peer interaction to support learning.

6.3. Use of English (follow-up questionnaire)

Lecturers teaching in English reported that they felt more confident and consequently more spontaneous but also that they were more aware of the language load on the students.

I understand better the difficulties that the students face and have thus adopted a strategy to help “unblock” them.

66 “J’ai repris du plaisir à enseigner ce cours en amphithéâtre qui ne me satisfaisait plus. J’avais la sensation de perdre leur attention, et j’avais plus d’absentéisme. Les interactions me permettent de sonder leur compréhension et de mieux adapter mon cours. La minute de réflexion que je leur laisse avant de répondre leur permet de discuter entre eux et me permet à moi-même une micro pause qui m’est bénéfique. Je n’ai plus la sensation de m’épuiser à attirer leur attention inefficacement.”

67 “Ce stage a d’abord été un apprentissage de la pédagogie pour moi. Cela a rempli le vide laissé par la non-ingérence et la langue étudiante à l’université.”

68 “L’impact est important, car cela m’a montré que l’on pouvait arriver aux mêmes résultats avec d’autres méthodes que les autres.”

69 “Cela a permis de mieux situer ma pratique parmi d’autres...”

70 “J’ai pu bénéficier de l’expérience et des conseils d’autres enseignants dans d’autres matières.”

71 “J’ai mieux compris les difficultés des étudiants et donc adapté une stratégie pour “les débloquer.”
They reported feeling less inhibited (“moins décomplexée”) when using English, for example when teaching classes with students who were native speakers. Respondents who were not teaching in international programmes also reported feeling more confident, that teaching in English was possible for them, and they also felt that they understood the interaction between classroom methodology and language and how it enabled them to envisage teaching in English.

The positive feedback at the end of the course gave me confidence and I put myself forward as a potential resource for teaching in English72.

Positive encounter with university pedagogy. Gained confidence in the possibility of my speaking English in public without having rehearsed and prepared everything in advance73.

Experimenting with active learning formats and changing the organisation of classroom communication had a positive impact on participants’ language confidence. This may seem paradoxical since active learning formats imply a wider variety of interaction and less predictable communication than traditional lecturing. However, here we can see that a different model of classroom communication has gone some way to alleviating performance anxiety with regard to teaching in English. The shift in focus from lecturer monologue to different forms of classroom interaction, at different time points throughout a session, is enabling, partly because it is a shift to a more appropriate, and more realistic, idea of what is required for teaching in English.

The responses indicated that teachers had moved away from a “native speaker” language model for themselves to implementing classroom strategies to support communication, as pointed out by the following participant:

It allowed me to understand that English is just a means of communicating the content. Allows me to stop aiming for linguistic perfection and to stop feeling that we have to be able to speak better than the students74.

Gaining a better understanding of English as a lingua academica had enabled them to better situate how teaching in English fits with their disciplinary teaching identity. This transition is dependent upon moving away from the idea of EMI as based purely on linguistic expertise towards an understanding of how disciplinary expertise, classroom methodology and language competence all combine to authorise the lecturer to teach

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72 “L’évaluation positive à la fin du stage m’a donné confiance et je me suis signalée comme ressource potentielle pour enseigner en anglais.”
73 “Confrontation positive avec la pédagogie universitaire. Prise de confiance dans ma possibilité de parler en anglais en public sans avoir tout répété et préparé à l’avance.”
74 “Ca m’a permis de comprendre que l’anglais n’est qu’un moyen de communiquer un contenu. Permet de ne pas viser la perfection linguistique ou de ne pas avoir l’impression qu’il nous faut mieux parler que les étudiants.”
through English. This means moving away from framing EMI as a language problem to framing it as a specific disciplinary communication context. For the participant quoted above, his positioning with regard to the students has been altered – the communication hierarchy has been readjusted. Indeed, lecturers often report that the shared lingua academica context has a levelling effect between students and teachers, changing the traditional classroom dynamic in a positive manner, an effect that has been noted in other EMI development programmes.

Overall, the responses indicate that the lecturers are better able to diagnose the language and communication requirements for EMI classrooms and thus take appropriate action to support their development for EMI, which in turn gives them confidence in their ability to teach. “Without question, the course, but also the conversation workshops, have made me to feel more at ease.”

7. Discussion

The findings here are consistent with other studies on teacher development through teaching in English, since the use of another language for teaching throws into perspective the role that communication plays in learning and inspires teachers to find workable strategies for their own classroom contexts. In France, and in other similar higher education contexts where the “technology” of university teaching is still defined along traditional lines, it might be argued that the “fresh” discovery of teaching methodology through teacher development for EMI is, in fact, an enabling and motivating factor for university teachers.

In this paper, the overview of the French context for EMI highlights how cultural and political issues have been a complicating factor in the way that disciplinary teaching in English has emerged. There is a gap between the top-down pressure to internationalise teaching and maintain disciplinary excellence which contrasts with the on-the-ground classroom experience. The teacher responses are a reminder of the fundamental importance of teacher cognition in shaping international classrooms. Teaching is a process of active decision-making informed by teachers’ thoughts and in this respect professional development for EMI has to provide teachers with the tools for clearly identified EMI classroom practice. In higher education settings, traditional models of teaching have meant that teacher cognition has not received much attention and yet the teacher responses

75 M. Guarda – F. Helm, ‘I have discovered new teaching pathways’..., pp. 7-9.
76 “Pas de doute que le stage, mais aussi les ateliers de conversation, m’a permis de me sentir plus à l’aise.”
77 P. Ball – D. Lindsay, Language Demands and Support..., p. 59.
78 M. Guarda – F. Helm, ‘I have discovered new teaching pathways’...
in our study show how attention to teacher cognition and sharing of this experience are important in encouraging and implementing educational change.

With regard to our first research question (What adjustments to their teaching practice did lecturers make for teaching through English?), a key aspect of the findings presented here is that many of the changes reported are small adjustments to approach that have had a considerable impact. Teachers were able to experiment informally whether they were teaching in English or French because they were simply invited to report back on what they had done. One of the difficulties with the development of quality teaching in English is the extra workload that it most definitely places on teachers81. The findings presented here indicate that, given the tools, disciplinary teachers are willing and able to explicitly manage and organise classroom communication to support EMI learning. This may be a long way from an explicit integrated content and language approach – lecturers who have come through the programme reject quite strongly the idea that they might take on this role –, but it does change perspectives on the role of language in learning. This implies investment on the part of teachers, but if they see gains in the classroom, then they are more likely to make that investment. In this respect, anchoring the practice of EMI firmly in an appropriate pedagogical methodology is not just important for the quality of EMI programmes but also for institutional development of EMI because teachers need to see an added value both for themselves and students. These gains need to be visible across the institution and adapted to its wider needs.

As regards our second research question (What impact did participating in Défi International training have on their conception of teaching through English?), the data reveals that there is a clear shift in the participants’ perspective. Not only did they change their teaching practices by making their classes more student-centred, but they also started to think of English as a lingua franca, which helped to dispel some of their fears as non-native speakers. Changing perspectives on the way language, communication and thus learning can be managed in the university teaching classroom allows teachers to feel more legitimate in teaching in English because it lowers the stakes for teachers – language load is shared and managed in a learning approach based on co-construction of knowledge. This is helpful because it shifts teacher identity from being a model of linguistic perfection to a facilitator and manager of a classroom situation and places the student at the centre of learning.

Although the Défi International course is explicitly presented as a course in both pedagogy and language, the teachers entering the training identify language competence as the main issue for teaching in English. The shift to another language allows lecturers to assume a position of reassessing their pedagogical approach. This might be challenging for confirmed and experienced professors in university settings82. Teacher development for EMI is thus a pretext for rethinking university teaching, as teachers are more likely to accept the need for professional development for EMI than for a rethink of their pedagogical approach in general. The shift to a more student-centred approach is justified

81 A. Doiz – D. Lasagabaster, Teachers’ beliefs about translanguaging practices...
in the course by the need to adapt to the more fragile language context of lingua academica learning, allowing for more collaboration to consolidate communication between teachers and students and this is transposed quite readily by respondents to their everyday French teaching context.

This study and ongoing study of the Défi International programme would thus tend to confirm the disruptive value of implementing EMI in higher education. Higher education is changing fast, due to multiple influences such as learning technology and new perspectives on learning from the field of cognitive science and neuroscience, all of which are changing the way that university learning is framed. There is currently much discussion of pedagogical transformation in higher education but seeing the results of such transformation on the ground takes time. Teaching and learning through English implies a shift in teaching practice which may contrast with locally ingrained models of learning. The constraints and demands on teachers and students, related to implementing EMI, mean that teachers need to be able to reflect on their practice and make appropriate adjustments. In these respects, internationalisation of higher education is subject to the constraints of the local context (as we have seen in the history of EMI development in France), but it can also become a driving force for change within local higher education contexts.

There are, however, limitations to this study. The findings need to be supported with more classroom-focused research and more extended interviews with teachers and this is currently underway. The study reports on one university setting in France and although there is supporting data from similar European settings, each context needs to be considered in terms of its own specificities. Another issue, which needs to be underlined, is that the focus of this programme is on teachers whose English level allows them to envisage teaching in English – the shift from a focus on language competence to an adapted pedagogical methodology is enabling in this French context. However, this is not to suggest that language competence is not a key issue for developing international learning of quality in French higher education; in this respect, professional development for EMI needs to be supported by strong institutional language policy. The balance between language competence issues and pedagogical implementation in EMI is surely subtle and complex and highly specific to individual disciplines: in fact, study of EMI settings tends to highlight the dependence of the quality of teaching and learning on a complex blend of communication and disciplinary skills whatever the language.

8. Conclusion

Défi International was set up with the explicit aim of developing a community of practice for EMI. EMI has had a limited and controversial development in France which has

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84 M. Guarda – F. Helm, ‘*I have discovered new teaching pathways*’..., p. 14.
85 J. Airey, *From stimulated recall to disciplinary literacy...*
contributed to a lack of understanding of how such a community of practice might work and what it implies for university teachers. The findings here indicate that having access to a more clearly defined “technology” for EMI teaching, being able to share experiences with colleagues from other disciplines and receive continued support within the programme are a first step towards developing EMI classroom practice and a more accessible community of practice with which teachers can identify. Recent work on continuing professional development for internationalisation highlights the need for “a more systematic and holistic approach” and the value of mentoring for the development of international classrooms\textsuperscript{86}. The benefits of this holistic approach go beyond primary considerations of quality in teaching and learning, as continuing professional development also becomes important for developing more locally-determined, bottom-up approaches to internationalisation within higher education which support educational innovation.

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Have we got the Lecturing Lingo?

Elizabeth Long

This article maps the evolution of lecturer training courses at the University of Modena and Reggio Emilia since 2011 to the present to meet the growth of English taught degree programmes being offered. It illustrates a three-pronged approach developed to deliver methodological and language instruction to Italian lecturers through three distinct “Lecturing in English” modules, outlining the rationale behind each element. It also considers the new role of the teacher trainer in training university teachers.

Keywords: English Medium Instruction, teacher education, ongoing professional development, English-taught programmes, UNIMORE.

Introduction

Italian universities are embracing the challenges of internationalization in higher education in terms of strategy, policy and instruction and are increasingly offering degree courses taught wholly in English. However, to date there has been little pedagogical training for university teachers embarking on teaching content through English on a global scale, despite evidence that teacher education courses are being developed and offered in some universities, particularly on the Italian peninsula. In general, although they are key stakeholders, university teachers are unaware of the need to modify teaching strategies in order to become practitioners of English Medium Instruction (EMI). One study commented on “a distinct lack of awareness of a need to change pedagogy in order to help students (whether home or international) cope with content delivered through a second language.” Research undertaken by Guarda and Helm as recently as 2016, however, indicates that a ‘shift’ in perceptions of teaching and participating in professional development courses is necessary if lecturers, encouraged to reflect on practice, are to be more effective teaching practitioners as they embrace teaching in another language. Results from their study show that, far from having a negative impact, EMI can provide “opportunities for reflection and innovation in pedagogy.”

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In Italy, there has been some resistance to the offering of courses entirely taught in English. This issue is currently being discussed in Italian legal circles and may actually necessitate HE reforms on language policy. Teaching through another language may not be un-constitutional but has been described as “threatening freedom of teaching and the primacy of the Italian language. It could also prevent non-English speakers from accessing education”\(^1\). The Council of State has ruled that as a compromise, English courses may need to be offered concurrently with Italian courses of a similar nature. There is, at the time of writing, no clear outcome on the matter.

This article provides a snapshot of the teacher education strategies in place on a local level at the University of Modena and Reggio Emilia (henceforth UNIMORE) through three phases of teacher development offered to academic teaching staff. It also considers the professional identity of the ‘teacher trainer,’ a new role in HE contexts.

The concept of the term ‘lingo’, used light-heartedly in the title of this paper, may bear some relation to the issue of using English as a medium of instruction. If a ‘lingo,’ according to the Macmillan dictionary\(^6\), is defined firstly as an informal term for a ‘foreign language’, and secondly as words used by a group of people engaged in a particular ‘activity or job,’ the term refers to both the foreignness and unfamiliarity of the language as medium, as well as its uniqueness as a jargon or genre to be embraced by teachers using it and teacher trainers designing courses in it. Therefore, in this article the word ‘lingo’ reflects both definitions, a foreign language of instruction and a language necessary to provide instruction. The ‘we’ in the title is intended to refer to the stakeholders in the HE institution in this case-study at UNIMORE, namely the lecturers themselves, the teacher trainers and the policy-makers involved.

2. The University Context- a growing international curriculum

The University of Modena and Reggio Emilia, a medium to large-sized public university based in the north of Italy embarked on its initiative of offering teacher education courses in English to its professors and lecturers in the academic year 2011-12.

While some degree course modules in Economics and Science departments were already offered in English at that time, the launch of four completely English taught degree courses at postgraduate level in 2015 heralded a more urgent need to provide EMI teacher education. These courses, Languages for Communication in International Enterprises and Organizations (LACOM), International Management, Physics and Electronic Engineering have proved to be popular postgraduate courses, and while international enrolments are increasing steadily, the courses also have a particular appeal for Italian students enrolling from outside the Modena and Reggio Emilia areas. Students are attracted by healthy university rankings as well as by links with local industry and


commerce, the possibility of internships and overseas exchange programmes, and concrete career prospects. The number of degree courses offered has now been extended, and as of 2017/2018, postgraduate courses in Advanced Automotive Electronic Engineering, Advanced Automotive Engineering and Innovation Design will be offered in partnership with other major HE institutions in the Emilia Romagna region.

3. EMI Teacher Development at UNIMORE: “Lecturing in English” Courses

As the demand for places on English taught degree courses grows, so does the need for quality assurance, or at least some form of awareness raising and training in content teaching in a foreign language. As early as 2011, UNIMORE started to face the challenge of equipping teaching staff with some of the tools needed to internationalize their courses.

The initiative began as a small project emerging from discussion and reflection between the university language centre and the personnel responsible for implementing initial internationalization strategies. Teacher training courses were therefore conceived at this time as a means of training in-service lecturers who were already teaching or intended to teach courses in English, and from the outset dual teaching expertise was proposed, involving both an Italian expert on Applied Linguistics and native-speaker language teaching experts (Collaboratore ed Esperto Linguistico or CEL). A system of financial incentives for participants was also approved, and potential recipients of this reward were invited to formally apply; if successful, they would complete a short first pedagogical training course ‘Lecturing in English I.’ The selection process for this course consisted of a formal application and a language proficiency test, as is still the case. This initial in-sessional course, consisting of twenty-eight hours of lessons over eight weeks was originally designed to give the most promising and most linguistically competent candidates some basic skills in teaching their subjects in English, as well as the financial assistance to plan the delivery of such courses and fund additional research. At first, numbers on the annual courses were low (fewer than ten in a class), but as the numbers of English Taught Programmes (ETPs) has multiplied, interest has flourished and for the 2017 course there were over 20 candidates interested in attending. Other faculty members have also attended this course out of pure interest and personal motivation. As far as language levels are concerned, the target entry level was initially fixed at C1 (CEFR), although some participants may have more competent reading and writing skills in English and find the spoken aspects of teaching particularly challenging. As the number of courses offered in the vehicular language has grown, so has the interest of the teaching staff in participating in training courses of this nature and the requirement of a C1 level of language competence has been relaxed.

The topic of this section is the first core module ‘Lecturing in English I’, launched in 2011. The positive reception to the course in 2013 led to the request for a follow-up course the same academic year, which was entitled ‘Lecturing in English II’. In 2016 the third strand of training evolved, namely ‘Lecturing in English III - language improvement and accuracy.’ The second and third phases of the course will be dealt with in sections five and six respectively, leaving section seven to focus on participants’ reactions to their learning experiences.

The first course was therefore designed to be team-taught, drawing on the subject expertise of a UNIMORE researcher (a non-native speaker) from the Department of Studies on Language and Culture and a qualified and experienced native-speaker teacher from the University Language Centre. The first tutor provides input based on the concept of the ‘Lecture as a Genre; anchoring the lessons in a genre analytical perspective’, focusing on the rhetorical features of the lecture as a macro-linguistic event in order to outline the lecturer’s overall goals. To achieve this aim, the course adopts a multi-layered methodological approach, providing the lecturers initially with a macro-analytical analysis of the lecture, including topics such as the context in which the communicative event takes place, its communicative purpose, the intended audience and its rhetorical structure. This part of the course is also concerned with problematic areas that a lecturer may encounter while teaching, i.e. how to address student needs such as real-time processing, or distinguishing what is more important from what is less important. Another challenging area for students concerns cross-cultural issues, since not only the language forms (vocabulary, syntax etc.) but also the underlying cultural grammar can be a barrier to learning. Lecturers in a foreign language, according to Flowerdew and Miller, need to act as “mediators to the local situation”, making the lecture accessible and comprehensible to their students by scaffolding those cultural obstacles that may arise so that a climate can be fostered that is conducive to learning. Benson’s research on academic listening also provides an insight into the difficulties that a student audience encounters in listening and understanding a lecture. Raising awareness of the interpretative strategies needed by students during lectures is fundamental for the lecturer in planning, delivering and pacing the lesson.

Subsequently, the focus shifts to the micro-analysis of the linguistic features of lectures addressing topics ranging from pedagogic strategies to vocabulary teaching. Since a key

issue for students is understanding subject-specific lexical items in their discipline, EMI lecturers need to be equipped with the linguistic flexibility to respond to moments of contingency which might emerge during lectures. This may require the lecturer to repeat, reformulate and even provide lexical glosses while teaching, as well as to be able to perform unscripted questioning to involve the audience in the lesson.

As regards the rationale of the course and the resources used, a genre-analytical approach is applied to authentic lecture examples from a variety of disciplines (e.g. Economics and the hard sciences). More specifically, the materials consist of lectures drawn from the MICASE (Michigan Corpus of Academic Spoken English)\textsuperscript{12} and recorded lectures from both native and non-native speakers. Lessons in this part of the course involve traditional teacher-fronted input sessions and group discussion of relevant issues leading to in-class practice. Therefore, tasks such as analysing videos of lectures, transcripts and academic corpora help participants understand models of academic content delivery.

The genre-oriented lessons alternate with the other facet of the ‘Lecturing in English’ course, which are practical awareness-raising lessons aimed at introducing teaching strategies, particularly of a communicative nature, delivered by the native speaker CEL. These ‘hands-on’ sessions focus on a variety of topics, including the effective use of visual materials, the importance of subject-specific vocabulary and collocations, using multimedia in the classroom, dispelling myths regarding pronunciation and the importance of signposting language and reformulation strategies. It is not uncommon to allude to other procedures and approaches such as the Flipped Classroom\textsuperscript{13}, Task-Based Learning\textsuperscript{14}, project-based instruction and problem-solving methodologies.

A typical lesson would consist of an input session (using slides) interspersed with pair and group tasks, allowing ample opportunity for participants to work together in the target language and improve fluency, with a micro-pedagogical goal in mind. The main aim is to provide a stimulating learning environment that is student-centred rather than teacher-fronted, rich in classroom interaction and which allows for discussion and reflection on teaching issues in a multidisciplinary context. While it is impossible to guarantee that participants are willing to accept and adopt specific pedagogical strategies, awareness-raising of the challenges of the EMI classroom is of paramount importance.

The combination of a non-native speaker language expert and an experienced university language teacher seems to be an effective strategy to bridge the gap between a lecturer’s excellence in content knowledge and a potentially low level of language proficiency. Fontanet-Gómez\textsuperscript{15} points to the importance of collaboration between the content teacher and the language teacher in facilitating students’ acquisition of ‘disciplinary discourse’, thus drawing on the strength of both content knowledge and language expertise. This would

\textsuperscript{12} MICASE, www.hti.umich.edu/m/micase (last accessed: April 28, 2017).
\textsuperscript{14} R. Ellis, Task-based language learning and teaching, Oxford University Press, Oxford 2003.
\textsuperscript{15} I. Fontanet-Gómez, CLLL in Higher Education Towards a Multilingual Language Policy, Multimedia Matters, Bristol 2013, pp. 164-166.
appear to be a healthy partnership for delivering teacher training courses too. However, satisfying course participants who are content experts but not master linguists, and who often in the Italian HE context have little or no formal teacher training, requires a sensitive and empathetic approach. It is evident that no single pedagogical course can satisfy all HE teaching contexts and disciplines; similarly, there can be no one course that can be unilaterally effective, given the multifaceted nature of audience\textsuperscript{16}. Considerable flexibility is required by the teacher trainer in fielding the queries and doubts that emerge spontaneously from participants and which can alter the course of a lesson or even lead to modifying the content of successive lessons.

Throughout the course, the tutors make use of the institutional Moodle multimedia platform as e-moderators as a means of publishing course materials, slides, creating homework tasks and inviting lecturers to participate in discussion forums. One task introduced after the initial lesson is for the participants to post their biodata on the platform. This is intended to encourage a sense of community and collaboration amongst the group, and an opportunity for participants to showcase their disciplinary competences as well as practise academic writing skills with their peers. Many of the academic staff on these courses may have had little contact with other departmental colleagues beyond professional duties at the university.

In order to receive their financial bonus, the lecturers must complete ‘Lecturing in English I’ (with 70% attendance) and participate in a final evaluated task which involves preparing and delivering either a twenty-minute portion of a lecture in English or a segment of a course overview of the same length to the class. They are required to provide a written abstract in advance, outlining their proposed lesson for their peers to read. The observations are scheduled over several sessions and all participants must attend as they, in turn, are involved in the evaluation process as peer-reviewers. The lesson observation is designed to obtain feedback from three sources: firstly, the course tutors evaluate the lesson segment considering factors such as its overall impact, the use of visual materials, language, clarity, coherence, organization and handling of questions. Secondly, peer-observers (course participants) complete a basic evaluation form on colleagues they observe. They are asked to comment briefly on their overall impression of the lesson, aspects that were effective and less effective and make suggestions for improvement. The final assessment comes from the observees themselves as they have to complete a post-lesson self-reflection grid immediately after their observed lesson, identifying which aspects of the lesson were successful, and which could be improved.

These three feedback tools allow the tutors to compile a personalised feedback document on the observed lesson which is sent by email to the individual participant (and to administration as proof of course completion). Drawing on teacher trainers’ comments, peer comments and the post-lesson reflection, the final evaluation synthesis provides a comprehensive picture of the participant ‘going live’ in a classroom situation from several

angles. This opportunity for lecturers to teach in front of a familiar audience that is unlikely to be expert in their subject discipline is extremely challenging and stimulates a lively post-observation question and answer session. The peer-assessment element is “dependent on establishing collegial trust and respect,” and not only can participants demonstrate their subject knowledge, language and presentation skills during the observation, but they can attempt to put into practice some of the strategies for EMI teaching that they have encountered on the course.

5. ‘Lecturing in English II’ – digging deeper and problem solving

A second step, ‘Lecturing in English II’ was created in response to a demand from participants who had completed the first course and desired to attend, at least on a weekly basis, a supplementary course tailor-made to their language and pedagogical needs. This follow-up course was launched in 2013-2014. Already in-service and teaching in English (or not, as the case may be), the lessons are solely in the hands of the native speaker language teacher and the course is built around lecturers’ specific requirements as they begin to operate within the realities of EMI. The curriculum emerges from an informal needs analysis so that “Lecturing in English II,” attended on a voluntary basis, with no financial incentive at stake, evolves in response to participants’ real needs. Practical issues such as assessment literacy and assessment types offered on an ETP are discussed, in addition to other pertinent topics such as materials design and development, improving classroom interaction, dealing with large classes, reformulation and paraphrasing strategies and less concrete concerns such as the meeting of student needs and expectations and the new challenges of the multi-cultural classroom. Given the flexible nature of this second course, teacher-fronted lessons are supplemented by seminars given by guest speakers. These invited speakers could be language teaching experts, course participants themselves reporting on their post-training EMI teaching experiences, or colleagues illustrating experiences gained on sabbatical exchanges in Anglophone universities. Possibly the strength of this phase of the ‘Lecturing in English’ journey is the chance to exchange opinions and experiences with colleagues in other departments on the practical delivery of their courses in English. Again, the Moodle platform is used both as an archive of course materials and as a means of facilitating interaction through online tasks and discussion tools.

6. ‘Lecturing in English III’: language improvement and accuracy

The third phase of the cycle, introduced in 2016, has also proved successful as part of ongoing professional development for in-service professors and lecturers in English and other motivated departmental members. ‘Language improvement and accuracy’ was

established after being specifically requested by participants who had taken the first two phases of the cycle as a means of improving language proficiency, but without a specific pedagogical focus.

These sessions could be described as conventional English language lessons with an academic bias. The lessons focus on grammatical structure (with practice), attention to specific pronunciation issues in addition to listening and reading comprehension tasks. Everyday English for academic encounters is also addressed, including the language required in an academic tutorial and the conventions of written academic correspondence in emails. This course is delivered by another native speaker English language teacher from the university language centre and has been well received. It appears that the traditional language lesson, where structures and rules are introduced and/or revisited is stimulating and reassuring. It allows participants to be language students, safe in the hands of a language expert as they gain confidence and competence in the spoken language. It is a particularly important course for participants who may have to teach in English but have weaker language skills and is appealing as a means of maintaining existing language skills, enhancing other skill areas and boosting confidence in using another language in the workplace.

The three-pronged approach to EMI teacher education at UNIMORE outlined above has thus evolved in response to participants’ needs and their enthusiasm in attending courses: first a core co-taught module, a second course emerging from practical teaching needs and a third to improve language skills. Teaching resources for course provision in this context have been sourced from experienced researchers and language teaching staff from the university language centre in collaboration with the Internationalisation office. It shows how the institution itself has been responsive to the emerging needs of the teaching demands of EMI.

7. Participant reactions to ‘Lecturing in English’ courses

Positive reception to the three phases of courses has allowed ‘Lecturing in English’ professional development programmes to become firmly established in the UNIMORE context. It is also important to consider the impact of courses on the participants themselves. Guarda and Helm’s qualitative study18 conducted at the University of Padua provides useful insights into participant reaction following teacher training programmes. The Learning English for Academic Purposes (LEAP) Project, established in Padua in 2013/2014, offered a range of teacher training options to academic staff such as residential summer courses, overseas intensive courses and blended options at home. Analysing data from course feedback and participant interviews, the research focuses on the impact that courses have had on participants’ perceptions and approaches to teaching in English. Several of the themes that emerge from their findings are echoed in some of the informal

reactions obtained at UNIMORE in emails from course participants on receiving their final assessment feedback from the tutors. One theme that is highlighted in the Padua study is the appreciation of the course content and delivery. This is evident from comments made by a course participant in Modena:

Many thanks to both of you for your efforts in building this unique course! I would like to express my general satisfaction for my results. I know I can improve my English and I’ll try to do it. (Lecturing in English I, 2017)

Similarly, another participant appreciated the methodological input on the UNIMORE course:

I am aware to be a good teacher...in my mother tongue...and applying some teaching strategies I am able to annul some gaps in my English teaching. However, by studying and attending CLA\(^9\) courses, with the help of persons like you, I hope I can do it. (Lecturing in English I, 2016)

Other soundbites expressing ‘appreciation’ and didactic enrichment mention the word ‘tricks’. This would appear to refer to strategies and techniques learned on courses in integrating “tricks of the craft into my repertoire,” and how it was useful to “use all the tricks I’ve learned in our class.” While not embracing a huge pedagogical shift, they do acknowledge a need to modify teaching practice.

Another point raised in Guarda and Helm’s findings is the awareness of a common interest in working together as course participants and in creating a Community of Practice (CoP). This is repeated in Modena’s feedback, for example:

I also found the course very interesting because it allows/forces people from different departments to work side by side thus stimulating cross-fertilization. (Lecturing in English I, 2017)

I really enjoyed attending your class. Perhaps, from my ‘learner’ perspective, the small number of attendees was a good point, since this increased the chance to interact with you and with the other colleagues. (Lecturing in English, II, 2017)

On completion of ‘Lecturing in English’ courses, some participants have voiced the need to have individual English lessons to improve language proficiency or one-to-one tutorialsto review course programmes and materials in English. Overwhelmingly, lecturers and professors have signalled the opportunity to continue with courses, either with a methodological component or a language improvement focus. A final point in common with the above-mentioned research is the desire “to nourish the need to receive support

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\(^9\) Centro Linguistico dell’Ateneo (University Language Centre), University of Modena and Reggio Emilia.
and guidance” which concurs with the LEAP Project findings. A further two quotes from UNIMORE illustrate this:

It was my pleasure to take the class [...] I do hope to have similar opportunities in the years to come (Lecturing in English II, 2016)

I really hope to have new occasions for sharing teaching experiences with you and especially for being again your student, given that I fill the need of improving my English. I really hope that our University will be able to replay and also enlarge the experience of English teaching for professors and teachers. (Lecturing in English I, 2017)

Comments emerging from UNIMORE course participants, together with findings from Guarda and Helm’s study help course providers understand the common concerns of their lecturers and professors throughout their EMI training as well as gauging the impact of the courses. However, one theme that emerges from UNIMORE is a lingering sense of insecurity regarding language proficiency, which may only be overcome by continuing to participate in ongoing professional development courses which aim to instil more self-confidence in teaching content through language.

Informal feedback is useful for informing the course tutors on how to proceed and in providing impetus for expanding these professional development programmes; however, implementing a formal course feedback mechanism would be highly beneficial.

8. What is the ‘lingo’ of the teacher trainer? Reflections on professional identity

Teacher education initiatives appear not to be widespread in the Italian HE sector, although at present there is a clear demand to embrace this need as EMI grows apace. It is evident that “special training is important when new pedagogies have to be implemented, as is the case with the integration of content and language,”20 and universities such as Modena and Reggio Emilia, the Universities of Padua, Urbino and Sienna have been active in developing ongoing professional development programmes and services21. On a wider scale, institutions such as the British Council offer Academic Teaching Excellence Courses worldwide, in collaboration with the University of Oxford22 and teacher trainers delivering such courses undergo specialist in-house training. Increasingly, online training options are becoming widespread, eliminating the physical presence of the teacher trainer or engaging them as external collaborators or online facilitators. Cambridge English’s Certificate in

20 I. Fontanet-Gómez, CLIL in Higher Education Towards a Multilingual Language Policy, Multimedia Matters, Bristol 2013, p. 166.
21 F. Costa, RiCOGNIZIONI..., p. 132.
EMI skills\textsuperscript{23} consists of purely online training modules (with optional face-to-face seminar sessions) for EMI practitioners. This suggests that online and blended courses may become the most cost-effective and practical solution for HEIs in the future.

As mentioned previously, the concept of a ‘lecturing lingo’ in the title of this study not only refers to the obvious challenge of language involved in the multilingual HE teaching and learning environment, but it is evident that there is another strand or narrative to the ‘lingo’ involved in this field, that of the EMI teacher trainer in HE, a relatively new teacher training profile.

While in any institution there will be variables regarding funding, available teaching resources and institutional language policy, we may assume a desirable skill set for those involved in lecturer training. In Italy, institutional issue concerning hierarchy may prevent a native speaker language teacher from being involved in lecturer training. As such, it is not uncommon for experienced academic staff members or external training consultants to be engaged to provide pedagogical seminars or input sessions in their native language, rather than involving an English language teacher. Since there is little pedagogical training available for Italian academics, offering courses in pedagogy in the Italian language may be regarded as a short-term solution.

However, it could be argued that the task of guiding HE teaching staff through the EMI ‘lingo’ into a new linguistic and pedagogic dimension may be more successful if experienced language tutors are involved. Given the challenges of EMI contexts, there may be certain optimal teacher trainer credentials required to perform this role. A native or non-native speaking teacher trainer should be an experienced teaching practitioner in a multilingual setting, ideally with teacher training experience, and possibly with an awareness of CLIL\textsuperscript{24} (Content and Language Integrated Learning) methodology. An understanding of the rigour of the academic community would be key and while not necessarily expert in any content area outside language teaching, the trainer should be aware of the diverse nature of pure and applied academic disciplines and the discourses therein.

From an English language teaching perspective, one avenue would be to harness the experience of qualified teacher trainers in teaching English as a foreign language (TEFL) and apply it to EMI training contexts. As the demand to train EFL (English as a Foreign Language) teachers grows worldwide, so does the need to equip trainers with TEFL training qualifications from institutions such as Cambridge University for courses leading to the Certificate in English Teaching to Adults (CELTA)\textsuperscript{25} and the more advanced Diploma in English Teaching to Adults (DELTA)\textsuperscript{26}. These CELTA and DELTA trainers are experienced EFL teachers and have considerable knowledge of language teaching methodology and the


skills required to manage the communicative language classroom. This training expertise could be harnessed to the needs of EMI teachers in universities. Additionally, the trainer’s skills need to encompass the intricacies of any local HE setting, as well as international HE models. Not only should they be aware of conventions and protocols of academic language, other skills such as curriculum design, materials development and assessment literacy need to be part of the skill set. More recently, with the increase in use of VLE (Virtual Learning Environments) and the adoption of multimedia tools in teaching and learning, the ideal EMI teacher trainer will need to embrace online teaching and moderating, be competent in using multimedia applications, act as a communicative model and, above all, be able to show sensitivity, tact, flexibility and empathy. What is fundamental is that teacher trainers support their EMI students and obtain feedback on the training courses they offer in order to negotiate a safe middle ground and avoid “methodological culture clashes”.

One experienced CELTA, DELTA and EMI teacher trainer, Brigid Nugent remarked that it is vital to assess “the university’s goals, the professors’ goals and the trainers’ goals – many don’t reflect real immediate needs and there is the temptation for the trainer to give quick fixes”. Clearly, more reflection is needed on the role of the EMI teacher trainer in the foreseeable future on a local and international level. On a local level, UNIMORE, as seen from this brief study, has drawn on in-house expertise from language teachers and research experts in developing their professional development courses, but any HE context must seriously assess the needs of their academic teaching staff in the internationalization of curricula and offer appropriate teacher development programmes, according to their budget and available resources.

9. Conclusions and future directions

The University of Modena and Reggio Emilia, as an expanding HE institution in northern Italy, is undergoing an ambitious internationalization programme. This is an exciting time for UNIMORE as the growth in English taught postgraduate degrees shows a thrust in offering an increasingly international curriculum. The language centre, together with the Internationalisation office, are attempting to meet the needs of a growing number of academic staff who are teaching their content through English with a series of teacher training courses entitled ‘Lecturing in English’, which have met with considerable success since their launch in 2011. In Modena and Reggio Emilia, plans for organising annual residential summer school for lecturers to fine-tune their language and teaching skills and a ‘Help Desk’ service are real future possibilities in order to extend the teacher development programme, provide ongoing institutional support and encourage a community of practice. Already in the Department of Engineering, UNIMORE, an action research project is under way on the English taught degree in Electronic Engineering, where lecturers are

28 Personal communication: 29 September 2017.
taking part in an peer-observation initiative designed to promote inter-departmental reflection on its teaching practice and to instil a community of practice.

It is a challenge to offer any methodological course that meets all linguistic needs, suits teacher beliefs and multi-disciplinary contexts. However, it is clear that university students, as stakeholders, are demanding high quality teaching and strong language skills from their lecturers in an increasingly international classroom – as well as transparency and fairness of assessment and good course organisation\textsuperscript{29}. It is hoped therefore that with our Lecturing in English programme, UNIMORE is making some headway in mastering the ‘Lecturing Lingo’.

**Metadiscourse in EMI lectures: Reflections on a Small Corpus of Spoken Academic Discourse**

Susanna Broggini, Amanda C. Murphy*

This paper describes a qualitative study on the use of metadiscourse in EMI university courses. It adopts Noble’s simplified and restricted classification model of metadiscourse markers, adapted from Ådel’s, focuses on reflexive language and is applied to academic spoken discourse.

*Keywords:* Metadiscourse, discourse analysis, academic spoken discourse, corpus-based study, qualitative research

**Introduction**

The spread of English as the working language in so many of the first world countries is undeniable. It generates the most diverse reactions, from enthusiasm to complete rejection, and raises both linguistic and political issues. Within Europe, the use of English can be observed in many domains, tertiary education being one: with the creation of the European Higher Education Area (EHEA), the need for an academic lingua franca to facilitate communication beyond national borders has contributed to the increased use of English as a teaching language across European universities. To enable institutions to be competitive and attract international students, English-medium course programs are now widely established at both undergraduate and postgraduate levels throughout Europe.

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*This paper was developed equally by both writers; Broggini is responsible for pages 81-88; Murphy for 75-80, 89-90.


This study of the use of English metadiscourse markers in lectures is part of a broader study of academics who teach their subject through the medium of English. It reflects interest in the ongoing educational debate about English as a medium of instruction in academic settings. In such a context, it appears both reasonable and relevant to examine the nature of this type of English and the way it is used in the university context. The study is borne out of the need to investigate the Italian situation in particular, where many tenured lecturers find it demanding to deliver their lectures in English.

As a focus of the analysis, the spoken language of the Italian lecturers who use English as a medium of instruction is explored in terms of the role and function of metadiscourse markers in their lecture discourse. A mixed methods research methodology, following both a corpus-based and qualitative approach, is adopted. Traditionally studied in written discourse, metadiscourse is being increasingly examined in spoken language and English-Medium Instruction (EMI) lectures represent an innovation on the research landscape. The novelty of focusing on the spoken academic discourse of non-native speakers responds to the practical, pedagogical needs of the current international Higher Education context. With the results of this study we intend to provide insights into the use and function of metadiscourse markers in the academic lectures delivered in English by non-native speakers.

2. Defining Metadiscourse

The term metadiscourse, suggested by Lyons for language about language, has been extensively used to indicate various non-propositional elements that contribute to the organisation of text. Although, as Mauranen points out, the capacity of language to refer to itself has been debated by illustrious linguists, the concept of metadiscourse has recently become “a highly dynamic topic in text/discourse research” and one of the major subjects of discourse study. Since the pioneering works by William Vande Kopple and

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9 A. Mauranen, Cultural Differences in Academic Rhetoric: A Textlinguistic Study, Peter Lang, Frankfurt am Main 1993a, p. 112.
10 A. Mauranen, Discourse Reflexivity - A Discourse Universal? The Case of ELF.
11 A. Adel, Metadiscourse in L1 and L2, John Benjamins, Amsterdam/Philadelphia 2006, p. 3.
Avon Crismore\textsuperscript{13}, this line of research has evolved to cover whatever is separate from the ‘primary’ discourse\textsuperscript{14}, the ‘topical’\textsuperscript{15} text matter, the ‘propositional content’\textsuperscript{16}, or in terms of Halliday’s theory\textsuperscript{17}, the ideational metafunction of language\textsuperscript{18}.

Although all researchers agree on its core conceptualisation, considering it as “discourse about discourse”\textsuperscript{19}, the principal topic of discussion has focused on the conceptual boundaries of the field and the possible methodological ways of identifying all forms of metadiscourse\textsuperscript{20}. Two different traditions, with diverse definitions and distinct approaches\textsuperscript{21}, have developed to study metadiscourse. The first so-called broad definition of metadiscourse is adopted based on “the ways speakers and writers project themselves into their discourse to signal their understandings of their material and their audience”\textsuperscript{22}, and “the linguistic resources used to organize a discourse or the writer’s stance towards either its content or the reader”\textsuperscript{23}. The second so-called narrow definition is chosen when researchers restrict the concept of metadiscourse to features that contribute to organizing the text as a text (i.e. the elements of discourse that signal its direction, purpose, and internal structure).

In the first definition, \textit{textual interaction} is seen as central to the category, while \textit{reflexivity} is recognised as the second cardinal characteristic\textsuperscript{24}. According to these two delimitations, the first tradition is classified as “integrative”\textsuperscript{25} or as “the interactive model”\textsuperscript{26}, and the second as “reflexive”\textsuperscript{27} or “the reflexive model”\textsuperscript{28}. Besides the terminological labels assigned to the different research positions, two main approaches can be recognized as

\begin{itemize}
\item \textsuperscript{13}A. Crismore, \textit{The rhetoric of textbooks: metadiscourse}, "Journal of Curriculum Studies", 16, 1984, pp. 279-296; Ead., \textit{Metadiscourse: what is it and how is it used in school and non-school science texts}, University of Illinois, Urbana-Champaign 1983.
\item \textsuperscript{16}A. Mauranen, \textit{Metatext in Finnish – English Economics texts}, "English for Specific Purposes", 12, 1993b, 1, pp. 3-22.
\item \textsuperscript{17}M. A. K. Halliday, \textit{Spoken and Written Language}, Deakin University Press, Geelong, Vic 1985.
\item \textsuperscript{18}A. Mauranen, \textit{Discourse Reflexivity – A Discourse Universal? The Case of ELF}, p. 14.
\item \textsuperscript{20}\textit{Ibidem}.
\item \textsuperscript{21}A. Mauranen, \textit{Cultural Differences in Academic Rhetoric: A Textlinguistic Study}.
\item \textsuperscript{25}A. Mauranen, \textit{Cultural Differences in Academic Rhetoric: A Textlinguistic Study}.
\item \textsuperscript{26}A. Ädel, \textit{Just to give you kind of a map of where we are going: A Taxonomy of Metadiscourse in Spoken and Written Academic English}.
\item \textsuperscript{27}See note 22.
\item \textsuperscript{28}See note 23.
\end{itemize}
usually corresponding to the two traditions. Mauranen and Ådel refer to them respectively as the “thin” and the “thick” approach, describing the former as more quantitatively oriented and the latter as qualitatively focused. Figure 1 illustrates these labels in a table. However, a single approach is rarely adopted and several studies combine both.

Table 1. Approaches to studying metadiscourse

<table>
<thead>
<tr>
<th>Broad Textual interaction</th>
<th>Narrow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrative; integrative model</td>
<td>Reflexivity</td>
</tr>
<tr>
<td>Thin</td>
<td>Reflexive, reflexive model</td>
</tr>
<tr>
<td>Quantitatively oriented</td>
<td>Thick</td>
</tr>
<tr>
<td>Qualitatively oriented</td>
<td></td>
</tr>
</tbody>
</table>

Thus several metadiscourse classification systems have been proposed over time, but one crucial distinction between systems lies in the consideration of evaluation as part of the concept of metadiscourse. Evaluation concerns linguistic material that expresses the speaker’s attitude towards what is said, and according to Ådel, it can be used as equivalent to ‘stance’, which expresses “personal feelings, attitudes, value judgements, or assessments”. The distinction between the broad and the narrow definitions lies in the inclusion or exclusion of evaluation in the concept of metadiscourse. In this respect, Ådel proposed a functional model based on four of Roman Jakobson’s six functions of language, as shown in Table 2.

Table 2. Ådel’s model of metadiscourse (2003) including four Jakobsonian functions.

<table>
<thead>
<tr>
<th>Function</th>
<th>Speech event component</th>
<th>Refers to...</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a)</td>
<td>Metalinguistic</td>
<td>text/code</td>
</tr>
<tr>
<td>(b)</td>
<td>Expressive</td>
<td>writer</td>
</tr>
<tr>
<td>(c)</td>
<td>Directive</td>
<td>reader</td>
</tr>
<tr>
<td>(d)</td>
<td>Referential</td>
<td>world/‘context’</td>
</tr>
</tbody>
</table>

30 Ibid., p. 4.
32 A. Ådel, The Use of Metadiscourse in Argumentative Writing...
33 Ibid., p. 39.
Ådel observed that one or more of Jakobson’s functions are prevalent in metadiscourse, with the metalinguistic function being crucial and indispensable. The resulting model of metadiscourse illustrates the functions with respect to each other (seen in Figure 1); it can also be used for studies on evaluation, since the model draws a distinction between evaluation and metadiscourse.

The partial overlap between metadiscourse and evaluation, as illustrated in Figure 1, shows that in evaluation the metalinguistic function (code/text) is not activated, while the referential one (context) is stressed, and the expressive function is indispensable (writer). Ådel shows that in evaluation, the writer and the reader are not seen in relation to the current text but as “experiencers in the ‘real world’, about which they possess feelings and opinions”\textsuperscript{36}. Although, as identified by Mauranen\textsuperscript{37}, the most important aspect of metadiscourse is its reference to the current text or the writing process, according to Ådel the reader of a text is not the only necessary reference to be observed. For this reason, Ådel’s reflexive model expands the notion of metadiscourse from the text to the writer of the text and the imagined reader as two other relevant components of the writing process. The distinguishing factor between metadiscourse and evaluation is precisely the reference to the writer\textsuperscript{38}.

The definition of metadiscourse adopted in the present study is that of the narrow (thick) restricted model, adapted from Ådel\textsuperscript{39} and proposed by Noble\textsuperscript{40} in which self-reflexive language is the distinguishing feature of the type of metadiscourse investigated. In other words, metadiscourse here concerns the speaker’s “commentary on the running text”\textsuperscript{41} referring to “references made by the speaker about him- or herself, to the hearer

\textsuperscript{35}A. Ådel, \textit{The Use of Metadiscourse in Argumentative Writing}…, p. 90.
\textsuperscript{36}Ibid., p. 2.
\textsuperscript{37}A. Mauranen, \textit{Cultural Differences in Academic Rhetoric}…
\textsuperscript{38}A. Ådel, \textit{The Use of Metadiscourse in Argumentative Writing}…, p. 76.
\textsuperscript{39}A. Ådel, \textit{Metadiscourse in L1 and L2}; Ead., \textit{Just to give you kind of a map of where we are going}…
\textsuperscript{41}A. Ådel, \textit{The Use of Metadiscourse in Argumentative Writing}…, p. 74.
or about the text at hand, but not about the world ‘outside’ the text”[^2]. In our opinion, the adoption of the reflexive model enabled the setting of clear criteria for the identification of metadiscourse markers; for this reason it was considered a useful tool to clarify the ambiguity connected to the study of this area.

To summarise, reflexivity is a relative concept, since some parts of the text function as metatext only in relation to the rest of the text. A “metadiscourse marker” in the present study is understood as an element employed by the speaker to talk about or structure the text (Firstly... This lesson will...), to capture the attention of the audience (I will talk about... as we have already seen), or to reflect or comment on the text (otherwise, however, next, consequently).

3. Research questions

As Flowerdew observed, “knowledge of the linguistic/discoursal structure of lectures will be of value to content lecturers in potentially enabling them to structure their own lectures in an optimally effective way.”[^3] This understanding of the important role of the structure in academic lectures becomes even more crucial in the case of lectures delivered in English as a lingua franca to international students. Indeed, the novelty of the investigation lies in the setting under scrutiny, which is that of academic spoken English when used as the medium of instruction by Italian lecturers.

Given the importance of metadiscourse markers, both for the lecturers in the way they deliver their lesson, and for the students in understanding the stages of the lesson, this study concentrates on the following specific questions:

- **RQ1**: Which metadiscourse markers are employed most frequently by Italian EMI lecturers?

- **RQ2**: Do the EMI lectures contain a similar amount of personal and impersonal metadiscourse?

(Personal metadiscourse expressions are self-mentions while impersonal metadiscursive expressions include connectives, frame markers, and code glosses.) Such a distinction might allow us to observe the means a lecturer chooses in attempting to lead the audience through the discourse and the way he or she presents him or herself to the audience[^4].

4. Method

The analysis of the role and function of metadiscourse markers in Italian EMI lecture discourse was carried out by means of a close, qualitative (or narrow and thick) analysis of elements found in a corpus of lectures. A list of the search terms selected for this study was

produced by drawing on important reference works, Quirk et al.\textsuperscript{45}, Biber et al\textsuperscript{46}, Ädel\textsuperscript{47} and Hyland\textsuperscript{48}.

4.1. Corpus-based research and study sample

Parallel to the rapid development of large corpus studies, a focus on the analysis of small textual corpora has also emerged. The corpus (illustrated in Table 3) consists of four lectures that were audio recorded and transcribed by hand. The lectures were delivered in the Business and Management and International Relations degree courses at a private university in Northern Italy, within Masters’ programmes. Lectures in these subjects were chosen based on the international role and relevance of their topics, and it was agreed with each lecturer that a minimum of three academic hours\textsuperscript{49} should be recorded. All the four lecturers were native speakers of Italian, three male and one female. Unofficially, we were informed that no evidence of a minimum level of English is required from teachers who volunteer or are asked to participate in these EMI programmes. In the case of the four professors taking part in this study, no English language certification of their level was provided to the University: an adequate level of English was simply self-certified by the lecturers themselves.

Study sample

<table>
<thead>
<tr>
<th>Lecturer and course level</th>
<th>Topic</th>
<th>Length in words</th>
<th>Length of lecture in minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>native Italian – second level degree (laurea magistrale) in Economics</td>
<td>Financial accounting and analysis (advanced)</td>
<td>10,111</td>
<td>169</td>
</tr>
<tr>
<td>native Italian – master in Middle Eastern Studies</td>
<td>Regional Studies</td>
<td>16,169</td>
<td>192</td>
</tr>
<tr>
<td>native Italian – second level degree (laurea magistrale) in Economics</td>
<td>Change management</td>
<td>10,801</td>
<td>138</td>
</tr>
<tr>
<td>native Italian – second level degree (laurea magistrale) in Economics</td>
<td>Political and Public Economics</td>
<td>13,491</td>
<td>153</td>
</tr>
</tbody>
</table>


\textsuperscript{47} A. Ädel, \textit{Metadiscourse in L1 and L2}, p. 113-114.


\textsuperscript{49} In the Italian university system, fifteen minutes of the hour are known as “the academic quarter of an hour” (quarto d’ora accademico). This indicates that a “teaching hour” is made of a forty-five minute session of student academic activity. The remaining 15 minutes give lecturers and students time to move from one classroom to another.
Table 3. Details of the corpus of EMI Lectures.

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of words</td>
<td>45,886</td>
</tr>
<tr>
<td>Average length of lecture in words</td>
<td>11,300</td>
</tr>
<tr>
<td>Average length of lecture in minutes</td>
<td>163</td>
</tr>
</tbody>
</table>

5. Analysis

For the purposes of this analysis, we have used a simplified classification model of metadiscourse markers in the written language proposed by Noble\textsuperscript{50}, adapted from Ådel\textsuperscript{51}, which focuses on explicit reflexive language. As suggested by Ådel’s subsequent study\textsuperscript{52}, the model has been adapted to analyse two macro-categories, namely personal and impersonal metadiscourse. The four subcategories, illustrated in Figure 2, are:

a) Connectives  
   Logical connectors: e.g. therefore, in addition, however
b) Frame Markers  
   Sequencing: e.g. first, second, then  
   Label stages: e.g. finally, to conclude
c) Code Glosses: e.g. call, define, mean, i.e.
d) Self-mention: I, we, my, our

In order to examine the reflexive (metadiscourse) markers that normally occur in EMI lectures, the analysis was divided into three stages, textual-manual, computer, textual-manual. First of all, the transcriptions were read and recurrent markers were identified. These markers were subsequently sought in the text systematically by using the concordancer\textsuperscript{53}, and the number of their occurrences was checked. Thirdly, each individual token was analysed within its linguistic context to ensure it played the assumed metadiscoursal role. In the third stage, the metadiscourse markers were divided into personal and impersonal markers and their frequency observed.

A combination of two types of textual analysis was chosen, since computational and manual methods together can provide a more complete description of how a lecture is delivered. However, although it could be argued that corpus linguistics methods offer the researcher a considerably higher degree of objectivity, we found

\textsuperscript{50} W. Noble, Understanding Metadiscoursal Use...
\textsuperscript{51} A. Ådel, The Use of Metadiscourse in Argumentative Writing...
\textsuperscript{52} Ibidem.
\textsuperscript{53} The concordancing software used was AntConc 3.4.4 (Laurence Anthony, 2016).
that subjective researcher contribution is undoubtedly involved at almost every stage of the analysis, as has been demonstrated in the literature. \(^{54}\)

6. Findings

Internal organisational patterns which structured information in the lecture corpus through the use of metadiscourse markers were analysed, with a focus on the categories of a) connectives, b) framing, c) code glosses and d) self-mentions. Overall, it was noted that in general non-native lecturers’ spoken language does not present a wide range of types, with the most frequent type being self-mentions. The lecturers demonstrate significant use of a limited variety of connectors, and rarely use framing and code glosses. By contrast, the data show heavy reliance on self-mentions.

The six most frequent metadiscourse markers from the four categories were chosen for analysis, since we attempted to discover which metadiscourse markers are most used by EMI lecturers and, subsequently, if the markers are personal or impersonal. In this case, the data collection process was partially objective, since occurrences were found using the concordance, and partially subjective, since each occurrence was examined in context, and only the occurrences of metadiscourse were chosen for analysis.

6.1 Connectives

Relatively few connectives were found in the corpus. We expected that spoken language, constrained by the limitations established by short-term memory, would present a higher number of connectives as signs, ‘prints’ of the cognitive process “underlying the production process”\(^ {55}\). The data overturns these expectations and seems to suggest that connectives are not used much in the English spoken by non-native academic lecturers, although they may be used more for formal or academic writing. Compared to previous studies\(^ {56}\), where corpora showed heavy reliance on a range of connectives in writing, the present study reported minor use of connectives in speaking.

The most frequent connectives found in the EMI lecture corpus are reported in Table 4.

\(^{56}\) Ibidem; A. Adel, *Metadiscourse in L1 and L2*; W. Noble, *Understanding Metadiscoursal Use*. 
Table 4. Frequency of connectives in the lecture corpus
(Total number of words of the corpus 45,886)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Connectives</th>
<th>Occurrences per thousand words</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>But</td>
<td>201</td>
</tr>
<tr>
<td>2.</td>
<td>For example</td>
<td>34</td>
</tr>
<tr>
<td>3.</td>
<td>Instead</td>
<td>16</td>
</tr>
<tr>
<td>4.</td>
<td>However</td>
<td>15</td>
</tr>
<tr>
<td>5.</td>
<td>Therefore</td>
<td>11</td>
</tr>
<tr>
<td>6.</td>
<td>In any case</td>
<td>9</td>
</tr>
</tbody>
</table>

The marker but was by far the most frequently used and, in the case of one lecture, the only one employed. It is worth noting that while but expresses oppositional/contrastive relations between two events or pieces of information\(^\text{57}\), the second most frequently used connective, for example, belongs to the appositive category and consequently has to be looked at in relation to all the items that have gone before\(^\text{58}\). A lecturer’s reliance on one connective, rather than being indicative of the quality of his/her spoken language, suggests familiarity with it and disregard for other kinds of connectives. Moreover, it is worth noting that the three connectors most heavily relied on in the four lectures of the EMI lecture corpus all belong to the contrastive type: but, instead and therefore. These connectives provide direction for the audience and are central in academic discourse as a means of assisting readers to understand how the writer links the argument\(^\text{59}\). In this sense, both items qualify as reflexive metadiscourse markers since they refer to the characteristics that explicitly direct the audience through the lecture and speaker-audience interaction. In using these connectives, the speaker reveals his/her intentions or extends the reference to the text to the audience. The main overall results show that the EMI lecture corpus relies on a small set of connectors in speech.

6.2 Frame markers

The entire category of frame markers was defined by Hyland as markers used to sequence parts of the text or order arguments in the text\(^\text{60}\). Within this category of metadiscourse markers, only two sub-groups were studied in this research, in compliance with Noble’s


\(^{59}\) K. Hyland, *Metadiscourse: Mapping interactions in academic writing*.

study: sequencing (e.g. first, second, then) and stage labels (e.g. finally, to conclude). To compile a list of these metadiscourse markers, both Ådel and Hyland were consulted.

As for logical connectives, a few different frame markers were identified in the corpus, and the results also show a low frequency. Among the frame markers found are the classic framing sequencers, such as first, last, second, first of all and third, which are text-oriented, since they fulfil the function of announcing informational focus and then narrowing it down. It is significant to note that the data indicates greater reliance on frame markers in the case of the lecture on financial accounting and analysis, where a significant number of tables, lists and diagrams were used throughout the lecture. It seems reasonable to suggest that where graphical representations are more copious, frame markers are more frequently applied, their presence in the form of ordinal numbers being particularly notable.

6.3 Code glosses

Code glosses are used to explain or deepen what has just been said by the speaker, and in our case, the lecturer. These elaborations contribute to the production of a well-organized and audience-friendly discourse. Code glosses provide signals for the appropriate interpretation of the elements in the discourse. Quirk et al. categorised this category as ‘style disjunct’ where the majority of the examples are represented by adverbials (e.g. honestly, seriously). The results show that code glosses are infrequently used in the lecturer corpus. If we consider that this type of marker provides extra explanations through rephrasing, explaining or illustrating, it is interesting to observe their rare use by the four lecturers. According to Noble, academic lectures should represent a moment of “topical development” where ideas are examined in depth, examples are given and complexity is elaborated. It is interesting to note that results showed a high frequency of participant-oriented metadiscourse, with the markers that is and called the most frequently used in the corpus. The function of these markers is in fact that of clarifying, i.e. specifying the meaning of textual material in order to avoid misinterpretation. Sometimes it seemed that the lecturer realized that something was missing from the current explanation. All in all, as with frame markers, the study of code glosses suggests that although monologic lectures are predominantly informative, they also favour some dialogism, depending on the way lecturers reconstruct experience and negotiate it with the students.

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61 W. Noble, Understanding Metadiscoursal Use...
62 A. Ådel, Metadiscourse in L1 and L2.
66 W. Noble, Understanding Metadiscoursal Use..., p. 162.
6.4 Self-mentions

Personal metadiscourse directly refers to the speaker and/or hearer of the current speech, through the use of pronouns (I, we and you and their possessive and oblique forms) and nouns (speaker or hearer)\(^{67}\). The most frequent self-mention markers found in the lecture corpus are reported in Table 5 below.

Table 5. Frequency of self-mention markers in the lecture corpus (Total number of words of the corpus 45,886)

<table>
<thead>
<tr>
<th>Rate</th>
<th>Self-mentions</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>We</td>
<td>382</td>
</tr>
<tr>
<td>2.</td>
<td>You</td>
<td>334</td>
</tr>
<tr>
<td>3.</td>
<td>I</td>
<td>224</td>
</tr>
<tr>
<td>4.</td>
<td>Us</td>
<td>39</td>
</tr>
<tr>
<td>5.</td>
<td>Our</td>
<td>34</td>
</tr>
</tbody>
</table>

The pronoun we was the most frequent self-mention marker in the corpus (382 occurrences) and the clearest indication of speaker presence. The metadiscoursal meaning of we was inclusive, as in ‘you and me’\(^{68}\) since it refers to the writer and reader. The inclusive use of the first-person plural pronoun evokes a sense of commonality and rapport between a speaker and his/her audience. By contrast, an exclusive we deliberately does not include the audience, it is not group cohesive, and for this reason its occurrences were excluded from this research.

Extract for inclusive we.

ok (. ) let me say two things first (. ) **we are going to close this course next week**

Extract for exclusive we.

*but on the other hand very often this is not the distribution you would expect (. ) as I told you we are spending a lot of money not for the poor people (. ) we are spending for the young pensions (. ) that is in Italy (. ) same in other countries (. )

The extracts taken from the corpus appear to be particularly significant, since in English the distinction between inclusive and exclusive is not made grammatically different forms of the pronoun. For this reason, context and additional wording (such as explicitly inclusive phrasing such as “we all” or “let’s”) play a crucial role in distinguishing the two forms.

The results show a lower incidence of the other first person plural pronoun analyzed in the corpus, us. While the subject pronoun we was used very frequently throughout the corpus, the object pronoun us is less frequent, being used only 39 times in total. Its function is explicitly participant-oriented and us was often used in the introduction and conclusion sections, i.e. when the speaker’s and audience’s positions tend to align by sharing the lecture’s common goals and final considerations. The pronoun us mostly occurred in participant-oriented cases, where the speaker’s attempt to invite the audience to share

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\(^{67}\) A. Ädel, *Metadiscourse in L1 and L2*, p. 47.

\(^{68}\) W. Noble, *Understanding Metadiscoursal Use...*, p. 163.
similar lines of thought (it is important to understand that...) is made explicit. Despite its low occurrence, it is significant to note that this personal pronoun often followed verbs such as allow, or was found within metadiscursive units such as it is relevant for all of us. The first person plural marker our was the sixth most frequent marker. Its frequency rate was very similar to that reported by us. However, there are relevant differences in the use of these self-mentions, since the word our is often used when the lecturer tries to align with the audience perspectives (in our knowledge of...). To sum up, a possible explanation for the use of the possessive adjective our seems to lie in the fact that in a spoken setting, participant-oriented functions allow the speaker to express a more persuasive presence. Overall, the results indicate that the subject pronoun we, the object pronoun us and the possessive adjective our are frequent in the corpus, although to varying degrees.

The pronoun you was the second most frequently used self-mention marker in the whole corpus, employed 334 times. Throughout the corpus, the pronoun you seemed to perform discourse ‘management’ purposes, contributing to the effective presentation and organisation of the discourse. You can indeed be considered as a warning to the audience every time something new is coming or needs to be given their full attention. Furthermore, it can also invite the audience to actively participate in the lecture. Undoubtedly, the use of the metadiscursive you adds conviviality to lectures and makes the speech less objective, sharing features of informal conversational events. It is also noticeable that the self-mention marker you is used for summary and recapitulation. In other words, you helps to focus students’ attention on the content of the lectures. Examples of reformulation markers were also found in the corpus.

7. Overall comments and conclusion

The objectives of the present research project comprise the analysis of metadiscourse features, namely metadiscourse markers, and the way they are used in the genre of lecture within the spoken discourse of English-medium instruction in Italy.

The goal of this study was precisely to analyse the use of metadiscourse markers in a corpus (45,886 words), consisting of four lectures recorded and transcribed for the purpose of the present research. The primary aim was to observe and understand how non-native English lecturers express certain concepts and if they underuse or overuse specific elements when the lecture is delivered through the medium of English. An overall observation of the results obtained from the study of the corpus revealed that, as an academic lingua franca, English represents an interesting field for the study of aspects of discourse that do not rely on interlocutors sharing linguistic or cultural knowledge. This is not a contrastive study. Thus, no comparison is made with native speakers, since the focus is on the communicative efficiency of lingua franca speakers and the academic setting together, rather than on language contact (Mauranen 2010). The data seems to suggest discourse

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reflexivity as one of the explicitness strategies employed by Italian academics who deliver their lecture through the medium of English. This study demonstrates that analysing monologic lectures delivered in English as an academic lingua franca reveal important uses of metadiscourse that share features of informal conversational events, despite their formal and planned nature.

The main conclusion to be drawn from this research relates to the comparison between the use of personal and impersonal metadiscourse in the EMI lecture corpus, i.e. metadiscourse items that refer explicitly to the speaker and/or the audience and those in which the reference is only implicit⁷⁰. The principal finding is that the number of personal metadiscourse tokens surpasses the impersonal counterpart. Surprisingly, the use of connectives, frame markers and code glosses was not frequent in the corpus in comparison to self-mentions. As regards connectives, the four lecturers of the present study seemed to generally underuse them and this is similar to the results of other studies, including those of Altenberg and Tapper⁷¹.

The discourse actors are highly present in the corpus and their visibility seems to confirm the general tendency observed. In other words, the four Italian EMI lecturers taking part in the study seemed to produce informal and personal discourses, since they seemed to be inclined to explicitly indicate their presence and so their awareness of the situation. As already mentioned, according to Samson⁷², the case of self-mentions is particularly significant since it indicates how a lecturer positions him/herself in the discourse and his/her perception of the relationship with both the audience and the discipline.

The use of the self-mention you seemed to contribute to the construction of a more convivial and subjective rather than formal and objective style of lecturing. All in all, the use of self-mentions seemed to confer a more conversational disposition to the monologic lecture. This is in line with the consideration of Dudley-Evans⁷³ on the conversational nature of lectures (as opposed to a speech), where the topic has been previously prepared, and some interaction with the students is allowed by lecturers. One of the four lectures could reasonably be considered interactive due to the periods dedicated to collective exercises. In general, in contrast to the reading style and the rhetorical style⁷⁴, the lecturers forming the EMI lecture corpus presented a significant number of false starts and repetitions that, although beyond the scope of this dissertation, characterized the genre of lecture under examination as spontaneous and informal. The heavy reliance on the use of personal metadiscourse is in fact the main pattern found in the analysis. Lecturers explicitly indicate how they want their students to understand their ideas through the use of reflexive metadiscourse markers and they give the impression of facilitating an informal chat, rather than a more formal argumentation, by using personal metadiscourse, i.e. self-mention

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⁷² C. Samson, *Negotiating academic knowledge*...
⁷³ A. Dudley-Evans, *Genre analysis: an approach for text analysis for ESP*.
markers. In conclusion, it seems possible and appropriate to speak about “personalisation” to describe the academic English spoken by the four Italian lecturers under review.

8. Possible pedagogical implications

Previous studies on English as a lingua franca (ELF) agreed on the assumption that communicative effectiveness depends more on the ability to use metadiscursive strategies than on formal language skills, since native-speaker standards should not be used for ELF speakers\textsuperscript{75}. Although more recent research exploring the EMI lecturers’ ability to convey their message effectively\textsuperscript{76} showed a correlation between effectiveness in EMI settings and the presence of both pragmatic ability and language proficiency, metadiscourse plays a crucial role in the monologic setting of the university lecture. As seen throughout the present paper, reflexive metadiscourse is the umbrella term for the self-reflexive expressions used by the speaker/writer to negotiate meaning in a text. In other words, it is the writer/speaker’s explicit commentary on his/her own ongoing text. It marks the writer/speaker’s awareness of the current text as text or as language, of him/herself as writer/speaker, and of the potential reader/hearer as reader/hearer of this text. Therefore, the use of metadiscourse can help to guide the audience as well as to create space for interacting with it and it could be used as a persuasive strategy\textsuperscript{77}. Discourse reflexivity seems to contribute to the fundamental uses of language, sharing experience and negotiating interaction (Mauranen 2010). To be more precise, lecturers explicitly indicate how they want their students to understand their ideas through the use of reflexive metadiscourse markers and they give the impression of facilitating an informal chat, rather than a more formal argumentation, by using personal metadiscourse, i.e. self-mention markers. The discrepancy between the use of personal and impersonal metadiscourse markers indicates that different cultural conventions – a sort of propensisty – may exist in how the lecturers approach their relationship with the students when using English as the academic lingua franca. In this respect, thus, it would be interesting to include the teaching and learning of metadiscourse in teacher training courses to improve the quality of their lectures. As aptly pointed out by Denver et al.\textsuperscript{78}, the challenge is to understand what can be done to enable the lecturers to use metadiscourse since its correct use depends on a considerable high level of language proficiency. Furthermore, the findings obtained from this study could be applied to the teaching and learning of the features of the lecture for both lecturers and students, as a


\textsuperscript{77} A. Ädel, Metadiscourse in L1 and L2, pp. 197-198.

\textsuperscript{78} L. Denver – C. Jensen – I. M. Mees – C. Werther, Good enough to teach?...
means of reinforcing good teaching practice and enhancing students’ comprehension. The study of metadiscourse also focuses attention on the phraseological dimension of language and sheds light on the need to integrate form and meaning. Studies of metadiscourse at phrase and sentence level would also provide analysis of idiomatic style in spoken discourse which would be useful for lecturers and students alike.

Overall, the findings of this research can be useful in expanding the learning strategies employed at the tertiary level of instruction and our hope here is that they can improve the communicative competence in a language, in the case of this study English, by raising lecturers’ awareness of their own role as a lecturer.
Adapting to EMI

in Higher Education: Students’ Perceived Learning Strategies

Robert Wilkinson, René Gabriëls

To a varying extent, many universities are changing their language of instruction to English in order to position themselves in the global market of higher education. This change attracts mobile students who wish to undertake studies abroad, but they may have to adjust the way they study. The central question in the study we report here is how students perceive an effect of English-medium instruction on their learning strategies. In an exploratory study, students were interviewed about their learning strategies as a consequence of EMI, about possible inequalities in EMI and how they perceive them. The findings suggest that modification of learning strategies depends on personal agency and the learning context. The interviews reveal three types of linguistic asymmetry at the individual level under EMI. The qualitative data confirm findings of previous studies and suggest new perspectives for quantitative research on learning strategies in EMI and linguistic inequalities.

Keywords: English-medium instruction (EMI), learning strategies, language inequalities, linguistic asymmetry

Introduction

Universities are competing in a race to claim a share of the global market for higher education. They have recognized that students have become very mobile and many are willing to travel abroad for their studies. Universities see these mobile students, rightly or wrongly, as a group of very gifted, highly motivated, extremely flexible, dynamic and creative individuals. The commodification of academic research and education entails an international competition among universities to attract as many excellent students as possible. Universities want their share of this market. Moreover, enrolling such a vigorous group of students is attractive for recruiting highly talented academic staff (not to speak of the potential of well-funded research projects), and it is a two-way process: excellent staff

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1 Part of this paper was presented at the Situating Strategy Use conference at the Alpen-Adria Universität in Klagenfurt, Austria, in 2015. We thank the two anonymous reviewers and the editors for the constructive and helpful comments on this article, which have helped us to improve it considerably.

2 Universities here include other institutions of higher education, whatever name they may be known under.

attract excellent students. Universities may see themselves in a win-win situation. Excellent students and staff attract spearhead industries to the region, increasing the power and value of the university to the community. One can easily see how this theoretical path of university ‘progress’ can be attractive to the institutional top management.

Moreover, the path is eased by adopting a common language for learning and instruction. It is eased further by the policies of many governments that have adopted the same language as the foremost foreign language taught in schools. For example, Eurostat reports that in 2014, 94.1% of upper secondary students throughout the 28 member states were learning the same foreign language (English)⁴. The vast increase in the number of programmes in higher education degree programmes taught through English has been well documented⁵ as well as the dominant reasons for their introduction.

The introduction of English-medium instruction (EMI) is part of the process of internationalization of the university. That process amounts to an amalgam of policies and practices that universities adopt as mechanisms to cope with the pressures of globalization, regulation and accountability. EMI has been defined as “the use of English to teach academic subjects (other than English itself) in countries or jurisdictions in which the majority of the population’s first language is not English⁶”. Scholars notably see EMI as an adaptive mechanism for change in response to globalization pressures⁷. Do students see EMI in the same way? What effects of EMI do they perceive on their learning? Do students modify their learning strategies when studying in EMI? The research we report here forms part of a larger study investigating the perceptions of EMI on the learning context. Our overall research aim is to explore the effects of language policy and practice on the learning and teaching environment in a university, in particular here what the impact of the EMI context is on student learning strategies.

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⁶ J. Dearden, English as a medium of instruction...
Adapting to EMI in Higher Education: Students' Perceived Learning Strategies

Research into learning strategies has a long history. Strategy itself has military origins and has been described as a practice to maintain a balance between ends, ways, and means. It entails identifying objectives, and ensuring that the resources are available to meet them. However, that could describe a process or a plan. A strategy arises when there is a problem, a difficulty, or potential conflict, and is a mechanism to seek to reach a solution or resolution. In education learners are confronted with challenges, problems, and difficulties, and they have to find ways to resolve them. Students adopt strategic behaviour to achieve their goals, though how they do so varies according to context, the task in question, as well as individual characteristics such as motivation, as a recent review of the effectiveness of learning strategy instruction shows. Heikkilä and Lonka classify three dominant theoretical inputs to learning strategies, approaches to learning, self-regulated learning, and cognitive strategy, concluding from their study that learning strategies can be explained as an intertwining of the three theoretical approaches. While EMI is a relatively new phenomenon in higher education, research into learning strategies and especially language learning strategies dates back several decades to the work of Rubin and Stern. Learning strategies have been defined by Griffiths as “actions chosen by learners for the purpose of learning or regulating learning”. However, there has been sharp criticism, especially of language learning strategies, on the grounds of definition, scope, abstractness, among others. A survey of the work in the field of second language acquisition by Norton

12 C. Griffiths, What have we learned from “good language learners”? “ELT Journal”, 69, 2015, pp. 425-433.
and Toohey\textsuperscript{14} summarizes how the early work on the successful language learning strategies of ‘good language learners’ has been complemented by an emphasis on learning context, identity and human agency.

Research into the effects of EMI on students’ learning strategies is very limited. Recently Macaro\textsuperscript{15} called for research into a wide range of areas, from the identification of the strategies used in EMI contexts and the consequent changes in interaction to the psycholinguistic and sociolinguistic impacts on the students’ first languages. It has been noted that students achieve success in EMI when they adopt effective learning strategies\textsuperscript{16}.

Macaro\textsuperscript{17} has underscored the importance of investigating the effect of strategies on learning content as well as language, and research has begun in the EMI field. In their study of mainland Chinese students learning in an EMI programme in Hong Kong, Ding and Stapleton report that it took time for the students to change their learning strategies from a focus on linguistic form to a focus on content in the EMI setting\textsuperscript{18}. A Malaysian university study in the humanities reports low awareness of language learning strategies among English majors, even though the students reported using more indirect than direct learning strategies\textsuperscript{19}. Of more direct relevance is a Spanish study of students in accounting\textsuperscript{20} comparing motivations and learning strategies among students on an EMI programme with their Spanish-medium cohorts. The EMI students show better motivation and higher self-confidence than the Spanish-medium students, and they score higher on the learning strategies denoting effort, time management, perseverance, and study organization. The study demonstrates changes of non-language learning strategies under EMI compared with the students in the first language. This is precisely the area that we are interested in.

\textsuperscript{15} Reported in A.D. Cohen – C. Griffiths, Revisiting LLS research 40 years later, “TESOL Quarterly”, 49, 2015, pp. 414-429. E. Macaro’s suggestions are on pp. 417-418.
In line with the work of Rivero-Menéndez and colleagues, our central research question in the study reported here is how students perceive an effect of EMI on their learning strategies. We investigated the effect of an EMI context on the students’ perceptions of their learning strategies. To answer the research question we formulated some sub-questions. Which learning strategies do students prefer? Did they change their learning strategies as a consequence of EMI? What are the students’ opinions concerning EMI? Do they perceive their context as equal or unequal? Perception in our study is defined as the student’s report of what they think they do and should do, irrespective of whether they actually do what they say in reality. In essence, the perception of students is the process of their interpretation of stimuli in the brain about past experiences.21

The structure of the article is as follows. In section 2, we set out our theoretical framework and the method we applied. We explain our theoretical assumptions and justify the chosen method. In section 3, we present the results of our explorative study. These results are based on semi-structured interviews. In the concluding section 4 we discuss the results and the possibilities for further research. We argue that the language policy of universities should address the linguistic asymmetries related to EMI.

2. Theory and method

Within the main research goal of exploring how actors in an internationalized context at university perceive EMI (the role of English and other languages) and its effects, here we report on a qualitative exploratory study with students about how EMI affects their learning and the learning strategies they use. As indicated in the introduction, EMI is defined following Dearden22 as the teaching and learning of an academic subject (other than English itself) through English in a country in which the majority of the population’s first language is not English.

We make the theoretical assumption that linguistic asymmetries underlie learning in an EMI context. A linguistic asymmetry is a situation in which agents don’t have equal opportunities to communicate with each other, because of differences in language skills or the status of a language. A speaker may use a language in which she or he is less proficient to reach a learning goal. Learning strategies can be aimed at overcoming linguistic asymmetries, because the asymmetries affect content learning (learner agency). One can also speak of a linguistic asymmetry when a language has been given a privileged status or a language is perceived as inferior in comparison to other languages. Salleh, for instance, argues that “over the centuries, many people have been moulded and, subsequently, conditioned to believe in what they perceived to be their ‘predicament’ as inferior people with an inferior


22 J. Dearden, *English as a medium of instruction*...
language vis-à-vis English\textsuperscript{23}. It is relevant therefore to explore the conditions in EMI that contribute to linguistic asymmetries. Another theoretical assumption underlying the present inquiry is that linguistic asymmetries touch on the issue of linguistic justice. In the EMI context, linguistic asymmetry can lead to a perception of inequity. Van Parijs describes linguistic injustice as “the unfair distribution of the burdens of lingua franca production\textsuperscript{24}”. Here the focus is not on the language policy of universities, but on the perceptions of students regarding their linguistic practice.

The more specific goals of this study were (1) to identify and explore whether students perceived a change in their learning strategies in an EMI context, and (2) to explore their perceptions of learning in an EMI context and whether they experienced the learning context as equal. Regarding both goals, we have chosen to do a qualitative exploratory study\textsuperscript{25}. The study is exploratory because we only want to explore whether students change their learning strategies in an EMI context and how they experience it. Based on the research results we will conduct further research. The study is qualitative because we assume that interviews provide a more detailed answer to the central research question than a survey. While qualitative research is particularly suitable for studying the nature of a phenomenon, quantitative research is especially suitable to determine the extent to which a phenomenon occurs.

There is a lack of clarity about the definition of learning strategies in the academic literature\textsuperscript{26}. Learning strategies\textsuperscript{27} can be defined, following Oxford, as the sum of the student’s approach to learning and can include a combination of memory strategies, cognitive strategies, retrieval strategies, affective strategies, among others\textsuperscript{28}. Consequently, we envisage a learning strategy, in line with Tóth, as “a complex system of procedures”\textsuperscript{29}(p. 214) where a learner may use a variety of methods, forms or means to achieve a chosen learning goal.

Learning strategies in EMI have been the subject of few studies. A search of eleven databases\textsuperscript{30}, using the search terms “English-medium instruction” or “EMI” and “learning strategies” and “higher education”, yielded 181 references\textsuperscript{31} for peer-reviewed research.

\textsuperscript{24} Ph. van Parijs, Linguistic justice for Europe and for the world, Oxford University Press, Oxford 2011, p. 72.
\textsuperscript{26} See Z. Dörnyei – P. Skehan, Individual differences in second language learning...
\textsuperscript{27} J. Rubin defined learning strategies broadly as “techniques or devices which a learner may use to acquire knowledge”, in her seminal article What the “good language learner” can teach us, “TESOL Quarterly”, 9, 1975, pp. 41-51.
\textsuperscript{31} The number varied slightly with successive iterations of the search or when the order of terms was changed.
articles published between a cut-off date of 2006 until 2015. After screening abstracts, 18 articles remained, covering both theoretical articles and empirical studies, of which there were only five that covered learning strategies in EMI in higher education. We also consulted additional articles that did not deal directly with learning strategies, but student learning practices under EMI, or that did not deal with higher education. Researchers investigated language learning strategies under EMI\textsuperscript{33}, adjustment and acculturation strategies\textsuperscript{34}, ability\textsuperscript{35}, teacher accommodation strategies to help learners\textsuperscript{36}, self-efficacy and self-regulation\textsuperscript{37}, and code-switching\textsuperscript{38}. The diverse nature of these previous studies motivated our choice for an exploratory study into how students adapted their learning strategies under EMI. Subsequently, additional studies have appeared reporting investigations of language learning strategies under EMI\textsuperscript{39}, learner autonomy strategies\textsuperscript{40}, teacher accommodation strategies to help learners\textsuperscript{41}, self-efficacy and self-regulation\textsuperscript{42}, and change of learning strategies due to EMI\textsuperscript{43}.

Setting: This study was conducted at Maastricht University, the Netherlands, in the Faculty of Arts and Social Sciences (FASoS), in 2015. Around half of the students at Maastricht University come from outside the Netherlands, with a higher percentage at FASoS. The main first degree (bachelor’s) programmes at FASoS are European Studies (in English) and Arts and Culture / Kunst en Cultuur, a programme comprising both


\textsuperscript{34} D. Fung – V. Yip, \textit{The effects of medium of instruction on certificate-level physics on achievement and motivation to learn}, “Journal of Research in Science Teaching”, 51, 2014, pp. 1219-1245. This study, however, concerns upper secondary school learners.


\textsuperscript{39} F. Ding – P. Stapleton, \textit{Walking like a toddler}...


\textsuperscript{42} M.J. Rivero-Menéndez et al., \textit{Motivation and learning strategies in accounting}...
an English and a Dutch variant, or track. In contrast to the marked increase in student numbers in the English variant in recent years, the number of students doing the Dutch variant has decreased sharply. In the surrounding environment, English is not the first language of the majority of the population, although it is widely spoken as a second or foreign language.

Population: Students in the second or third year of their bachelor's programme were invited to participate in an interview concerning how they perceived the linguistic environment of their learning and how they adapted their learning strategies to the context. It was decided to recruit two students each from four different first-language groups (French, German, Dutch and English). A further Dutch student was recruited as she gave her native language as the local dialect (Limburgs). Thus, a total of nine students were interviewed.

Three students had dual nationality, and one was bilingual from childhood (French/Dutch). All interviewees except one (British) student reported high competence in at least one other language, with two indicating good competence in four languages besides their mother tongue. Seven of the students had lived abroad for periods of at least three months, while two (Dutch) had not. All students had highly educated parents, with only one student reporting one parent (mother) having secondary education as their highest level.

Interview process: Students were invited in pairs to the interviews according to their first language. The benefits of a pair interview (also called a couple interview) outweigh the disadvantages. A disadvantage of a pair interview is that the interviewees can influence each other by steering the conversation in a specific direction. However, this disadvantage can be countered by pointed questions of the interviewer. A pair interview creates a dialogical situation that overcomes the disadvantages of the subjectivist first person’s perspective and the objectivistic third person’s perspective. In fact, a pair interview creates a hermeneutic room for the perspective of the second person’s perspective. One interviewee can metaphorically play the role of the birth helper of the other by evoking specific experiences and ideas, and the other way around. The rationale for conducting pair

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44 Self-reported competence: at least B2 or C1 on the Common European Framework of Reference for Languages.

45 Self-reported competence: at least B1 level.

46 Higher vocational training or university education.

47 The three Dutch students, i.e. including the dialect-speaking student, were interviewed together.

48 The bilingual French/Dutch student chose French in this case on the grounds of residence in the French-speaking community in Belgium.


Adapting to EMI in Higher Education: Students’ Perceived Learning Strategies

The research was aimed at answering the question of how students perceive an effect of EMI on their learning strategies. It is important to specify that in the setting for this study, at Maastricht University learning is based on Problem-Based Learning. This implies more emphasis on group sessions than on lectures. Students are supposed to be active in the

Interview: The interview involved a set of semi-structured items and was organized in two parts. First, students completed a short questionnaire asking about demographic information. Then, the interviewers asked questions about the students’ preferred learning styles and whether their learning styles had changed as a consequence of EMI, about their individual learning strategies and whether these had changed under EMI, about their opinions concerning EMI and whether they found the learning context equal or unequal for everyone, and if so why. The semi-structured interviews allowed additional questions to be asked to probe answers, and allowed some variation in the order of the questions. Interviewees were informed about the purpose and goals of the study and assured that their identities would remain confidential. All interviewees signed an informed consent form.

Analysis: The interviews were recorded and subsequently transcribed. The transcription policy largely follows that of Studer, Kreiselmaier and Flubacher, although it deviates slightly in that the transcriptions were punctuated as appropriate for ease of reading and edited slightly to eliminate some hesitations and word repetitions. The transcriptions were analysed by searching for the interviewees’ answers to the questions under learning styles and strategies and EMI. The remaining parts of the interviews were not used for this study. Software such as NVivo was not used to code the transcripts.

3. Results of the interviews

The research was aimed at answering the question of how students perceive an effect of EMI on their learning strategies. It is important to specify that in the setting for this study, at Maastricht University learning is based on Problem-Based Learning. This implies more emphasis on group sessions than on lectures. Students are supposed to be active in the

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51 P. Kirschner and J. van Merriënboer have convincingly demonstrated that there is no scientific support for learners having preferred learning styles. However, we included questions about learning styles as a way into asking about strategies that students use in specific circumstances. We are not arguing that students do actually have a preferred learning style. P.A. Kirschner – J.J.G. van Merriënboer, Do learners really know best? Urban legends in education, “Educational Psychologist”, 48, 2013, pp. 169-183.

52 Additional questions were asked about language policy, but these are not reported in this paper.


group sessions. With regard to learning strategies, we distinguish language learning from content learning, though we assume that they are related\textsuperscript{57}. According to the interviewed students, content learning strategies carry more weight than language learning strategies. The learning strategies of students are the result of agency and structure, i.e. individual preferences and Problem-Based Learning. Within the structure set by Problem-Based Learning students can choose their learning strategies.

3.1 Learning strategies

Students have different learning strategies. Their learning strategies depend on the way they prefer to process information. While some prefer to have a lecture before they start to read, others prefer to read a text before they attend a lecture. A student belonging to the latter category says:

I'm more fond of self-study actually because I can do it on my own pace really fast really slow depending on what I'm reading, and I can really adjust my manner of learning and then to have the tutorials or lectures afterwards that’s for me very clear to me like I was totally wrong here, this is a clarification, this is indeed important, so that's more like a confirmation for me which is really important\textsuperscript{58}.

Some students claim to be well-organized and others not. They indicate that they have their own strategies not to become distracted. Students emphasize that the feedback from tutors affects their learning strategies. A Dutch student said: “I ask also like a teacher to tell me what’s wrong with it or what can I do better. [...] I think you can become better if only someone tells you how to become better.”

\textsuperscript{57} In essence, learning can be said to involve the same cognitive and behavioural processes whether it focuses on learning a language or learning some specific content. Skehan notes that theories of language learning strategies (e.g. R. Oxford, Language learning strategies...; J. M. O’Malley – A.U. Chamot, Learning strategies in second language acquisition, Cambridge University Press, Cambridge 1990) assume content learning and language learning do not differ, but the assumption ignores the role for “any specifically linguistic faculty” (p. 287) (P. Skehan, Individual differences in second language learning, “Studies in Second Language Acquisition”, 13, 1991, pp. 275-298). A.K. Jappinen (Thinking and content learning of mathematics and science as cognitional development in content and language integrated learning (CLIL): Teaching through a foreign language in Finland, “Language and Education”, 2005, 19 pp. 148-169) makes a similar point in connection with CLIL (pp. 152-153). We make a similar distinction, in that we allow for the possibility of specific content learning in a domain to follow a different acquisitional path than learning linguistic knowledge. M.A.K. Halliday (Towards a language-based theory of learning, “Linguistic and Education”, 1993, 5, pp. 93-116) argues that learning language is not a domain of human knowledge (except in linguistics), “it is the essential condition of knowing, the process by which experience becomes knowledge” (p. 94, author emphasis). In this light, language is different from content since it is the fundamental medium through which learning takes place.

\textsuperscript{58} Where appropriate, the quotations from the students have been slightly edited for ease of reading to eliminate unnecessary repetition and hesitation markers. The changes do not change the meaning of what they students wanted to say.
3.2 Adaptation

Students point out that they need time to adapt to learning through another language. Not only do they have to learn to study in another language, but they also need to adapt to the academic approach. As one Dutch student says: “In the beginning it was hard to adjust but I think more people had problems even native speakers, native English speakers, to get used to an academic way of reading and writing, but now I’m really used to it.”

Although there is integrated content and language learning at Maastricht University, students concentrate more on learning the content than the language. One French student, for instance, did not expect the curriculum to pay so much attention to language skills:

I would say that the approach to Maastricht’s thinking is that the English level is my responsibility and the content study’s their responsibility, but I didn’t think that I would be pushed towards learning the language here, and I was actually quite surprised when we had the first language skills course where Research and Writing, there was a lot actually about how you write in English, and that I didn’t quite expect. I was expecting everybody was supposed to come with already his English luggage.

A Dutch student adds: “[I] notice at some times that my progress itself in the language sometimes stops, yeah because we’re really more focused on the content than the language.”

According to a French student, EMI did not change his content learning:

It hasn’t changed the way I learned the content, it has changed the way I approach the language. So the contents I pretty much assimilate the same way, but the way I approach the language has changed a lot, so now that I study political sciences my vocabulary, my English skills are centred around this field as well, whereas when I was in France much less so. My politics, my thinking about politics would have been maybe in French and that’s shifted. [...] The way of approaching the content doesn’t change, but the way – which language you use to resonate about it changes. So, it’s very topical. I think of family in French and I think of politics, political science in English, but then again I think of French politics maybe in French.

In an EMI setting, it is important to distinguish between the spoken and the written language. In the context of the PBL system at Maastricht University it is important to point out that students are expected to participate actively in the group sessions, while for the exams the written language is relevant. A British student elaborates on the difference:

I definitely think language and written language are two very different things when you’re studying here. Some of the written language might be very good and they’ll understand it on paper but you hear them speak and they just don’t get the little inconsistencies, I mean with writing English of course there’s variations in spelling of words, still if you understand the basics, you’re going to be able to write a paper, but language-wise it’s different, [...] friends who aren’t you know native English speakers say oh we really don’t speak up because it’s not our native tongue so.
3.3 Impact on first language

Several students pointed out that EMI has an effect on their mother tongue. A French student asserts that

I would have a harder time going back to French content, so for example if I start writing a paper again, I’m not sure I could deal with French sources, academic sources, much less easier because I just know the codes of what I need. I very quickly in English now see in academic articles or what not, I can scan through it and see certain words that are in my interest and that I pick out and that I use, and maybe in French I’m less used to handling those codes, this information. [...] Let’s say if I have an academic article in front of me I know if it’s in English I can very quickly see which paragraph says what, and without reading the whole text, because I’ve taken on the ability in English a little bit to scan through it, and I know that the last sentence says it all basically in the paragraph, whereas in French I’m not sure I’m able to – to quickly scan through a text and know what it’s about.

For a Dutch student taking the Dutch track but who has to attend lectures in English and to read texts in English, it is a disadvantage: “I notice my Dutch gets worse because we’re doing so much in English and I have to write in Dutch.”

Students who do the Dutch variant of the Arts and Culture programme do not apparently have it easy. The lectures and group sessions are largely in English, but they have to write their papers in Dutch. In contrast to the monolingual character of the English variant of the programme, students who do the Dutch variant must be de facto bilingual. Therefore, students who do the Dutch variant have to invest more time in translating. A student who is in the Dutch variant of the programme says:

For me it takes a lot of time because I have to translate a lot of words and stuff, and I need to make my papers and my exams in Dutch, so I also have to translate into Dutch and learn in Dutch, while the tutorials and lectures are in English. [...] So sometimes it’s hard because you have to translate it, sometimes also twice because the tutorials are in English again.

She and another Dutch student underline that searching in a dictionary is time-consuming. A German student confirms that for a non-native speaker, learning under EMI generally will take up a great deal of time: “I need more time I’m a slow reader anyway and if I then read in another language, of course it takes more time, and time in Maastricht is a bit precious.”

3.4 Three linguistic asymmetries

The research shows that a university like Maastricht University that embraces EMI has to deal with linguistic asymmetries. Our study focuses mainly on the micro-level, that is at the level of the individual. Here different asymmetries arise. The first linguistic asymmetry on the micro-level is between students with good and those with less good or even insufficient
language skills. In the words of a student who does the Dutch variant of the Arts and Culture programme: “I find it really difficult to say something in English and mostly in tutorials I have to think a lot when I want to say something or which words I need to use. Most of the time I’m just thinking about it and somebody started talking and says what I wanted to say.” A British student underlines that he does not have the hindrances of non-native speakers: “No hindrances really, the benefits again would just be presentations and a bit less of a load on my mind.” Another British student acknowledges that non-native speakers think that they have an advantage:

> Just the presentations, and hindrances I guess I could say a lot of people expect me my level of English to be really high, I mean I speak quite well and people have commented on that, but then they say ‘oh [...] could you grade a paper for me or something’, and then the grade they get oh that’s not great, ‘you were probably better off me not checking it’ but, you know I do see mistakes and I do see sentences that don’t work very well, but still – it’s like if you speak very well, they definitely expect you to be the best in English, but that’s not always the case.

Apparently insufficient command of the English language is a reason to stop with a study in an EMI setting. One student says: “Especially in European Studies there were people who were so bad at English that they couldn’t cope with the fact that they had to do everything in English and therefore they just had to drop out.”

The second linguistic asymmetry on a micro-level partly corresponds to the previous one, and relates to the difference between native and non-native speakers. A Dutch student says: “During our tutorial we have three British boys in our class. [...] I can tell that my vocabulary is slightly less than theirs, obviously because it’s their mother tongue and they know all the words.” Interestingly, one of the French students emphasizes that it can be a benefit not to be a native speaker:

> in an international environment it’s better to have a more let’s say – classical English, so something that is not influenced by colloquial accents or dialects, so you can actually see for example in some tutorials the British people are the ones who are not – we will ask them to repeat themselves because we don’t understand their accent, whereas we come from an international school, we have internalized different accents which actually form an English which is quite smooth.

In comparison to the native English speakers who do not master a foreign language, non-natives have the advantage of being able to read literature in their own language as well as English, as one German student remarks: “The advantage is that you can also read German literature.”

The third linguistic asymmetry is between those who speak only or mainly their mother tongue and those who almost constantly have to speak another language. Several students indicate that studying in an EMI setting implies that they have difficulties to speak or write in their mother tongue. For instance, a German student states:
I notice lately that my German suffers from speaking too much English because sometimes I’m talking to people in German and I just get that English words come to my head, certain words or concepts especially when it’s more academic. I think more in English. That’s what we call in Germany Denglish, this mix of German and English where you just have some English words get into your sentences.

A Dutch student says: “What I notice for instance if I have to explain to a Dutch person my essay that I’ve written in English, I’m reading in English, I’m talking in English all day, I cannot find the Dutch words anymore.”

3.5 Discrimination

On the macro-level linguistic asymmetries entail discriminatory perceptions about a language and a language policy that accords a superior position to one language. A French student suggests that English has a better status than French:

The main advantages of English are the social ones, the communicative ones, not really the scholarly ones. Let’s say, I mean, obviously having a degree in English will be easily recognized around Europe, whereas if you have a French degree in let’s say history, history of the Italian republic or something, it will – you have to prove to a German university that your degree is relevant to the university, for example, whereas if you have an English-language degree I think it’s much easier.

Sometimes students have general views about differences between languages. They reveal such discriminatory perceptions when they say or suppose that one language is more complicated than the other. According to a German student, German is more complicated than English:

I think English is a lot simpler, especially when you read academic texts, yeah I have the feeling that some German scholars [...] make their language, their sentences unnecessarily complicated. I read for example Habermas in English and in German and I actually get more in English than I get in German. So, I think that reading is actually easier when you learn in English than when you learn it in German.

A French student depicts the difference between his mother tongue and English similarly:

When it comes to writing, English is very useful to actually expressing ideas because they have these combinations of words which you can combine and make express a concept whereas in France, in French you would actually have to write a whole sentence to express what you can express in two words in English. So it’s actually a useful language in terms of simplicity.
As one German student notes, many books are translated in English, because it is the *lingua franca*\(^59\), a point also made by the French and English interviewees\(^60\). However, translations have consequences. The German student emphasizes that “something is always lost in translation.”

The student following the Dutch variant of the Arts and Culture programme does not find it fair that she has to do so much in English: “I’m in the Dutch track and they’re not offering me the Dutch things and [...] I think okay it’s really good also to learn English and to do it in English, but they have to say that to me beforehand.” It should be noted that, at the time of this study, the Faculty of Arts and Social Sciences offered a Dutch variant, which implied to the students that all the courses would be in Dutch, which was not the case. This suggests a failure to honour implied commitments\(^61\). The Faculty has since changed its course information for students taking the Dutch variant.

Integrating Content and Language in Higher Education\(^62\) (ICLHE) is an approach that aims to promote the learning of both the content and the language at the same time together. However, in the EMI setting at Maastricht University, the focus is on the content and not the language. That might be the reason why some students would like extra courses on the English language. One Dutch student comments: “I would really enjoy having an English class just to study English and not in English.” A student who studied one year of European Studies and switched to Arts and Culture pleads for an extra language course:

> I did a year of European Studies and I think they were more helpful in giving you the tools [...] how you write your English and how you speak your English and what is appropriate and what is not, and I think compared to Arts and Culture, they want to help you improving your writing skills, but they’re not so much focused on good English, than I think in European Studies, so I think it would be helpful to focus more on teaching the language.

The EMI setting at Maastricht University is generally seen as positive. The costs do not outweigh the benefits. Various students see EMI as an enrichment. A German student says about EMI: “I think it’s one of the main motivations for many students to come here.” And a Dutch student states:

> Everyone can communicate with each other, we can still become friends even though we’re still not speaking the same mother tongue whatsoever, and later on with work it’s of course a big advantage, also in life it’s so nice that you can communicate with

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\(^59\) “I believe that it’s more and more the *lingua franca*” (French student). All the faculties at Maastricht University offer EMI courses.

\(^60\) Interestingly, not by the Dutch students.

\(^61\) This may be a factor in the decline in the numbers of students wishing to follow the Dutch variant (see section 2, setting).

other people which otherwise would not have been possible but only because you try to learn the language as good, well as possible.

In contrast to both voices, a French student emphasizes that the enrichment EMI offers is at the same time accompanied by an impoverishment:

it’s a bit dual for me because I see it as an enrichment of my English here because it’s mostly English I use, but […] it’s always related to the other language which becomes impoverished, a little bit. I do feel that you could have two or three languages perfectly mastered, but I feel that the more I study in English here, the more I lose in my French capacity, a little bit. So for example the fact that I was trained to reflect on political sciences in English, […] the little I had in such reflection in French was taken away because now […] the easy way would be to take English language for that.

4. Discussion and conclusion

This study shows that students perceive their learning strategies to be affected by characteristics of the student’s agency and the educational setting. This fits in with findings elsewhere about learning strategies63 where the learning strategy choice depends on the nature of the task at hand, the autonomous motivation of the learner64, and the educational context. The main conclusion suggests that EMI stimulates all our respondents, except the English-native speakers, to modify their perceived learning strategies65. This finding concurs with previous research where students report having changed their strategies or adopted new ones, perhaps at the explicit instigation of teachers66. Ding and Stapleton have shown that students switch their focus from linguistic form to strategies for content learning67. For non-native speakers of English, overcoming linguistic asymmetries is a necessary condition for content learning. However, the fact that the programme is taught through English does not present additional problems for some students who persevere with their previously successful learning strategies. Dafouz and colleagues have observed some effects on learning strategies but they relate these to the nature of the discipline. They found no significant difference between studying in English and in Spanish within

64 In our study, we characterize our respondents’ perceptions of the student’s ‘personality’ as student agency. This chimes in with the factors comprising personality that promote deep learning (e.g. openness to experience, conscientiousness, extraversion) in Baeten et al., Using student-centred learning, p. 251.
65 The English students speak of “adapting to the level of the other students”.
66 See for example J.W. Judge, Use of language learning strategies by Spanish adults in business English.
67 F. Ding – P. Stapleton, Walking like a toddler...
the same discipline. Costa and Mariotti also found no significant difference between English- and Italian-medium instruction strategies. A comparative study among EMI accounting students by Rivero-Menéndez and colleagues reported greater effort, time-study management techniques, perseverance with reading academic literature, and the setting of organizational goals more than comparable students on an equivalent Spanish-medium study programme. The differences were statistically significant. Our study lends support to the conclusion that for well-motivated advanced students with highly proficient language ability, EMI is not likely to present additional challenges. For these students, content learning is paramount and strategies for content learning prevail over language learning strategies. Another reason may be that the benefits of learning in an EMI context outweigh the costs. The benefits include perceived increased job opportunities and the pleasure of studying in an international environment. The costs mainly concern the additional time necessary and the extra effort required.

Universities would be wise to address linguistic asymmetries, including the three types identified in our study. The first type lies between students with good and those with less good or even insufficient language skills. This type of asymmetry increases the difficulty for some students to contribute to group sessions or to write academic papers. The second type is between native and non-native speakers, whereby native speakers of English are perceived to accrue an advantage, because English is the de facto lingua franca. The third linguistic asymmetry we identified is between those who speak primarily their mother tongue and those who constantly have to speak another language, not only in studying but also socially. Students whose mother tongue is not English report difficulties speaking or writing in their mother tongue, because it suffers from the persistent use of English. In addition to these three types of linguistic asymmetry on a micro-level, there are also asymmetries on a

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70 M.J. Rivero-Menéndez et al., *Motivation and learning strategies in accounting*...
71 See K. Lueg – R. Lueg, *Why do students choose English as a medium of instruction? A Bourdieusian perspective on the study strategies of non-native English speakers*, ”Academy of Management Learning and Education”, 14, 2015, pp. 5-30. Lueg and Lueg show that for management education, perceived higher English proficiency is related to higher social background, which in turn increases the likelihood of choosing an EMI programme. For such students EMI functions as social and symbolic capital.
72 M.J. Rivero-Menéndez et al., *Motivation and learning strategies in accounting*... See also F. Ding – P. Stapleton, *Walking like a toddler*...
73 K. Lueg – R. Lueg, *Why do students choose English as a medium of instruction?...* Lueg and Lueg demonstrate that students opt against EMI if they perceive barriers to EMI (e.g. risk of lower grades, inability to understand content), and that ‘lower strata’ students perceive the barriers as greater than they actually are.
macro-level. The latter entail discriminatory perceptions about a language and a language policy that privileges a language75. In the academic world nowadays, English has a higher status than French or German76.

Our study has focused on the perceptions of students, both of their learning strategies and of the linguistic asymmetries they experience77. It would be valuable to conduct observational and experimental studies of learning in EMI to elucidate whether the perceived use of learning strategies matches what students do in practice, whether the linguistic asymmetries perceived are in fact present in the learning context and how they might have an additive or detrimental effect on learning.

We note that research on learning strategies in EMI has only recently begun, and that results reported so far are limited, disparate, and lack clarity to allow generalization. We can only reiterate the call by Macaro78 for more research into areas such as how classroom interaction changes under EMI, as well as the psycholinguistic and sociolinguistic effect of both the first language of the learners and their English. EMI in higher education will generate contexts where students from different cultural and linguistic backgrounds learn together with teachers who may or may not share the same background. Such contexts offer plentiful contingencies for overt and tacit linguistic asymmetries, which highlights the need for the study of learning strategies under EMI to take linguistic asymmetries into account.

This exploratory study has been fruitful because it provides a thick description of the respondents’ experiences and feelings79 in response to the research question, which a survey would not. However, one cannot generalize the results. Nevertheless, they are a stepping stone to designing new research. The qualitative data provide new perspectives for quantitative research on linguistic inequalities. The interviewees also pinpointed aspects of EMI that deserve further research. For instance, the linguistic asymmetries that lead to some students stopping studying through EMI because they lack the necessary

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78 Macaro’s suggestions are on pp. 417-18 in A.D. Cohen – C. Griffiths, Revisiting LLS research 40 years later.
language skills or because they lack academic competences\textsuperscript{80} would be good starting points for new research. This might also be relevant for the language policy of universities. These linguistic asymmetries arise at both a micro and a macro level and epitomize discussions about linguistic justice.

Students’ Outcomes in English-Medium Instruction: Is there any Difference Related to Discipline?

Francesca Costa, Cristina Mariotti

This paper focuses on the acquisition of content in Economics and Science EMI classes taught by the same lecturers. The control group consists of L1-taught classes (Italian), whereas the experimental group consists of L2-taught classes (English). Students’ marks in two comparable written exams are analysed. Data are complemented with interviews with the lecturers. The results show that in some instances the two groups differ significantly as regards the acquisition of content.

Keywords: ICLHE, content acquisition, content presentation, English-medium instruction, Italian-medium instruction

Introduction

Since the beginning of the Bologna Process in 1999, Italy has seen a fast-paced and steady rise of internationalisation programmes, which in practice have translated into the fact that an increasingly high number of university courses have been taught in English over the past decade (Dearden 2014). At the tertiary level, English-taught programmes and courses are generally part of a top-down strategy imposed by the institutions, and their spread has been accompanied both by positive factors, such as an increase in student mobility, and by concerns regarding on the one hand the loss of domain of Italian in favour of English as the language of academia, and on the other the possibility that content learning is affected in a negative way by a change in the language of instruction. In other words, it is being questioned whether learning in a foreign language at the tertiary level affects the quality and quantity of subject matter content acquired if compared to teaching the same content in the students’ L1. This issue should be addressed especially at the tertiary level, where academic content cannot be simplified if delivered in an additional language, and where, at

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1 Paragraphs 2, 5, and 6 were written by Francesca Costa; paragraphs 1, 3, 3.1, 3.2, and 4 were written by Cristina Marioti.
the same time lecturers might simplify their input because they feel their ability to convey subject matter contents effectively is limited by the use of an L2.

This study presents the results of a follow-up study to Costa and Mariotti (2017) and investigates content acquisition in English-Medium Instruction (EMI) versus Italian-Medium Instruction (IMI) settings in four different universities in Northern Italy. The objective of this study is to find out whether one of the two teaching modes leads to better learning outcomes in terms of exam marks, and whether the learning outcomes are affected by either the type of subject or the degree course level (Bachelor of Arts, BA – or Master of Arts, MA). The choice of Italy is particularly relevant because despite the fact that EMI courses have continued to spread at an increasingly fast pace over the past two decades (Maiworm and Wächter 2014), the academic community has not yet reached an agreement on whether teaching in English is detrimental to the learning of content acquisition (Maraschio and De Martino 2013), and only one study (Costa-Mariotti 2017) comparing the learning outcomes of students attending courses in their L1 versus students attending same content courses taught in English has been carried out so far.

2. Literature Review

Part of the debate on the benefits of EMI revolves around the fact that it has yet to be proven whether or not learning a subject-matter through a foreign language impedes the learning of content. For this reason, many academics hold that research in this area is necessary in order to have as much empirical data as possible on this situation (Ruiz de Zarobe 2010, Dalton-Puffer, 2011; Perez Cañado, 2011; Doiz, Lasagabaster and Sierra, 2013). There have been few studies in this area, since at the methodological level it is difficult to plan scientifically sound research in an educational context, with both experimental (EMI)

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5 Ibidem.
8 F. Costa – C. Mariotti, Differences In Content Presentation and Learning Outcomes In English Medium Instruction (EMI) Vs Italian-Medium Instruction (IMI) Contexts.
and control (IMI) groups. Therefore, the present review will consider only studies that have used statistics to compare marks; studies on stakeholders’ perceptions of the results regarding content acquisition will not be considered.

Studies focused on outcomes in terms of content acquisition in primary schools have been undertaken in Belgium (Van de Craen, Ceuleers and Mondt, 2007)\(^\text{10}\), where children exposed to bilingual education outperform their counterparts in mathematics; in Spain (Ramos García, Ortega Martín and Madrid 2011)\(^\text{11}\), where a comparison made to establish whether or not bilingualism was detrimental to the learning of content and found no evidence of this; and in Switzerland (Serra, 2007)\(^\text{12}\), where CLIL\(^\text{13}\) classes were as good as, and sometimes better than, control classes where mathematics was taught in the mother tongue. One of the most recent studies (Fernández-Sanjurjo, Fernández-Costales and Arias Blanco, 2017)\(^\text{14}\) has been carried out again in Spain in the region of Asturias. The sample of students (CLIL and non-CLIL) was very big (709). The acquisition of content was tested by means of a standardised test (carried out in Spanish for both groups) for the discipline of science. In this case, results show that non-CLIL students slightly outperform CLIL students in science.

As far as Italy is concerned, there has been just one study of this kind and it concerned primary schools (Infante 2009)\(^\text{15}\). This study reports an ad hoc analysis of 298 students (control and experimental classes) for art, science, history and technology classes, finding no significant differences in the performance scores for subject-matter content. Obviously, primary school studies deal with a broader range of subject areas due to the type of interdisciplinary teaching involved. The situation is quite different with disciplinary learning at universities, where the subjects are highly specialized.

Two studies have been carried out in secondary schools: one in the Netherlands (Admiraal, Westhof and de Bot, 2006)\(^\text{16}\), where the results showed that the experimental

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\(^{13}\) CLIL stands for Content and Language Integrated Learning and implies an integration between content and language. It is normally used for primary and secondary contexts, but it is increasingly being used also at the tertiary level. EMI stands for English-medium Instruction and is widely used in higher education where it does not necessarily imply attention to language.


\(^{15}\) D. Infante, Il Content and Language Integrated Learning (CLIL) in Italia, Modelli didattici e sperimentazioni nella scuola primaria, Editrice Nuova Cultura, Roma 2010.

group (CLIL-like) achieved significantly higher results than the control group, and one in Finland (Jäppinen, 2005) involving 669 students from 7 to 15 years of age, where no negative results were found regarding cognitive development in maths and science for the CLIL group.

The only studies (three) comparing EMI classes with those taught in the language of the country in which the university is found were done in Spain and Italy, all of which involved economics. Dafouz, Camacho, and Urquia (2014) compared BA students in Business Administration for Accounting, Finance and History classes, carrying out a t-test to compare the class marks where these subjects were taught in Spanish against those in which EMI was adopted (316 students were examined). Different professors were involved in the two strands (the one taught in Spanish and the one taught in English). The study revealed that English was not a detriment to content learning. Hernandez-Nanclares and Jimenez-Muñoz (2015) came to the same conclusions and compared the average marks of students (654 in all) doing a BA in Economics; in this case as well, there were different lecturers for the two strands. However, it was not possible to do a t-test but only a comparison of the averages.

In Italy, on the other hand, there has been only one study, by Costa and Mariotti (2017), involving two cohorts of students (214 in number) studying Economics, with an experimental EMI group and a control group. The final exam on which the marks were based for the comparison was identical for both the EMI and IMI groups, and both had the same lecturer. In this case, the results also revealed no significant differences in the t-tests between the two groups, and thus no difference in learning when the final exam marks of the groups were compared.

3. Methodology

The present paper tries to answer the following research questions: Does one of the two teaching modes, i.e. IMI vs EMI, lead to better learning outcomes based on exam marks? Are learning outcomes affected by either the type of subject or the degree course level (BA/MA) in the two settings? In the present study differences in content acquisition in IMI and EMI were analyzed by comparing the marks obtained by students on their final exam, all consisting in multiple-choice written tests. The factors leading to the choice of

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20 F. Costa – C. Mariotti, Differences In Content Presentation and Learning Outcomes In English Medium Instruction (EMI) Vs Italian-Medium Instruction (IMI) Contexts...
the sample were the following: the lecturer had to teach the same content in two courses, one held in Italian (IMI) and the other in English (EMI), in order to maximize group comparability. A request to participate was sent to 14 lecturers from Departments where English was used as a medium of instruction, and only four of them accepted. The present study represents the continuation of a pilot study on the first two cohorts (Costa and Mariotti 2017). To complete the study, interviews were conducted with the lecturers to determine whether there was any bias on their part toward the two groups and if the two groups were comparable. The study considered two science and two economics subjects.

3.1 Sample

The sample included 18 students studying International Relations (Master's level, public university) in the EMI strand and 18 in the IMI one. There were 111 students studying Economics (Master’s level, private university) in the EMI group and 65 in the IMI one. Forty-four geometry students (Master’s level, private university) were surveyed for the EMI group and 50 for the IMI one, while the respective numbers for physiopathology (Bachelor’s level, public university) were 79 and 187. In all, 572 students were surveyed from 4 different universities. The English language level of all the students is certified C1.

The lecturers are two females and two males. All of them have similar teaching experience, ranging from 15 to 16 years, and they mainly teach ex-cathedra lectures, although some interaction is present in the form of student questions.

3.2 Instrument

As far as quantitative data analysis is concerned, a two-tailed t student test was used. The t-test is used to understand if two distributions are statically, and significantly, different from each other. T-test results were complemented by calculating p-values; thus making the analysis more robust. To answer the research questions, we compared the results of the EMI and IMI teaching mode for every single course. Then, we also compared the results of the BA degree course (Physiopathology) with the results of MA courses (Economics, Geometry and International Relations). We calculated the means of the two samples, and then we formulated the Null Hypothesis (H0=0 the means of the two samples are equal, and the difference between them is due to chance) and the Alternative Hypothesis (H1 ≠ 0 the means of the two samples are not equal, and the difference is not due to chance). We then looked up the degree of freedom for n1 (number of observations in sample 1) and n2 (number of observations in sample 2) and level of significance 5% to test whether the ratio is large enough to say that the difference between the groups is not likely to have been a chance finding. If t-value is less than table value, then it is not significant. To make our analysis more robust, we also calculated the p-value, that is the probability of getting a test

\[ Ibi \]
statistic value that is at least as extreme as the one just calculated: small values of \( p < 0.05 \) mean that there is more evidence against H0 or H1.

Concerning the analysis of qualitative data, four interviews with the lecturers were held to investigate their stance towards EMI, to see if they were biased in any way, and if they thought the two groups were comparable. Only comments relevant to the present study were transcribed (Gillham, 2000)\(^{22}\). Some interviews were done via Skype while others were sent via e-mail by request of the lecturer due to time constraints. While such interviews made for more concise answers, they also resulted in less abundant data. The interviews were carried out with a semi-structured protocol, which, however, was not always followed, since the lecturers often digressed or did not specifically answer the question. Therefore, the interviews were of varying length, which depended on the personality of the interviewee and the time he or she could dedicate to the interview. The interviews were in Italian and subsequently translated into English.

4. Results: Statistical analysis

In the following tables we describe the results of the comparison between the EMI and IMI teaching modes for every single course (tables 1-4) and of the comparison between the EMI and IMI modes for MA courses, i.e. Economics, Geometry and International Relations (table 5).

Table 1 Comparison of students’ outcomes in the General Physiopathology course

<table>
<thead>
<tr>
<th>General Physiopathology</th>
<th>Sample</th>
<th>Mean</th>
<th>T-test</th>
<th>DF</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>English-taught Course</td>
<td>79</td>
<td>24.86</td>
<td>-10.0087</td>
<td>264</td>
<td>0.00002</td>
</tr>
<tr>
<td>Italian-taught course</td>
<td>187</td>
<td>28.79</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In this case, the t-test value (-10.0087) is associated with a p-value smaller than 0.05, so we can conclude that the means are statistically different and the difference is not due to chance. The difference between the two means suggests that there is a significant decrease in the learning results observed for the English-taught course with respect to the Italian-taught one.

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For Economics students, p-value 0.91 is greater than 0.05 (or 5%), so it can be concluded that there is no difference between the means.

In the International Relations course p-value 0.86 is greater than 0.05. Thus, it can be concluded that there is no difference between the means.

The average marks for the geometry classes are statistically different. The p-value is close to 0, so it is reasonable to conclude a refusal of the null hypothesis. The difference between the two means is significant because it is not due to chance; this means that in this case the IMI course has given better results than the EMI one.

Finally, table 5 shows what happens if we compare the two teaching modes only for MA courses, that is Economics, Geometry and International Relations.
Table 5 Comparison of students’ outcomes in MA courses
(Economics, Geometry and International Relations)

<table>
<thead>
<tr>
<th>MA courses</th>
<th>Sample</th>
<th>Mean</th>
<th>T-test</th>
<th>DF</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>English-taught</td>
<td>173</td>
<td>26.6</td>
<td>1.81</td>
<td>305</td>
<td>0.06</td>
</tr>
<tr>
<td>Course</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Italian-taught</td>
<td>134</td>
<td>28.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>course</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In this case, t-test value is 1.81, and the p-value is greater than 0.05. Thus, we can say that the statistical test has not yielded significant results and that H0 holds true. This means that if we consider only graduate courses, and we therefore do not take into consideration the BA course in General Physiopathology, the difference between marks in the two teaching modes is due to chance.

5. Results: Interview analysis

The first two interviews described below were part of the published pilot study, and thus they will only be summarized. The original extracts are instead provided for the other two.

The Economics professor at a private university has regularly taught in English since September 2003, with two parallel groups since February 2007. She says that for her it has been impossible to replicate the same type of teaching she does in Italian, especially in terms of the delivery of content. She is very enthusiastic about the EMI experience and says it is a source of pride for a lecturer to be able to do both types of courses. She believes the two groups she teaches this year are comparable, adding: «But we'll ultimately know when we get the exam results...», thus showing she has no pre-conceptions about the results and has not ruled out being surprised by them. On the other hand, she believes that differences existed in past years, stating that the classes in English were slightly different, in the sense that there was more interaction, perhaps due to an initial self-selection process (the EMI students had lived abroad, and were thus more used to interacting in English). She added that perhaps today English is more readily available to everyone.

The International Relations lecturer has taught for 15 years, 10 of which in English and for 2 years with parallel groups. He judges the experiences positively, stating that the two groups are comparable, even if the teaching in Italian is more formal and the EMI students are more involved in the courses. However, he does not think there are substantial differences, while noting that the group in English has greater previous and more uniform knowledge to some extent.

The Geometry lecturer has taught in English since 2001 and with parallel groups since 2013. His view of the experience is «essentially positive: it helps the lecturer, who is thus able to master the use of English for his discipline, while also being of great help to students, who become familiar with the technical terms of the subjects in question.» However, he believes that when an internationalisation process is begun, a difference among subjects must be considered:
Holding classes in English is without doubt a positive development from all points of view, for both lecturers and students. Nevertheless, the speed of the internationalisation process regarding teaching depends on the subject in question. From my experience with mathematics, it is difficult, even if not impossible, to illustrate in a language other than the mother tongue what lies behind mathematical formalism.

When asked about the differences between the L1 and L2 he states:

I have tried to maintain the same style as much as possible, but obviously it’s not easy. Teaching a course in a language that is not your mother tongue does not allow you as many digressions and observations to go along with the technical explanations. As far as my mastery of English permits, I try to accompany my technical explanations with reflections and digressions, as I do in the course taught in Italian.

When assessing the IMI and EMI classes, he says they are comparable, although he reveals a slight bias:

I’ve noted a difference in student performance: in terms of marks, the class following the course taught in English has a slightly worse performance. However, this could obviously depend, in my view, on several things: a modest ability of the lecturer to transmit the content in a language different from his mother tongue, limited knowledge of English by the students, and different backgrounds among the students (I taught the two courses in two different universities). Nevertheless, I’ve observed that the average level of understanding (or level of study) is lower in the course taught in English. As proof of this, at times during the exams held in English I’ve had to ask a student to answer in Italian when he or she cannot give the answer in English. However, even in Italian the student was not able to answer.

The last comment shows that perhaps it is not only the language that is the measure of understanding (seeing that some students did not even know how to respond in Italian) but more the type of cohort. In short, this lecturer is not totally convinced about EMI teaching.

The General Physiopathology lecturer has taught for 15 years, and since 2011 in English with parallel groups. She holds that the groups are comparable and has a positive view toward the experience:

Having lived abroad, I don’t have particular difficulties with the language. Therefore, the teaching is interactive and, it seems to me, pleasing, as also confirmed by the student evaluations. I haven’t noticed great differences between the two groups. Perhaps the course in Italian, having more students, also includes some more difficult cases to deal with.

The only difference she has noted involves the class in Italian, which, being larger, is more difficult to manage.
6. Discussion and Conclusions

This paper has sought to analyze the differences between IMI and EMI lectures regarding content acquisition. In terms of our research questions, the study has provided the following results.

Regarding the comparability of the two groups (IMI and EMI), the lecturers state that they are in fact comparable. However, at times they recognize there are some differences and reveal some perplexity regarding EMI, which may have influenced their marking.

Regarding the learning outcomes (Research question 1 - RQ 1), the results of the study are in contrast with similar studies at the tertiary level of education. There appears to be a difference in the acquisition of content on two main levels: the first is represented by the type of degree course, (Master’s vs Bachelor’s); the second is represented by the subject matter taught (humanistic vs scientific).

In fact, at the Bachelor’s level EMI appears to reduce the acquisition of content with respect to courses taught in the mother tongue (Research Question 2 - RQ 2). This finding is not in line with the study by Dafouz et al. (2014)\(^2\), where there appeared to be no disadvantage for Bachelor’s courses in Economics. At the Master’s level, though, there is no evidence of any detriment to content learning in the EMI group. At the same time, in our study there is a difference related to the discipline being taught. Economics and International Relations cohorts do not show statistically different results in content acquisition. Also Dafouz et al. (2014)\(^2\) found a difference linked with the subject, suggesting that content acquisition was limited in History courses, whereas this was not the case with subjects in the economics area taught in English. On the other hand, in our study the results for science courses were different when taught in English; that is, content acquisition was lower for the EMI classes in Geometry and Physiopathology. This result is partly in line with research by Kuteeva and Airey (2014)\(^2\) and suggested by Dimova, Hultgen and Jensen (2015)\(^2\), who maintain that informed choices must be made regarding the subjects to be taught in English. In our case, the question remains open: do these differences depend on the choice of the language of instruction or are they connected with the type of discipline and degree level?

The present study has shown that learning outcomes are highly variable, and it cannot be excluded that contextual factors other than the ones we have investigated also play a role. For instance, the lecturers’ individual characteristics, differences regarding knowledge construction, the part of the country where the university is located or the year in which the course is given.


\(^2\) Ibidem.


could also be taken into consideration. Therefore, we hope that other studies will follow the present one, with both experimental and control groups, using statistics as a tool for analysis.

Acknowledgements

The authors would like to thank Dalila Ribaudo for her invaluable help with the statistical analysis of the data.
Beyond the classroom: the impact of EMI on a university’s linguistic landscape

Francesca Helm, Fiona Dalziel

In this paper we explore the linguistic landscape of an Italian state university. A “Linguistic Landscape” refers to the language visible in public spaces, and to a transdisciplinary approach adopted in language policy studies, often in “arenas of contestation”. The EMI context can be considered such an arena; linguistic landscaping offers an exciting new methodological approach, enabling observation of the changing face of universities in their quest for ever-increasing internationalisation.

Keywords: English-Medium Instruction (EMI), Linguistic Landscape (LL), language policy, internationalisation

Introduction

In this paper we explore the impact of English-Medium Instruction (EMI) outside the classroom walls by analysing the Linguistic Landscape (LL) of certain spaces in an Italian university. Our original interest in EMI arose out of involvement in a Language Centre project aimed at providing language and methodological support for lecturers teaching their courses in English (see for example Helm and Guarda). As part of the project the Centre organised numerous seminars and round tables, where issues related to internationalisation, the role of English and language policy were discussed at length and in great depth. We thus came into direct contact both with scholars who were keen to promote EMI and those who were extremely concerned about the effects of the process of Englishization on the Italian language and culture (Motta). At the same time, the Language Centre received first-hand knowledge of the continuing complaints of international students studying on English-taught programmes (ETPs) with regard to the lack of support in the English language outside the EMI classroom. A growing interest in EMI led us to explore a number of fields related to multilingualism, including that of Linguistic Landscaping (LL), which

1 F. Helm is responsible for the following sections: Linguistic Landscape; Sites of linguistic landscape studies; Research questions; Findings: the physical environment; Interviews; Discussion. F. Dalziel is responsible for the following sections: Introduction; The Italian context; Categorisations; Findings: the virtual environment.  
we thought could provide a fertile ground for the investigation of these contradictory sides to EMI.

The construct of LL was described by Landry and Bourhis in a landmark article in 1997 as “the visibility and salience of languages on public and commercial signs in a given territory or region”. The definition of linguistic landscape has since been expanded to include a wide variety of signs, such as graffiti, notice boards, placards and also virtual spaces such as websites.

The study of linguistic landscapes is a transdisciplinary approach that has been adopted in the exploration of language policy, and has often been used in “arenas of contestation”. English-Medium Instruction in Italian higher education, especially with regard to the role of the Italian language and the risk of domain loss, has become the object of considerable contestation. This case study investigates the visibility and significance of the English language in some of the physical spaces where EMI is taking place in addition to its use in the virtual spaces which are promoting and describing EMI degree programmes.

We begin the paper by describing the situated context of the study with some descriptive and quantitative data regarding EMI, ETPs and international students. We then provide a review of the literature on linguistic landscaping and its application in different contexts. After describing the data that we have gathered (webpages, photographs and interviews) and how it was analysed for this study, we present the findings and conclude with a discussion of its implications.

2. The Italian context: EMI, an arena of contestation

The rapid rate at which English-Taught Programmes have been introduced into Italian universities can be considered remarkable in a context where change is notoriously slow. In 2016-2017 according to Universitaly, there were 276 ETPs in English offered by 54 different universities, of which 21 were first cycle degrees. This marks a considerable growth

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4 There have been many reports of this ruling in the press and also on academic websites and journals, as will be further discussed in the following section of this paper.
6 http://www.universitaly.it/index.php/cercacorsi/universita?lingua_corso=en (last accessed: February 10, 2017). The Universitaly website provides up to date information on university programmes taught in English.
since the previous year\textsuperscript{10}, but not as great as the 2014-2015 academic year, which saw an increase of over 70%. The introduction of ETPs has been controversial in many European countries\textsuperscript{11}; in Italian higher education it has also become the object of considerable contestation, as has been well documented\textsuperscript{12}. The ongoing case of the Politecnico di Milano, whose 2011 decision to offer all of its Master’s degrees and PhD courses entirely in English, continues to be widely discussed in the local, national and international media, in the academic world\textsuperscript{13}, by Italy’s language academy Accademia della Crusca\textsuperscript{14} and also at a political and juridical level. The most recent development in this controversy occurred in February 2017, when the Constitutional Court declared that fully taught programmes in English can be introduced only when there is an equivalent degree course in Italian, a decision which has stimulated further debate\textsuperscript{15}.

The actions of the Politecnico di Milano have brought the Italian EMI debate to the attention of many within and beyond Italy. In many ways this case is an exception, since the Politecnico is the only public university which has sought to transform all of its Master’s degree courses from Italian to English, though it does bring to light a potential risk to the status of Italian in higher education. Most other Italian universities currently have a relatively small – but growing – percentage of their second-cycle degree courses in English\textsuperscript{16}, and students enrolled on these courses represent a small minority of the total student population. Wächter and Maiworm\textsuperscript{17} consider the number of students enrolled on ETPs as a percentage of the entire European student population and found that in 2013-2014 it was just 1.3% and for Italy it was only 0.5%. As regards the students enrolled on ETPs, the average European percentage of international students is 54%, while for Italy it

\textsuperscript{10} In 2015-2016, 52 Italian universities were offering a total of 245 ETP courses according to Universitaly.


\textsuperscript{13} In international publications it has been mentioned in, for example, Dearden’s 2014 report for the British Council https://www.britishcouncil.org/sites/default/files/e484_emi_-_cover_option_3_final_web.pdf

\textsuperscript{14} See for example A. Motta, Nine and a half reasons..., pp. 95-110, which summarises the arguments made by the Italian Accademia della Crusca in N. Maraschio – D. De Martino, Fuori l’italiano dall’università? Inglese, internazionalizzazione, politica linguistica, Editori Laterza, Bari 2013, pp. 22-26.


\textsuperscript{16} Data sources vary on this. In Wächter and Maiworm’s 2014 study in Italy this was 2.9% but the percentage has changed since then. In numerical terms their study reported 307 ETPs, but this data contrasts with that found on the Universitaly website.

\textsuperscript{17} B. Wächter – F. Maiworm ed., English-Taught Programmes in European Higher Education...
is 42%; hence there are a considerable number of local students who choose ETPs, partly in the hope of improving their English language skills and employability. It is interesting to note that Wächter and Maiworm’s study reported that while the English proficiency of academic staff teaching in ETPs is generally perceived quite positively across Europe, the proficiency of administrators was reportedly the least impressive among all those involved in ETPs. This should not necessarily be a surprise as the rise of EMI is a relatively new phenomenon. Whilst for academics in some fields, participating in international research groups, conferences and publishing in English may have been a regular part of their job for many years, this is not the case for most administrative staff. English language proficiency has only recently become a key requisite for many administrative jobs, at least in Italy. Wächter and Maiworm write that some program directors reported that administrative staff are not only unprepared to deal with students in English but may also be unwilling to do so, which in the eyes of institutional coordinators of ETPs is one of the most relevant language-related problems. This may, in part, be explained by “the unmet expectation of the mastery of the domestic language by foreign students” (p. 22). Italy, however, is one of the most active countries with regard to offering support and training in the domestic language (68%). This issue, as will be discussed, may have a bearing on the presence of signs in English on university campuses.

3. Linguistic Landscape: literature review

Linguistic Landscape is a transdisciplinary approach which has aroused the interest not only of applied linguists and sociolinguists, but also researchers with backgrounds in advertising, education, economics, history, media, semiotics, sociology and urban geography. It has been used in research into language contact and change, social protest, tourism and other domains of language use in public life. The most commonly quoted definition is provided by Landry and Bourhis: “The language of public road signs, advertising billboards, street names, place names, commercial shop signs, and public signs on government buildings combines to form the linguistic landscape of a given territory, region, or urban agglomeration.” Using the theoretical framework of (subjective) ethnolinguistic vitality, Landry and Bourhis explored the linguistic landscape experience of a group of francophone secondary education students in Quebec. They concluded that “the linguistic landscape is a sociolinguistic factor distinct from other types of language contacts in multilingual settings,” and the linguistic landscape “may constitute the most salient marker of perceived in-group versus out-group vitality.”

Linguistic landscaping is fundamentally concerned with signs, but the definition of these has moved from being “primarily mental and abstract phenomena” to “material

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18 Ibid.
21 Ibid. p.45.
forces subject to and reflective of conditions of production [...] and as real social agents”22. Backhaus’ definition of sign, for example, is “any piece of written text within a spatially definable frame [...] including anything from the small handwritten sticker attached to a lamp-post to huge commercial billboards”23. The concept was further extended by Shohamy and Waksman to include “verbal texts, images, objects, placement in time and space as well as human beings”24, thus blurring the distinction between private and public, real and virtual, text and image. The interest in and applications of LL as a methodological approach has grown rapidly in the last decade as witnessed by the vast increase in the number of publications in this area. In 2012 Troyer25 presented an updated bibliography of linguistic landscape publications in English, which included 168 publications, only 12 of which had appeared before 1998, 40 between 1998 and 2006, and 116 between 2007 and 201226. The list has since moved location and become a group library on the website Zotero27 and at the time of writing includes 14 authored books, 11 edited collections and 349 journal articles. In 2015 a dedicated international journal, Linguistic Landscape28 was launched.

4. Applications of Linguistic Landscaping

Linguistic Landscapes are perceived as places of identity construction and representation29 and can also be considered sites for the propagation of particular ideologies through textual/linguistic/semiotic artifacts. Many of the first linguistic landscape studies were, in fact, carried out in areas where language is a contested issue, such as Belgium or Israel, and also in relation to minority languages – both of which remain key areas of study inlinguistic landscaping. Shohamy30, for example, depicted the Linguistic Landscapes as an arena where language battles take place and where the linguistic landscape items act as the mechanisms of language policies that can perpetuate ideologies resulting in the centrality or the marginality of languages in a society. Like many others, Shohamy concludes that LL

26 As reported in D. Gorter, *Linguistic landscapes in a multilingual world*.
does not provide true reflection of the ethnolinguistic diversity of a place, but rather the status of languages in a given context. It was instead Spolsky who connected the study of public multilingual signage to language policy theory. Linguistic landscapes are part of language practices, one of the three components of Spolsky’s theory, which also includes beliefs about language and language management, the latter being the explicit efforts by authorities to modify practices or beliefs. For Scollon and Scollon, on the other hand, the languages on a sign can index the community in which they are used (geopolitical location), or they can symbolise an aspect of the product that is not related to the place where it is located (sociocultural associations). Thus, a sign in English may not index an English-speaking community, but can be used to symbolise foreign taste and manners, modernity, internationalism and/or cosmopolitanism. The spread of English has, indeed, been one of the main themes in LL studies and even when the focus of a study is minority languages, English inevitably emerges in the findings.

5. Sites of linguistic landscape studies

Most of the work on linguistic landscapes has been carried in urban contexts so as to explore expressions of ‘superdiversity’, brought about and enhanced by globalisation and increased migration flows; indeed, new terms such as ‘linguistic cityscape’ and ‘multilingual cityscape’ have emerged as synonyms of linguistic landscape. Much of this work has focused on shop signs, road signs, advertising billboards, street names, public signs on government buildings. Coluzzi, for example, explored the linguistic landscape of two streets in Italy, one in Milan and the other in Udine, aiming to investigate the presence of the different languages making up the linguistic repertory of the two cities, with a focus on minority languages. Signs in two streets of a similar length were recorded and classified according to the language or languages they were written in. What he found, however, was that of the few multilingual signs that he identified, a very low number included minority languages; the most common second language he identified was English.

The study of linguistic landscapes in semi-public spaces has been identified as a potentially fruitful area for further research for as yet little work has been carried out in such settings. Some studies have been carried out in educational settings, particularly schools, in relation to bilingual education, where the linguistic landscape has been identified as an important space for the celebration of bi- or multilingualism and for

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33 D. Gorter, Linguistic landscapes in a multilingual world.
35 For an overview, see D. Gorter, Linguistic landscapes in a multilingual world.
37 D. Gorter, Linguistic landscapes in a multilingual world.
practices of inclusion\textsuperscript{38}. The linguistic landscapes of university spaces have been less widely explored, perhaps because it is only in recent years that language policy in universities has become an area of interest and contestation\textsuperscript{39}.

6. Categorisations and language functions of signs

Signs have been categorised in several different ways. A common preliminary distinction is that between ‘top down’ and ‘bottom-up’ signs, also defined as “official vs. non-official”\textsuperscript{40}, “private vs. government”\textsuperscript{41} or “private vs. public”\textsuperscript{42}; commercial (e.g. shop signs) and transgressive discourses (e.g. graffiti)\textsuperscript{43}. Recent technological developments have led to the addition of many new types of signs\textsuperscript{44}: electronic flat-panel displays, LED neon lights, foam boards, interactive touch screens, inflatable signage, and scrolling banners.

As regards the main functions of the language found on signs, Landry and Bourhis\textsuperscript{45} distinguished primarily between an informational (or instrumental) and a symbolic (or token) function. The former is a means of providing information about the sociolinguistic composition of speech communities in any given area, indicating the language(s) used for communication and the presence or absence of language diversity. The latter, instead, is a reflection of the power, prestige and status of a language, telling us whether it is dominant or subordinate, and thus whether it symbolises the strength or weakness of different groups/communities. The few LL studies that have been carried out in university contexts have explored official, semi-permanent bilingual university campus signs, bottom-up signs and student notice boards, the rules that govern the display of signs, and students’ attitudes towards the signs on campus\textsuperscript{46}.

Virtual arenas of language use such as websites have also been identified as linguistic landscapes worthy of study in relation to language policy\textsuperscript{47} though in university contexts

\begin{itemize}
\item \textsuperscript{40} P. Backhaus, \textit{Linguistic Landscapes: A Comparative Study of Urban Multilingualism in Tokyo}.
\item \textsuperscript{41} R. Landry – R.Y. Bourhis, \textit{Linguistic landscape and ethnolinguistic vitality}.
\item \textsuperscript{42} E. Shohamy – E. Ben-Rafael – M. Barni, \textit{Linguistic landscape in the city}, Multilingual Matters, Bristol 2010.
\item \textsuperscript{43} R. Scollon – S.W. Scollon, \textit{Discourse in Place: Language in the material world}.
\item \textsuperscript{44} D. Gorter, \textit{Linguistic landscapes in a multilingual world}...
\item \textsuperscript{45} R. Landry – R.Y. Bourhis, \textit{Linguistic landscape and ethnolinguistic vitality}.
\item \textsuperscript{47} H. Kelly-Holmes, \textit{Multilingualism and commercial language practices on the Internet}, “Journal of Sociolinguistics”, 10, 2006, 5, pp. 507-519. See also D. Ivkovic – H. Lotherington, \textit{Multilingualism in
these have not, as yet, been studied in great depth. Callahan and Herring carried out a longitudinal study on the language ecology of university websites and found that in general the national language is the core language used to communicate with the local population, English is increasingly found to be the first additional language aimed at an international audience (following a Diglossia model) and in some cases use of other secondary languages targeting specific groups is emerging (a tri-level multiglossia model).

7. A Linguistic Landscape Study

7.1 Research questions

This case study reports on the initial stages of a larger, diachronic study the authors have recently embarked on, which aims to explore the changing linguistic landscape of an Italian state university over several years. Our aim is to investigate whether the continuing growth in the number of ETPs and other joint programmes will be mirrored by evolutions in the direction of greater multilingualism in physical spaces. The first step in this study is thus to begin to map the linguistic landscape by gathering and classifying data on the ‘current’ situation. Our hypothesis is that despite the increase in ETPs, the growing number of international students and the current hyperbole about the spread of English in Italian higher education, which might lead one to expect English to be visible in the landscape, its presence is relatively limited. The specific research questions we sought to answer were:

To what extent is English present in the linguistic landscape of the university (taking into account the website and selected physical spaces)?
What is its function in these signs?
What are stakeholders’ attitudes towards the signs on campus?

7.2 Methodological approach and data collection

Many studies adopt a predominantly quantitative approach, taking photos of all signs in a given area, and counting the numbers that fall within different categories, such as...
as multilingual, bilingual or monolingual. Sometimes these studies are comparative, comparing numbers and types of signs in, for example, similar streets in different cities\textsuperscript{51} and more recently diachronic, looking at how the linguistic landscape changes over time\textsuperscript{52}.

Gorter\textsuperscript{53} laments the lack of qualitative analysis of some of the signs, commenting on the prevalence of pure description rather than critical evaluation. He endorses a mixed methods approach, which is increasingly being adopted, combining visual data with ethnographic interviews with sign makers and/or policy makers, or with individuals who ‘experience’ signs. This latter mixed methods approach has been adopted in this paper.

We have chosen to focus our initial analysis on two different settings within the same university. One of these is the School of Agricultural Sciences and Veterinary Medicine, which has a campus 10 km from the city; the other is the School of Psychology, now situated in a new university citadel in the city. These schools are the only ones which have first cycle degrees taught through English – the former established one in the current academic year, 2017-2018, and the latter 2 years ago. Both schools also have second-cycle ETPs. The aim of the present study is not to compare the two settings, but rather to gather data from each with a view to shedding light on the presence of English in two different areas of the university landscape where EMI has a strong presence.

Our study begins with analysis of the virtual LL of these two schools, because this is the first LL that international students come into contact with. The main marketing channel for universities seeking to attract international students is indeed their websites\textsuperscript{54} and these provide information about ETPs and admissions in English. The methodology adopted for the analysis of the virtual site draws on the work of Kelly-Holmes, who has brought together virtual ethnography and linguistic landscape analysis\textsuperscript{55}. The ‘journey’ through the university websites in order to find information about ETPs in the two schools was recorded by the researchers with field notes and screenshots, and is described in the first part of the findings.

Subsequently, the physical LL was explored by the authors, who visited the sites of the two schools in March and April 2017. Equipped with cameras, they took photos of the signs they saw (both bilingual and monolingual), and subsequently classified them into different types, basing their classification on research previously carried out in the field, but adding types of signs that are specific to higher education contexts. After taking over 150 photographs the authors felt they had identified the different sign ‘types’ as no new categories emerged and all the multilingual signs in the two areas had been photographed. The study does not include a systematic inventory of all the observable signs in the two university areas, but rather a classification of all the sign types in these two university

\textsuperscript{51} For example Coluzzi’s study \textit{The Italian linguistic landscape: The cases of Milan and Udine.}

\textsuperscript{52} See, for example, A. Pavlenko, \textit{Linguistic landscape of Kyiv, Ukraine: A diachronic study, in Linguistic landscape in the city}, E. Shohamy – E. Ben-Rafael – M. Barni eds., Multilingual Matters, Bristol 2010, pp. 133-150.

\textsuperscript{53} D. Gorter, \textit{Linguistic landscapes in a multilingual world.}


settings, and an inventory of the small number of signs found that included English. A qualitative analysis of these signs was carried out, looking at the functions of English on the signs, the intended audience and their indexicality. In order to answer some of the questions that emerged and to explore attitudes to the linguistic landscape, the authors also interviewed some key stakeholders in the ETPs at the two schools under investigation: two ETP directors, the heads of the departments’ library services and some international students.

7.3 Findings: the virtual environment

The University’s website can be said to follow the Diglossia model as it has pages in Italian and English, which are the only two languages available. These options appear on the top right hand corner of the website through the abbreviations IT and EN. The Italian and English versions of the site have quite different content, clearly targeting different audiences, but both the Homepages provide a link to information about courses and course units held in English, though this is in a more prominent position in the English language version. These are the first of two main entry routes for prospective international students interested in studying at the School of Agricultural Sciences and Veterinary Medicine or the Psychology.
From the English language version of the University’s homepage (Figure 1 above) one can access information about “Courses and course units held in English” with the text below explicitly specifying the intended audience “For international students and to enhance language skills”. This leads to a list of ETPs organized first by cycle (first cycle and second-cycle degrees) and then by school. Taking Psychological Science, a first-cycle degree course, as an example, clicking on the relevant link opens up a page containing basic information and a brief overview of the course, with links to information on fees and application procedures. These in turn lead to pdf files of documents which have been translated into English. The virtual LL following this route is monolingual English.
Figure 2: Course description for Psychological Science (screenshot date 15/3/2017)

For the School of Agriculture, starting from the first cycle degree course in Animal Care, there is a page similar to that of Psychological Science with basic information and an overview of the course, but there is also a link to a course website which is part of the School’s site; this contains further information about the course as well as information and labelled photographs of the Agripolis Campus.
The second entry route for international students is directly through the English language versions of the individual schools’ webpages – again available by clicking on the EN button in the right-hand corner of the toolbar at the top of the page. Both schools provide introductory videos, a banner with information about international events, information about services such as accommodation, canteens, libraries, language courses, health services, student associations, linking to the English language pages of external websites, such as that of the housing association. One notable feature is the video produced by the School of Psychology, which is plurilingual with subtitles in English, and features students speaking a range of languages, from German to Farsi56. As well as the presence of English on the website, the linguistic background and resources of international students are used to index a globalised university environment where students from a range of linguistic backgrounds are welcome.

It is worth highlighting that the content available on both the Schools’ English language webpages is different from that available on the Italian pages as it is customised for international students intending to enrol or already enrolled in these ETPs. Less content is available and links tend to lead to less dynamic content (for example pdf files). The use of languages on the site could thus be said to exhibit “limited parallel monolingualism” (Heller 1999), indexing a “two solitudes” model of bilingual education whereby languages live alongside one another but do not appear to interact.

7.4 Findings: the physical environment

The analysis now moves from the virtual to the physical environment. The authors first of all classified the signs they had photographed according to location, beginning with external then internal spaces, and then the different types of signs (see table 1). Signage on the exterior of the sites explored generally consisted of maps, directions and building identification. All of the signs found in this setting were semi-permanent and top-down, that is official signage.

Table 1: A classification of signs

<table>
<thead>
<tr>
<th>Location</th>
<th>Sign type and function</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EXTERNAL</strong></td>
<td>In campus space</td>
</tr>
<tr>
<td>'Official'</td>
<td>Outside buildings</td>
</tr>
<tr>
<td>Semi-Permanent</td>
<td>On exterior of building</td>
</tr>
<tr>
<td>Maps and directions</td>
<td>Building identification</td>
</tr>
<tr>
<td><strong>INTERNAL</strong></td>
<td>Inside spaces - Interior semi-permanent signs</td>
</tr>
<tr>
<td></td>
<td>Building identification</td>
</tr>
<tr>
<td></td>
<td>Directions</td>
</tr>
<tr>
<td></td>
<td>Safety signs</td>
</tr>
<tr>
<td></td>
<td>Wifi hotspots</td>
</tr>
<tr>
<td></td>
<td>Room/office signs</td>
</tr>
<tr>
<td></td>
<td>Paper signs</td>
</tr>
<tr>
<td></td>
<td>Information about courses, timetables, theses, exams</td>
</tr>
<tr>
<td></td>
<td>Instructions</td>
</tr>
<tr>
<td></td>
<td>Services</td>
</tr>
<tr>
<td></td>
<td>Advertisements (for other MA courses, for conferences)</td>
</tr>
<tr>
<td>Library noticeboards</td>
<td>Paper signs</td>
</tr>
<tr>
<td>and walls, doors</td>
<td>Opening times, services available</td>
</tr>
<tr>
<td>- Library</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Advertisements - for courses, conferences, publications</td>
</tr>
<tr>
<td></td>
<td>Information for students</td>
</tr>
<tr>
<td></td>
<td>Advertisements for books, lessons, rooms to rent posted by students;</td>
</tr>
<tr>
<td></td>
<td>Adverts for services by businesses and associations (language schools, NGOs...)</td>
</tr>
<tr>
<td>Bottom-up</td>
<td>Student noticeboards</td>
</tr>
<tr>
<td>Temporary</td>
<td>Walls</td>
</tr>
</tbody>
</table>

Inside the buildings there was a wider range of sign types, from semi-permanent signs such as those indicating directions, rooms, safety notices, wifi, to more ephemeral paper notices and information provided on electronic flat-panel displays. Paper notices ranged from official notices on university headed paper to student and commercial advertisements found on the various noticeboards. The distinction between top-down and bottom-up signs that is
commonly used in LL research in urban contexts is somewhat less clear-cut in this university environment. Whilst paper signs posted by students on noticeboards are clearly bottom-up, the temporary signs posted by professors outside of official noticeboards, for example on their doors, were more difficult to categorise for they could be seen to reflect individual initiative rather than top-down, institutional policy.

The few signs we photographed with languages other than Italian on them were then classified according to the visibility of the languages present on them. The following typologies were identified: predominantly Italian, by which we mean those in which Italian was the main language but a few words of English added; bilingual English and Italian signs in which both languages were used to equal degrees; and finally monolingual English signs. No languages other than English were identified. The table below shows the numbers for each type of sign we found.

<table>
<thead>
<tr>
<th>Table 2: Status of languages other than Italian in signs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Predominantly Italian</td>
</tr>
<tr>
<td><strong>Agriculture</strong></td>
</tr>
<tr>
<td>External</td>
</tr>
<tr>
<td>Internal</td>
</tr>
<tr>
<td>Semi-permanent</td>
</tr>
<tr>
<td>Internal temporary</td>
</tr>
<tr>
<td><strong>Psychology</strong></td>
</tr>
<tr>
<td>External</td>
</tr>
<tr>
<td>Internal</td>
</tr>
<tr>
<td>Semi-permanent</td>
</tr>
<tr>
<td>Internal temporary</td>
</tr>
</tbody>
</table>

External signs

Top-down, public signage

We will begin our discussion of the physical linguistic landscape by looking at different categories of top down signs, beginning with those that are of a more permanent nature, that is those that are not printed on paper, but those that are specifically made by sign-makers on metal, plastic or other hard-wearing materials. By virtue of being external, these are the most public signs of all those studied.

Directions/Maps/Names of buildings

As mentioned above, we explored the sites of two schools, Psychology and Agriculture (Agripolis Campus). In the city of Padua, Psychology is in an area called Cittadelladellostudente, a ‘mini-campus’ inaugurated in 2015\(^{58}\) which comprises various buildings besides the main building.

\(^{58}\) http://www.unipd.it/ilbo/inagurata-cittadella-studente The Psychology buildings however were there previously.
for students enrolled in ETPs at the School of Psychology, for example the Language Centre, a student residence, a building with conference rooms and professors’ offices.

Outside the Psychology buildings at the Cittadella dello Studente there were not many signs, just those marking building names and functions, all of which were monolingual Italian. In the main central square of the Cittadella, there is at yet very little signage, but at the time of writing plans are being made to install bilingual (English and Italian) sign throughout the area\footnote{Information provided by two interviewees.}.

On the other hand, the School of Agriculture and Veterinary Science is on a campus outside the city, known as Agripolis. It is a much larger area than the Cittadella dello Studente, and has more public signage in the outside area. The two sign types found were a map of the area and directions. These were classified either as monolingual Italian or predominantly Italian. The map of the area was classified as predominantly Italian because it included a few words in English, namely the wording ‘You are here’ which appears below the Italian Voi Siete Qui, supported through visuals and the term ‘teaching rooms’. See figure 6 below.

Figure 5: Map of Agripolis campus

It is interesting that ‘teaching rooms’ is the only English expression found on the signs giving directions. It appears on the same level and after the Italian words Aule e Laboratori which literally mean classrooms and labs. Perhaps because the literal translation would have been too long for the sign, the shorter version ‘Teaching Rooms’ was selected. What is
particularly striking though is that the indication above it, *Aula Magna* (Auditorium) is not translated, but it is supported by a visual icon, as is the word *Portineria* (reception) which appears at the bottom of the sign, which is supported by the internationally recognisable letter/symbol ‘i’ to indicate an information point. However, this information point is for couriers, not for international students, as confirmed in interviews with stakeholders. Other icons were used in the directions, perhaps as an alternative to translation, for example a coffee cup to indicate bar, and knife and fork for the *mensa* (canteen). It is interesting that the photograph of the campus which appears on the website (see Figure 6 below) contains more bilingual labels than the campus itself.

Figure 6: photograph of the Agripolis campus published on the School website.

The decisions as regards the public signage are made by the *Polo Multifunzionale*, a body concerned with the functioning of certain university areas. The course director that we interviewed had not been consulted about the signage, and was not able to inform us as to why “Teaching Rooms” were the only English words included on the signs.
Figure 7: photograph of directions on the Agripolis campus.

Internal signs

Top-down, semi-permanent signs
In the interiors of the two areas that we explored, the semi-permanent signage which regarded directions, room names, safety notices (such as not to use the lift in case of fire, or No Smoking) were almost all monolingual Italian, as can be seen in the sign on the left in figure 8 below. Some of the signs have visual icons which support understanding. This would appear to confirm what one of the interviewees remarked, namely that the physical landscape, even when related to safety and security features, has rarely been addressed as an issue, even by those actively promoting EMI (see below).
There are some English words, such as “wi-fi” and “hot spot” which have come to be used in Italian more often than the Italian equivalent and tend to be used on signs, as in the sign above. However, the sign is characterised as predominantly Italian as the syntax and other words appear in Italian.

A bilingual exhibition space

The majority of bilingual semi-permanent signs found were part of permanent exhibitions, which had been set up by university lecturers, in the Agriculture building. Two out of the various permanent exhibitions were completely bilingual, with Italian and English versions of the same text appearing side by side together with photographs. Figure 9 was one of a series of panels displayed in the Agriculture building. One of the interviewees reported that this was part of an exhibition that had been created several years ago but was recently reworked by a researcher who added English translations. The original Italian text appears on the left, the dominant position (if we consider that Latin script is read from left to right), and the English translation on the right, and the fonts are of equal size. The bilingual texts in this exhibition space can be seen to serve a didactic function as they provide authentic...
educational and linguistic input for both Italian students and international students. They also index the environment as a bilingual learning space, serving both local needs and the international student community. Like the signs in bilingual schools, these were the initiative of a university lecturer rather than the administration.

Figure 9: Permanent exhibition on display with bilingual signs appearing side by side.

Bilingual temporary paper signs
As well as the exhibition at the Agripolis campus, two more examples of truly bilingual signs were found on the two sites, although in both cases the Schools themselves were not responsible for their presence. In the Psychology Library, run by central library services, a bilingual sign recently appeared (December 2016) on individual desks in the study area, giving instructions about regulations for the use of these desks (see Figure 10). Once again the two languages appear alongside one another, in the same size of font, with Italian on the left hand side.

60 O. Garcia – L. Wei, Translanguaging: Language, bilingualism and education.
Previously no such signs had existed, and the head of the Psychology Library informed the authors that they were part of a campaign to encourage respect for fellow library users. The choice to include English was taken by the organising committee of the library in question, not the central library board; given the high number of international students using the library, it was deemed appropriate to give them equal access to information. Despite the regulatory nature of the notice, its aim, the head of library informed the authors, was that of including international students into the community of library users, and hence the initial word “Welcome”. This sign was experienced positively by one of the student informants who reported that she felt that the library was one of the few places where her presence as an international student was acknowledged by the university.

Figure 10: Notice on individual desk in Psychology Library.

A similar case was found in the Agripolis canteen, where menus and dishes of the day are available both in English and Italian, not appearing side by side, but on different sheets of paper. Unlike the example above, which was the initiative not of the central library services but the library of Psychology, this bilingual choice was part of a university-wide policy on the part of ESU (l’Azienda Regionale per il Diritto allo Studio Universitario - Regional company for the Right to University Education), the body responsible for accommodation
and canteen services to the university. In fact the entire website of ESU\textsuperscript{62} is available in 4 languages: Italian, English, Spanish and Chinese.

Electronic flat panel displays (top-down signs)

The department of psychology has an electronic notice board which provides information about the timetable and alternates this with other institutional websites which provide information, as can be seen in the picture below. These have been classified as predominantly Italian as almost all of the information is provided in Italian. Some English words do appear at the level of headings: Home, Help me, Newsletter, Business Analysis but their presence is not to index information in English for the information provided below these headings is in Italian. English here has a very superficial, symbolic function, indexing globalisation and the spread of English terminology, but it is not being used to provide information or to address international students.

Figure 11: Electronic flat panel display in Psychology building.

Temporary monolingual signs

The linguistic landscape of both areas observed is also characterised by temporary paper signs posted on various types of official notice boards around the interiors of the buildings and on the doors of some professors. Though the size of text on these signs is often very small, and does not have as strong a visual impact as the semi-permanent signs, we have nonetheless considered these as part of the linguistic landscape. Most of these signs have been posted by institutional staff members; several different functions were identified, such as providing information about courses, exams, thesis writing, opportunities for placements and study abroad. The vast majority of these signs were monolingual Italian only, and equivalent signs in English were not available. There were, however, several monolingual English paper signs which were those advertising courses (summer/winter schools, second cycle degrees), international conferences or guest lectures (see figure 12). These appeared on the school notice boards and on the doors of some of the professors and ETP course directors, with the symbolic function of indexing internationalisation.

Figure 12: Publicity for a seminar at Agripolis.
7.5 Some conclusions

To return to our research question regarding the extent to which English is present in the linguistic landscape of the university, we can conclude that in the two physical spaces we explored English is currently barely visible. Despite the fact that several ETPs exist in these spaces and are attended by international students, the presence of English on permanent or semi-permanent external and internal signs is almost non-existent. There are, however, some bilingual or monolingual English temporary paper signs with informative functions and two semi-permanent exhibitions with bilingual signs which index a bilingual learning space. There are several factors which could possibly explain the low visibility of English, which do not appear to be related to the conflicts around the role of English in Italian higher education, but rather to a lack of attention and/or awareness to the symbolic and informative function of signs.

First of all, one could argue that the university offices responsible for signage have little to do with internationalisation and ETPs. The fact that the only signs with English appear in interior spaces of the two buildings we explored were almost all the result of initiatives coming from university lecturers could be indicative of the bottom-up push towards EMI at this institution. And yet, the interviews with stakeholders (see below) would appear to indicate that the primary concern of those involved in EMI at the university is still that of language skills (firstly of the lecturers and then of the administrative staff). It might be of relevance to highlight here that the increase in ETPs has been relatively recent and there is, as yet, no written official university language policy, as there is in many other universities actively promoting EMI. In future, if such a document were to be produced, it would address the role of the native language and culture, in this case Italian, alongside English and other languages. This would ideally focus on the needs of international students (and visiting lecturers) and include the provision of multilingual signage.

7.6 Interviews with stakeholders

What interviews with students have revealed is that they are aware of the linguistic landscape in the spaces surrounding them for it impacts their experience of the university. Several of them reported having difficulties due to not understanding signs in Italian, particularly when they first arrived, and this leads to disorientation and frustration. Whilst most of them acknowledge the importance of learning Italian, and indeed enrol on Italian courses, they report that when they see signs which have English on them they feel ‘comfortable’, ‘happy’, ‘more at home’ and ‘valued and important for the university’. Though students find strategies such as Google Translate to understand the signs, and may ask peers for directions and translations, what the student remarks highlight is the symbolic value of the presence of languages in the LL of a university. English is not their first

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language, and though they may eventually understand the meaning of the Italian signs, the presence of a language they are familiar with, even in signs of a regulatory nature, not only facilitates their understanding, but offers symbolic acknowledgement of their presence as international students at the university and can foster a sense of belonging, rather than a sense of belonging to an invisible ‘out-group’.

Interviews with course directors revealed that the linguistic landscape is on the whole not something to which they have paid specific attention. This is not because of a lack of desire to welcome international students, which is indeed keenly felt and demonstrated by the immense efforts it has taken on the part of individual professors to set up ETPs and to improve their lecturing skills in English65. Along with these didactic issues, more immediate concerns have, understandably, been enrolment procedures and other bureaucratic tasks, such as that of providing translations of all the documentation that students will need to refer to, from admission to course/assessment descriptions. Semi-permanent signage such as maps and directions is not their responsibility as it falls under the remit of central or campus administration, yet our interviews led them to the realisation that this too was an important issue which they could in future pursue more actively.

8. Discussion and considerations

The small-scale, exploratory nature of this study clearly limits the implications of its findings, but it does, we believe, point to some issues which are worth reflecting upon as regards university language policy. One of the first significant results is the stark contrast between the LL in the university’s virtual space, where prospective students find a range of information at their disposal in English, and the university’s physical space, where the presence of English (or any other language) is minimal. Clearly, much attention has been paid to the English language on the university’s website, the most public and wide-reaching of all of the university’s linguistic landscapes and considered an essential part of the university’s international marketing strategy. The symbolic value of English here is used to index an international university. On the basis of this initial contact with the university’s environment, though the English version of the website provides less dynamic information than the Italian site, international student expectations could be quite high, expecting to find physical spaces reflecting an international learning environment. Yet, the findings of the analysis of physical spaces, albeit based on an exploration of a limited scale, point to a mismatch between the virtual and physical spaces, with hardly any bilingual or English signage on the campuses investigated. As the interviews with international students revealed, this can lead to frustration and disappointment once they have reached the physical

environment. The largely monolingual Italian university space causes disorientation amongst international students looking for a functional use of English in what the virtual space presented to them as an ‘international’ environment. It might also give the impression that the university is spending more time and effort on attracting prospective students than on catering for those who actually enrol, thus principally following a market-driven internationalisation policy.

One could of course argue that incoming international students should acquire at least a basic knowledge of Italian, and thus that translating these signs is not necessary or even desirable. We would certainly agree that learning the local language is an imperative, as it makes life outside lessons easier and more enriching, offering opportunities for intercultural contact and providing access to local and national knowledges. Indeed, there are provisions for learning Italian at the University Language Centre which, although originally aimed at Erasmus and other exchange students, are attracting more and more international students enrolled in ETPs every year. Yet bearing in mind the students’ comments, and also the literature, it is worth remembering the symbolic value of language, in this case English, which could serve to acknowledge the presence of international students. What may appear as a trivial and unnecessary change to the linguistic environment, such as bilingual notices pasted to library desks, indexes a welcoming rather than a daunting environment for international students.

A further, perhaps more important point to be made is that since the university actively recruits international students and places no Italian language requirement for admission, it has an ethical responsibility to make its learning spaces accessible to international students as well as to local students. The limited visibility of English and its less dominant position in relation to Italian in the physical space could be seen as representing a paradoxical finding of this study in relation to other LL research. In this particular context, English, rather than occupying its usual hegemonic, imperialist position, symbolically represents and addresses what could be considered a minority student group, in numerical terms. By making this point we are not arguing in favour of internationalisation tout court, or that all information be provided in English, but rather highlighting the accountability of institutions. Making the physical space as accessible as the online space would be a step in the right direction towards catering for the needs of this minority group. Yet addressing the linguistic landscape alone, that is providing signs in both Italian and English, could be misleading as it would lead students to assume that they would find English-speaking staff in all administrative offices – which may or may not be the case. This implies that attention

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66 The University of Padova Language Centre provides Italian language courses for international students and staff.

67 O. Garcia – L. Wei, Translanguaging: Language, bilingualism and education.

68 There is not, as yet, a written document outlining a university-wide language policy, but recruitment procedures and admission requirements for ETPs are a reflection of an implicit language policy. Whilst English language competence is a requirement for admission to ETPs, no reference is made to competence in Italian, and the registration process can be completed monolingually, using English alone, as can the admission test.
to the linguistic landscape should be accompanied by language development opportunities for staff who have contact with international students and lecturers.

Other considerations which have emerged from this study regard the types of bilingualism represented in the signs we have found in the virtual and physical linguistic landscapes that we explored. Those with the presence of two languages side by side, as found in the bilingual exhibitions in the Agriculture faculty or the library signs, should be welcomed as this input provides learning opportunities for both local and international students and promotes a language rich environment. Indeed, adding more languages, and more bilingual or multilingual exhibitions would further enrich the environment. Monolingual English signs on the other hand could be seen as embodying the ideology of parallel monolingualisms, the ‘two solitudes’ assumption and subtractive bilingualism. This ideology could be divisive, separating not only languages but also communities within and outside the university. Providing information about talks and events only in the secondary language can be seen as targeting certain student groups, which entails excluding or ignoring others. EMI programmes may be seen as increasing elitism and potentially leading to social rupture both within and outside universities. It has been suggested that students who choose ETPs are from higher social strata in society; in Italy, as elsewhere, the rise of EMI has been criticised for leading to an increased gap between the bilingual intellectual classes and the rest of the population, between universities and the communities that finance them. Ideologies and practices of subtractive bilingualism could be more likely to advance these tendencies and create further tensions. The creation of a bilingual environment, on the other hand, can support the development of multiple languages and literacies of all the students and create a more inclusive environment. Clearly the linguistic landscape alone is not sufficient, but it may represent an important symbolic step in the right direction.

69 J. Cummins, Teaching for transfer: Challenging the two solitudes assumption in bilingual education.
72 A. Motta, Nine and a half reasons against the monarchy of English.