English as a Medium of Instruction at an Italian Engineering Faculty: an Investigation of Structural Features and Pragmatic Functions

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1. INTRODUCTION TO THE THESIS

If we spoke a different language, we would perceive a somewhat different world.
Ludwig Wittgenstein (1889-1951)

1.1 An Overview

Teaching through the medium of a foreign language is not a revolutionary event in the history of humanity and it is not necessary to go very far back in time to see it. European people, in fact, used to teach and learn in Latin for several centuries (Mehisto et alii, 2008). Latin was the prestigious code, which allowed people to access High Culture, though the use of it was restricted to a small part of the population. Even up to the first half of the past century, Latin was the language that allowed people to fulfil everyday tasks such as, for example, taking part in religious services wherever in the world they were. Then the need to reach the mass and the requirements of mass education have switched to vernacular languages so that each individual had the same chance to gain information and to partake any social activity by using the national languages. Nevertheless, Latin is still the language used for specific purposes like the Latin rites (Sacrosanctum Concilium, 36 § 3-4).

If Latin was a superimposed language by a sort of top-down process, now in our contemporary society we are experiencing the reverse phenomenon. People want to master a universal language, which allows them to surf the net and the world, to speak and write across the borders, to communicate without language barriers. Another language seems having replaced Latin in this function, and that language is English. However, English and Latin differ from each other not only because the processes of implementation and uses are different, but also because while Latin was the language of the
Culture and owed an intrinsic prestige, English is the language of Communication and its prestige, if any, resides in its transactional value. Latin and English still share some similarities as they both allow access to the Knowledge; however, English performs an extra function, which seems to be even more important in the contemporary society, that is the exchange of information, ideas, and emotions among a huge culturally and linguistically heterogeneous population. Besides the large number of users of English, it is also striking the heterogeneity of domains in which English is exploited: from finance to music, politics to cinema, science to fashion, education to entertainment. The list is not exhaustive as the domains in which English is used as a means of communication grow more every day. However, even if the actual status of English is a matter of fact, the issues related to its position are several and of various nature. Scholars wonder and debate on the nature of this lingua franca idiom; on the social and cultural implications of the use of English worldwide; on the different domains in which it is used; on the pragmatic implications of this trans-cultural lingua franca; on the threats that English can make on local and national languages. The issues on the ground are many and it is difficult to outline a clear-cut horizon for this linguistic, cultural and social phenomenon. Paraphrasing the refrain of *Que sera sera* (*Whatever will be will be*) - a song by Doris Day in the Hitchcock’s film *The man who knew too much* - ‘the future is not ours to see’. But while the main character of the film knew too much, linguists nowadays do not know much about the future of languages in the world and English in particular. They can make predictions based on scientific data, but they are far from putting an end to the debate about the future of English in the current global society (Crystal, 2003; Graddol, 2006). There is, in particular, a debate that is of great interest to scholars; this is the use and the role of English for a very special purpose and exploited in a very specific domain, in other words English used as a means of instruction or as lingua franca in Higher Education contexts. This topic will be further debated in the following paragraph.
1.1.1 The Role of Language Education in Today’s World

**Education** plays a major role in today’s society and not to acknowledge it is *to bury one's head in the sand*. Nowadays, educational stakeholders face new challenges and one of them is the role that the knowledge of different languages plays in the new educational scenario.

The CCN Foresight Think Tank¹, a research team based in Finland, has set out “to identify needs and generate ideas for re-shaping languages in education over the next decade” (2010). The team that is made of several specialists² drawn from different fields of interest and research has analysed the ‘global forces’ that invest our society. **Globalisation**, the newly emerging forms of personal learning environments, and incoming research from the neurosciences call for a new way of thinking language learning. In the report *Talking the Future 2010-2020* the authors explore present and future dynamics of languages in education while trying to identify the several related issues and the possible courses of action to be taken.

According to the CCN Foresight Think Tank the next decade will experience a series of developments that are aimed to re-collocate the role of languages in education. In particular, they stress the added value of learning languages and of electronic literacy in our contemporary age. Language education, in fact, can have a fundamental impact on many dimensions of social, cultural and working life and it is necessary to increase the educational stakeholders awareness about it; all the educational and resource providers are invested of this responsibility and it is paramount to acknowledge that many of the key competences for lifelong learning are

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¹ The CLIL Cascade Network (CCN) is a multilateral network co-financed by the European Commission. CCN operates through the CCN Platform in order to enable CLIL practitioners and researchers to connect and share experiences, resources and good examples of CLIL (Content and Language Integrated Learning). CCN is a network set up by 21 founding partners from 14 member states and 14 associated partners from five European countries. It was officially launched at the CLIL Fusion Conference in Tallinn 24-25 October 2008 (www.ccn-clil.eu).

² The Report contributors are: Ulla Aikio-Puoskari, Teemu Arina, Tuula Asikainen, Pat Bertaux, Isabel Campillo Aráez, Do Coyle, María Jesús Frígols Martin, Sue Hughes, Gisella Langé, Miika Lehtonen, Jenny Lindström, David Marsh, Gillian McLauglin, Peeter Mehisto, Oliver Meyer, Josephine Moate, Teresa Navés, Hannele Nevalampi, & Emily Rosser.
language-based. The European Commission (Recommendation 2006/962/EC) lists eight different competences, which are essential in a knowledge society because of the flexibility and constant changes in our society and because they enhance citizens’ motivation and satisfaction in working and social environments. At the top of the list, there is the competence in communicating in both the mother tongue and other foreign languages, followed by mathematical and scientific competences; digital competences; learning skills; social and civic competences; sense of initiative; and cultural awareness. There is no need to say that most of these competences are language based or language related and consequently to implement language education has the outcome to enhance the acquisition of the European key competences. In particular, the position of English will be crucial for education and information access. It will be interesting to follow the social and cultural developments that English in education will undergone in the following decade in a context where English fulfils several different communication needs and transactional moves.

1.1.2 English in Today’s Education

Over the past decades English as a foreign language has played a major role in language instruction. Former colonies in Asia and Africa have long experienced education through the medium of English. Classroom activities and textbooks were all in English and often even the teachers were British native speakers. Sociolinguistics has long discussed the premises and the outcomes of that situation, trying to highlight advantages but more often disadvantages of that language policy. English, in Europe, as taken up the role that had belonged to French in a relatively past time and nowadays is the first most studied foreign language in almost all countries in the world since primary school. The social impact of English is highly considered and the knowledge of this language seems to be a basic and commonplace competence in education and not only. However, the novelty is the emergence of English as the medium of international communication. In
particular, the scholars’ interest is on the status of English as a Lingua Franca (ELF) and English as a Medium of Instruction (EMI) in the international and European context. It is fair and reasonable to wonder what English looks like in a world where communication technology allows people to communicate with other people from all over the world by using mostly English and how English is used and taught in educational contexts. In fact, if people use English everyday for professional, cultural, and entertainment reasons, scholars wonder whether it can still be considered a foreign language. English is often seen as a tool people exploit in order to fulfil their needs or to manage cross-cultural communication. In this respect, scholars also wonder whether English can also be considered a language of mediation, a bridge people build in order to overcome linguistic barriers. In the next paragraph the role of language education and English will be explored in a particular segment of education.

1.1.3 Languages, Internationalization and Higher Education

The Council conclusions of 11 May 2010 on the internationalisation of higher education (2010/C 135/04) provide interesting insights into the debate on the role of languages and internationalisation in education, especially at higher levels. Internationalisation is a new term and a recent concept used to address the current scenario in which people, ideas and events meet across the national borders and create new forms of social, economic, educational and discourse communities. Educational institutions are among the main stakeholders in charge of these changes and developments of present days communities. If crossing the borders can be an easy task as it implies the implementation of technical regulations; on the contrary, crossing people’s minds entails more subtle actions, which aim at creating the conditions for cultural exchange and communication. Europe acknowledges that the increasingly international dimension of higher education together with the international cooperation programmes and policy allows the dialogue with third countries and at the same time
contributes to improve the quality and international standing of European Higher Education. For the Council, learning mobility in Higher Education for students, teaching staff and researchers is of paramount importance and in the 2010 conclusions the Council invites all the member states to foster a “truly international culture” within Higher Education institutions, in order to increase their international attractiveness and to promote the awareness of their social responsibility. Such goals imply the promotion of foreign languages learning at any educational level; however, higher education requires a more specific and specialised mastery of the foreign languages as a deeper knowledge is required and expected by the participants in that context.

The attention to Languages for Special Purposes (LSP) has a long and well-established tradition in the university scenario; however, recently the introduction of Integrating Content and Language in Higher Education (ICLHE) has fostered new and complex issues with regards to lecturing style, listening comprehension, students’ levels of performance, students’ needs, etc. In the LSP context, the knowledge of the foreign language is required in order to understand texts and to produce language in that particular code; the ICLHE context has broadened the scenario, as students are required to master a wider range of skills related to studying through a foreign language. Several studies have focused on the teaching of English in ESP (English for Special Purposes) and EAP (English for Academic Purposes) contexts; at the moment many others focus on English used as Lingua Franca in Academic settings (ELFA), on English as a Medium of Instruction (EMI), on English as an Additional Language (EAL), and on the use of English in a ICLHE context. The presence of so many different acronyms reveals the complexity of a phenomenon on whose definition this thesis will try to provide further insights.
1.2 Research targets

The present thesis seeks to provide a contribution to the on-going debate by looking at uses, features, roles of English in the academic setting in which the Anglophone idiom has often assumed a controversial position, as either a Lingua Franca or as a *Tyrannosaurus rex* (Swales, 1997; Tardy, 2004; Hyland, 2006). Moreover, this study aims to pursue pedagogical goals as far as EAP is concerned. It seeks to provide useful insights into the growing community of Non Native Speakers (NNS) lecturers who are now involved in programmes where English is either an Additional Language (EAL), or a Lingua Franca (ELF), or a Medium of Instruction (EMI).

In particular, the aim of this research is to provide a first evaluation of EMI implementation at the **Faculty of Engineering** of the University of Naples *Federico II*. The structural and the pragmatic features of the **English-medium lecture** delivered by non-native teachers among non-native students are investigated. Moreover, the lecturers and students’ perceptions are analysed through a set of qualitative instruments. Following are the issues that have been explored:

a. The state-of-the-art of English as a Medium of Instruction (EMI) at the Faculty of Engineering in Naples.
b. Students’ and lecturers’ attitudes to English as a Lingua Franca (ELF) as medium of learning.
c. The way subject content specialists structure and deliver their lectures in a foreign language.
d. Changes in the lecture format due to the change of the language of instruction.
e. The extent language proficiency and lecturing behaviour contribute to the understanding of the lecture.
1.3 Research Method

The aim of this exploratory research is to provide an overview of the state-of-the-art of English-medium instruction at the Faculty of Engineering in Naples. Given the exploratory nature of this thesis, an ethnographic qualitative methodology has been preferred. The ethnographic approach, in fact, emphasises the understanding of behaviour in context through the participation-observation of the investigator in the situation being studied. This approach provides a descriptive report, utilising a range of instruments, mainly informal interviews and observational techniques. In this way, it provides a holistic view of the tasks being studied with an emphasis on context. This methodology proved to be particularly useful in answering the how and why questions I wanted to explore. Alongside the ethnographic qualitative method, quantitative research has also been conducted through the administration of close-ended questionnaires. This triangulation of approaches and data has helped in interpreting and understanding the complex reality I was about to investigate. A description and discussion of the research procedure and instruments is the topic of the next paragraph.

1.3.1 Research procedure and instruments

The first step of this study was the searching of a university institution where English-medium courses were on offer. In the Neapolitan academic context the choice at the moment is not a widespread one as there are only few scientific faculties, which implement single courses and/or complete programmes taught in English on a regular basis\(^3\). The choice fell on the Faculty of Engineering for a series of reasons: firstly, the existence of a rather large amount of previous literature in the same field of education (see

\(^3\) The source for these data was the University of Naples website (www.unina.it).
paragraph 2.2.3 of this thesis); secondly, the recent creation of a specialised growing corpus of engineering lectures from different countries in the world (ELC corpus wwwm.coventry.ac.uk/researchnet/elc); then, the great investment of the Faculty Internationalisation Task Force in this new learning environment through the diversified offer of courses and programmes at both undergraduate and postgraduate level; and, last but not least, the general assumption that Engineering is a field of research and education in which English is perceived as a paramount language of study and communication (Talberg, 2006; Suviniitty, 2007; Stappenbelt/Barrett-Lennard, 2008; Tasic, 2009; Terraschke/Wahid, 2011).

The Faculty administration offices provided a complete list of all the courses on offer and of the lecturers involved and contacted by e-mail the English-medium lecturers for a brief introduction of my project. As a second step, I sent via e-mail a questionnaire to all the lecturers involved and I provided more details on the research aims. Later, four lecturers were contacted, interviewed and asked for the permission to audio and video record their English-medium lectures. The students’ questionnaires were distributed either via e-mail or in the classrooms during the lectures.

The following questionnaires were used:

- Lecturer’s questionnaire
- Student’s questionnaire for English-medium courses
- Student’s questionnaire for Italian-medium courses
- Feedback questionnaire
- End-of-master questionnaire for students

Prior to their distribution, the questionnaires were checked and discussed with other researchers dealing with the same research issues (see chapter 4 of this thesis).

The rationale behind the questionnaires design was to collect background information on the participants and to outline a sketch of the English-medium lecturers and students at the Faculty of Engineering; to assess their previous experiences with English and with English-medium teaching in particular; to monitor lecturers’ and students’ perceptions of the English-
medium lecturing; to identify some features of English-medium lecturing in that specific context.

Together with the questionnaires other qualitative instruments proved to be useful:

- Interviews
  - Interviews to the lecturers
  - Interviews to groups of students during the course
  - Interviews to the students after the course
  - Interviews to the Master students after the semester abroad
- Classroom observation grids
- Participant observation
- Researcher’s notes

I personally conducted the interviews and I was present at the lectures during the recordings. During and after the lectures I took notes and completed a classroom observation grid, which I had designed in order to register information on lecturer’s style; lecture structure; classroom interaction; student’s reactions; and use of teaching aids (see paragraph 4.3 of this thesis).

Both sets of instruments, the qualitative instruments and the questionnaires, contributed to the analysis of the lectures’ recordings collected during the lessons. These were digitally recorded and then they were transcribed by using an adapted version of the ELFA transcription guidelines⁴ (see chapter 4 of this thesis). Then all the transcriptions were analysed by a triangulation of data: written texts, observation grid and questionnaire’s information. The interpretation of the data was possible also thanks to the video recordings of the lessons.

### 1.4 Outline of Chapters

The descriptive nature of this thesis required a previous general overview

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⁴ To consult the ELFA transcription guide lines see the ELFA website at the following address: http://www.helsinki.fi/englanti/elfa/ELFA/transcription/guide.pdf
of the research problem. The Introduction to the thesis (Chapter 1) is meant to provide input for reflection on the current state of English in the world, on the role of language education in today’s society, and on the widespread phenomenon of internationalisation. Though the ultimate goal of my thesis was to explore the use of English at the Faculty of Engineering in Naples, I found convenient to review the on-going debate on English as a Lingua Franca in academic settings and on English as a Medium of Instruction in Higher Education. Chapter 2, in fact, focuses on the new role of English as a Lingua Franca in our contemporary society. The debate on this issue is a very hot one, as scholars discuss both the nature of ELF and the implications of using ELF in several domains and in Higher Education in particular. The point is to re-collocates English in relation to the local languages and to the functions it is able to fulfil. Chapter 3 deepens the focus on the nature of English when it is used as a means of instruction in education. English-medium instruction (EMI) is a broad term, which might include different ways of implementation, and some of them are revised especially in relation to Higher Education. EMI is, then, seen in contrast with Content and Language Integrated Learning (CLIL). Finally, this chapter tries to highlight the relationship between EMI and English for Special Purposes (ESP).

The following chapters are devoted to the case study I researched on and provide results and discussion of the research. Chapter 4 seeks to provide a picture of the English-medium teaching at the Faculty of Engineering in Naples through the discussion of the results of the questionnaires I distributed to lecturers and students, and of the classroom observations I made during the lectures. Chapter 5 goes deeper in the research as it contains the analysis of the lectures transcriptions. The structure of the Engineering lecture is analysed by using different models of analysis. The Systemic Functional Analysis was definitely the background framework of analysis, while Young’s model of phases proved to be convenient in order to identify the structural features of the Engineering lecture, although the model required a few adaptations. Chapter 6 contains the main concluding
remarks of this research, some pedagogical implications for the lecturers involved in English-medium project, and future scenario of research in this field.
2. **ENGLISH AS A LINGUA FRANCA (ELF)**

In communities where there are many languages in contact [...] the problem has traditionally been solved by finding a language to act as a lingua franca, or 'common language'

Crystal, 2003:106-115

The background of this thesis is the wide panorama of English as a Lingua Franca of communication. For the man of the street the status of English as a Lingua Franca seems a given fact with no need to say more. However, the more experienced eye of the scholar perceives the prismatic nature of this old and at the same time new linguistic and social phenomenon.

### 2.1 Definition and Domain

ELF is the acronym for *English as a Lingua Franca*. Lingua Franca is a sociolinguistic concept, which refers to any linguistic code used among speakers of different languages who choose a sort of neutral language in order to communicate with each other. As Crystal states in the above quotation, lingua franca seems a sort of technical device aiming to solve problems of trans-national nature or more in general of communication among speakers of different first languages.

However, the term *lingua franca* was actually coined at the times of the Crusades when the Arabic people used to address all the Western European people with the word *Franks*. Their language, which was composed mostly of the Italian language with numerous French, Greek, Persian, Spanish and
Arabic words was known as *Frankish* language, that is the language of the Franks. It was used for communication as a diplomatic language in the Middle East (Richards et al., 1996), and the term has since become common for any ‘auxiliary language used to enable routine communication to take place between groups of people who speak different native languages’ (Crystal, 1991:203). However, the choice of a lingua franca depends on many reasons: political, economical, social, and geographical issues, though seldom on pure linguistic issues. It never happens that a language assumes the role of lingua franca just because of its intrinsic nature or because of a presumed easiness. Language, nation and identity are very close concepts and people are very sensitive about them. If nowadays, English is a lingua franca in many countries and is being used in different domains, however, it does not depend on any intrinsic peculiarity of the language; instead, English has gained the status of global language for ‘one chief reason: the political power of its people - especially their military power’ (Crystal, 2003:7). Crystal’s statement was definitely correct in the past for the well-known historical events; however, currently, many other elements have played a role in the promotion of English as a global language and, in the future, many other cultural and economic changes will back the use of global languages (Graddol, 1997). In other words, as Pennycook states in the book "The Cultural Politics of English as a Second Language," the prestige of English in the world is linked to inter and intra-national social and economic relations. The global contemporary society, moreover, has raised the need for an international language considerably to allow effective exchanges of goods, ideas and people (Council of the European Union 2010/C 135/04). English, which happened to be in the right place at the right time, nowadays has gained the status of International Language spoken by a quarter of world’s population (Crystal, 2003) and employed in so many different domains for utilitarian purposes.

The status of *international language* or lingua franca does actually encourage reflections on the motives for which people, from all over the world, wish to learn and to use English. Foreign language learning usually
implies –or it is advisable- an interest in the culture of the people who speak that language. Language is seen as both a peculiar element and a powerful vehicle to grasp and to fully understand the inner identity of a given culture. In this way, language learning can be closely associated to identity searching. Differently, when the language to be learned is an international language to which no identity can be associated, the motivation for learning an international language or a lingua franca lies consequently in the mere utilitarian exploitation of it. English as a lingua franca or as an international language is meant to be used among groups of non-native speakers mainly for transactional purposes rather than for interpersonal ones. This is true in many domains included academic settings in which English has become the main lingua franca both in Europe and in the rest of the world.

In the following paragraph this issue will be further developed with a special attention to the controversial status of English in today’s educational settings.

2.2 Literature Review

2.2.1 ELF debate

The role of English as a lingua franca is widely acknowledged and accepted as a matter of fact. The issue has become hot topic in the Applied Linguistics field and Swales (1997) has been one of the first scholars to start the debate on ELF in academic settings by exploring whether English is a Tyrannosaurus Rex towards the other local languages. Many see English as a super-imposed language, which will cause the death of the minority languages. For this reason, the spread of English in the world is seen as a sort of new form of imperialism, which apparently concerns only the language, even in the academic world. The issue is a very controversial one as scholars’ positions diverge with many respects. House (2003:556), for example, argues against the general assumption that ELF is a ‘serious threat to national languages and multilingualism’. The argument in support of this
position is the distinction between languages for identification and languages for communication; it seems clear that if ELF is not a language for identification because of its proper instrumental nature and aims, it must be a language for communication. In this respect, English is not a threat to local languages as they work in different area and for different functions; actually, according to House, the use of ELF can even enhance the emotional link of minority languages to their own historical and cultural traditions. In the analysis that Swales carried out, the role of English it is taken for granted and it is instead underlined that the core problem is to acknowledge that using ELF as a global lingua franca entails new challenges and responsibilities which English for Academic Purposes (EAP) teachers have to face. Far from finding a solution, it is argued that what can be aimed at, it is a consciousness-raising awareness in EAP classes worldwide; non-native speakers of English should be made aware of the role of English and of the advantages and the disadvantages of using it as a lingua franca in scientific communication (Tardy, 2004). There is no need to say that the link between language and culture is a well established one and no language can be considered culture-free; consequently the risk to acquire cultural behaviours through the use of the language is a real one and the issue at stake is whether it is likely that English as an Additional Language (EAL) teachers might become unconsciously agents of colonial reconstruction (Hyland, 2006). The shadow of Americanization through the use of ELF - in particular in Europe- worries some scholars as English is likely to play the role of lingua frankensteina rather than a neutral lingua franca (Phillipson, 2008). It is argued that because English is a nation and culture-bound language, it might phagocytize the other languages. Although the phenomenon is worldwide spread, as far as Europe is concerned, the EU Policies on multilingualism do not depict a clear role of English in the Old Continent and more empirical studies are needed to answer the many questions on the ground. One of the issues to be explored is certainly the idea of a lingua franca, which is also the national language of a State. Can English be the lingua franca among Europeans if it is also the mother tongue.
of one of the EU members? It is difficult to answer this question. Probably a prior reflection on the nature of English used as a lingua franca, which cannot be the same as English used as a mother tongue, should be made. The so-called **Euro-English**, that is the particular variety of English spoken in the old continent, must be considered a different and evolving language in which variability and flexibility are peculiar features (Jenkins, 2011). However, ELF used in Europe and so spoken by so many and such diverse speakers cannot be considered as a monolith. Actually, English can have different profiles according to the speaker’s identity -whether native or non-native, and according to the context in which the language is used -whether a foreign language in non-ENL settings or a lingua franca in/across non-ENL contexts (Seidlhofer, 2006). The context where English is used as a lingua franca among non-native speakers for communicative purpose is one of the most interesting and controversial ones. In fact, the linguistic features of that variety can be looked at either as specific peculiarities of an emerging variety or as ‘errors in need of correction’ (Seidlhofer 2006:9). To consider the peculiarities as an identity maker for ELF means to recognise that ELF is an independent variety, which functions on behalf of endo-normative rules. On the contrary, to consider the peculiarities as errors to be corrected means to apply exo-normative rules, which compare and contrast ELF uses to one of the ENL established varieties, mainly American or British varieties. It is necessary to define the background context to ELF and to agree on a precise point of view in order to better understand the ELF phenomenon. In academic settings, for example, Jenkins argues that it is no more sustainable to keep as a reference normative model one of the English native varieties. If the universities tend to become international by providing international programmes, which aim to attract an international audience, it seems a contradiction if in terms of language policy they stick to a single national variety (Jenkins, 2011). In other words English spoken in academic settings should be considered as a trans-national code and the descriptors have to be new ones. The aim of any language is to communicate ideas, thoughts, feelings, and information; but this is even truer for a lingua franca
whose main goal is to allow a smooth and effective communication among different people. The issue at stake is not really the correctness of morphosyntax and lexical, but the mutual comprehension; consequently the descriptors should move from linguistics to pragmatics, from the form to the meaning and function of the language.

Consensus on ELF as a variety implies recognizing the existence of those features peculiar to any language: sound system, morpho-syntactic structures, pragmatic functions, etc. While the debate on ELF sociolinguistic implications has been a lively one, not many descriptive studies have been conducted on it. Pronunciation is probably the area where the differences are more evident. Jenkins has worked on a set of features, which are typical of English Lingua Franca, and constitutes the Lingua Franca Core (LFC) that is the attempt ‘to provide EIL speakers with a core intended to guarantee the mutual intelligibility of their accents’ (Jenkins, 2003:126). Attempts to identify morphological features in ELF contexts have been carried out too –for example, the use of third person –s- and the findings suggest that misuse of grammatical devices does not prevent communication as speakers ‘direct their attention not to the language, but rather to the content of their discussion’ (Seidlhofer, 2006:17).

Jenkins and Seidlhofer are among the scholars who are in favour of what is called a ‘strong’ version of ELF as they consider it as a variety –although in a recent article by Jenkins it is stated that ELF cannot be considered a variety in the traditional sense of the term, but ‘variability is itself one of ELF’s principal characteristics’ (Jenkins, 2011:931)- even though a still emerging variety (Maley, 2010). Other scholars acknowledge that ELF is a variety of English used among non-native speakers but they are more tentative in labelling it in any way; some of them even consider ELF as a myth rather than a reality, as instead English as an International Language is (Maley, 2010:25). Maley’s point of view is a pedagogical one; despite his criticism of a strong version of ELF, he clearly underlines the need for an awareness-raising process of the new and different uses of English in the Expanding circle (Kackru, 1985) rather. The actual trend is so definitely
towards a description of ELF features in general and even more towards the analyses of ELF in specific contexts of use and domains in the hope of increasing the knowledge of the language mechanisms and functions of the lingua franca.

The mainly instrumental use of a lingua franca, English in this case, causes the attention to be focused on the function of the language and its **pragmatic** features in the specific contexts in which it is performed. Paradoxically, ELF, which is used as a means of communication among international audiences, ends up by showing local traits not only in grammar and phonology but also, and especially, in pragmatics (House, 2003). It is not by chance that Canagarajah (2006) enters the debate on ELF by looking at local features within the *globalised* general look of English; he underlines how pragmatic and discourse strategies play a major role in communication when English is used as a lingua franca (Björkman, 2010). If ELF cannot be considered a neutral language, as it is the language of a nation, more investigation must be undertaken on the local traits in ELF in a specific context of use and in culture-bound genres.

The emerging pragmatic research on ELF becomes of relevance for the issues of intelligibility, too. It is meant to enhance - or at least not impede - understanding in international contexts. The point is to quantify how intelligibility depends on linguistic forms, which can be more or less close to any of the native-like standards (Pickering, 2006; Leonardi, 2010), and how much it depends on pragmatic accommodating strategies (Ljosland, 2011; Björkman, 2011). Pronunciation is definitely one of the critical points as a mispronounced word can invalidate a communicative event both at segmental and word level (Jenkins, 2000:83). However, intelligibility in an ELF context owns specific peculiarities as ‘interlocutors engage in communication strategies and accommodation processes that are unique to this context and that may conflict with the ways in which NSs typically negotiate understanding’ (Pickering, 2006:227).

Actually, pragmatics seems to be the first area of research concerning ELF (Björkman, 2011:951) because of its intrinsic communicative aim and
nature. Several studies have focused on communicative effectiveness and on accommodation strategies played by ELF speakers in order to handle communication and avoid misunderstanding. Understanding is, in fact, a crucial issue in every communicative domain; however, the use of ELF in educational settings makes the intelligibility issue even more relevant as the core of education must rely on a clear and efficient communication strategy in a context in which there is usually a gap between those who are the depositary of knowledge –namely the teachers– and those who look for knowledge –that is the students. Knowledge at Higher Educational level is of paramount importance. Students in HE need to highly improve both their skills and the amount of information in their professional fields (Ricci Garotti, 2009; Knapp, 2011). The way in which the communicative act is performed can determine the success of the teaching/learning process.

The next paragraph tries to highlight some of the main current issues on this topic in the specific area of ELF in Higher Education.

2.2.2 ELF in Higher Education (HE)

Higher Education is one of the domains where the use of English as a lingua franca is increasingly spreading especially in Europe. English has become the language of journals, international conferences, academic publications, and also Master thesis and PhD dissertations (Tardy, 2004; Graddol, 1997; Swales, 1997; De Wit, 2002; Mauranen, 2006) all over Europe.

English is the European Lingua Franca in pedagogical settings as well. The Bologna process’ recommendations aimed to create a European Higher Education Area (EHEA):

‘based on international cooperation and academic exchange that is attractive to European students and staff as well as to students and staff from other parts of the world’(www.ond.vlaanderen.be/hogeronderwijs/bologna/about/)

As an outcome of those recommendations, universities and other higher education institutions have been increasing the number of courses and
programmes taught in English in order to facilitate and encourage mobility of students, researchers and lecturers. In particular, the Bologna Follow-up Group held in Belgium in 2009 has been emphasizing that in the next decade (2010-2020):

‘European higher education has a vital contribution to make in realizing a Europe of knowledge that is highly creative and innovative […] European higher education also faces the major challenge and the ensuing opportunities of globalization and accelerated technological developments with new providers, new learners and new types of learning. […] We recognize that higher education has a key role to play if we are to successfully meet the challenges we face and if we are to promote the cultural and social development of our societies. Therefore, we consider public investment in higher education of utmost priority’ (Communiqué of the Conference of European Ministers Responsible for Higher Education, Leuven and Louvain-la-Neuve, 28-29 April 2009).

The decade after the Bologna follow-up has just started, and mobility of students and staff will mean improved intercultural ways of thinking and working; these goals to be achieved have to pass necessarily through a better use of additional foreign languages. However, English as a matter of fact, is the main lingua franca in European educational institutions; it is the main second language taught in schools at any level, and now it is the language in which most of the international university courses are held throughout Europe (Coleman, 2006).

Lingua franca is thus an issue at stake in this environment, and its spread in educational domains, though not only, does imply many different concerns. One of these is related to the assessment. The point is that before discussing assessment, which is a crucial issue in education, it is necessary to define what kind of ELF is being used. ELF can have different meanings according to different contexts: 1. ELF among speakers where only some of them are NNS of English; 2. ELF among NNS who do not share the same first language; 3. ELF among NNS participants who instead share the same first language; and, finally, 4. ELF as a (new) code among NNSs, which is

5 The Bologna Process does not recommend the use of any language in particular, let alone English. However, as a matter of fact, in university policies all over Europe the call for internationalisation has often overlapped with a call for Anglicisation (for a contribution on this issue see Ljosland, R. –Paper presented at the conference Bi- and Multilingual Universities: Challenges and Future Prospects. Helsinki University 1-3 September 2005).
based on Standard English. The last context is the one that, according to Seidlhofer, can give rise to a new international variety (Elder and Davies, 2006:283). One of the above listed contexts is the intra-national use of ELF among speakers who do share a first language: it happens usually in professional and educational domains such as higher education settings, where English is used among NNSs for professional, teaching/learning and research purposes. The controversy about ELF assessment is very much dependent on the criteria employed, that is whether ELF assessment is made against any of the existing varieties of contemporary Standard English (but mainly American and British) or in terms of a new international variety (Elder and Davies, 2006:287). On the other hand, it is accepted that communicative learning and teaching welcomes ‘inter-language approximations […] with a strong emphasis in assessment criteria on meaning as opposed to form’ (Elder and Davies, 2006:294).

2.2.3 ELF in the Engineering Field

English is a lingua franca of many scientific domains; however, Engineering seems to be the subject area in which the use of English is more widely spread and accepted (Wächter and Mainworn, 2008; Björkman, 2010).

Researchers in the various scientific disciplines consider as a matter of fact the professional importance of English. All over the world there is an undisputable recognition of the role of English to access new scientific information and, above all, to spread scientific innovation (Tamtam et al., 2010). The binomial between English and scientific visibility and success seems a fact of life, which needs no further discussion. This is true in Europe as in the rest of the world (de Wit, 2002). Recent surveys among students of scientific faculties and in the engineering field in particular from different countries, report that English is seen as an important gateway for their profession and for their future career success (Talberg, 2006; Tasic, 2010; chapter 4 of this thesis).
One of the main reasons for the implementation of English within the higher educational settings is definitely the need for internationalisation; consequently the use of English as a lingua franca in academic settings fulfils one of objective of university policy, which allows the institutions to compete in the global educational market. The use of English in Engineering has been often explored and researched in ESP (English for Special Purposes) and EAP (English for Academic Purposes) fields. That research trend aims at describing the features of English used in a specific professional setting –mainly a ESP concern- and at providing support for students and pedagogical insights for teachers involved in learning and/or using an additional language for educational purposes –a EAP concern. The impact of EAP on students’ success is not of little relevance, as students’ results seem to be positively affected by language support in the specific area of learning (Talberg, 2006; Stappenbelt and Barrett-Lennard, 2008; Terraschke and Wahid, 2011). Improving English in HE is not just a matter of improving the language in general; it means to acquire specialised academic literacy skills. EAP teachers should pay attention to general English improvement, which is of relevance for communication skills, but they are mainly supposed to work on specific engineering language, which allows an easier access to reading and listening materials. Technical vocabulary plays, in this respect, a major role in EAP at the Engineering faculties (Ward, 2007:18); students themselves require a deeper knowledge of vocabulary in order to access textbooks which are often available only in English, even when the university courses are held in the students’ mother tongue (Ward, 2009:295).

The offer and the request of improved English language competence seems so to be a matter of fact in the Engineering field; what can be discussed, instead, is the way in which that education can be pursued in order to obtain the best results (Talberg, 2006). One of the answers to this question lies probably in the implementation of English-medium courses at the faculties of engineering all over Europe and also elsewhere in the world. The need for internationalisation and the request for more advanced English
language competences go hand in hand and the increased use of teaching through/in a foreign language can be a way to fulfil those needs. Research carried out in Australia among international engineering students has proved that ‘collaboration between content and language experts […] seems to hold promise of achieving more equitable outcomes for international students’ (Stappenbelt and Barrett-Lennard, 2008:115). This result opens horizons towards a conscious use of English as a Lingua Franca in education: language competence cannot be taken for granted – not even in the mother tongue - especially when the competences concern a specialised domain as the academic field; dealing with subject content by using a foreign language does not exclude a formal language teaching; content and language are two sides of the same coins and there is no knowledge which is only content or only language (Mohan, 1996); learning in one’s own mother tongue is different from learning through/in a foreign language; acknowledgement of such difference means to provide additional language support or to adopt different pedagogical strategies; given the close relationship and the mutual interplay between language and content (Mohan, 1986), a change in language can also mean different instructional patterns.

Some of these issues will be explored in the next chapter that deals with English as a Medium of Instruction, a special variety of ELF.
3. ENGLISH AS A MEDIUM OF INSTRUCTION (EMI)

[EU member states are invited to] devote particular attention to the further training of language teachers and to enhancing the language competences of teachers in general, in order to promote the teaching of non-linguistic subjects in foreign languages

Council Resolution on a European strategy for multilingualism, 21 Nov. 2008

3.1 Definition and Domain

EMI (English as a Medium of Instruction) is the acronym used to address a particular use of English in educational contexts. In this chapter, EMI will be explored together with CLIL (Content and Language Integrated Learning), which is a particular and emerging pedagogical environment widespread nowadays in Europe at all levels of education, even in Higher Education (HE).

3.2 CLIL and EMI: Literature Review

Although CLIL and EMI are different acronyms, they share a few common features. The first acronym stands for Content and Language Integrated Learning and it refers to the use of a foreign language used as a vehicle of instruction in a setting in which a different L1—or different L1s—are spoken. CLIL in itself does not privilege any specific language; in Italy and mostly the whole of Europe, however, the language used in CLIL programmes is mainly English (Wilkinson, 2005; Coleman, 2006; Fortanet-Gomez 2009). EMI, on the other hand, stands for English as a Medium of Instruction, which is the use of English as a means to teach and to learn curricular non-linguistic subjects in foreign or second languages.
CLIL and EMI share the setting in which they actually perform as, in both cases, it must be an educational environment; in both cases the means of instruction is a language different from the audience’s L1s; and finally, for both the presence of native-speakers is not a *sine qua non* condition. Both for CLIL and EMI, when the participants share the same L1, the *code switching* phenomenon, or code mixing, can occur. *Code switching* is the practice of alternating the use of languages in different situations. In an educational context, code switching is defined as the practice of switching between a primary and a secondary language or discourse, and it implies the occasional insertion of linguistic elements belonging to different codes at word, phrase, clause or even sentence level (for more details on code-switching see chapter 5 of this thesis).

However, there is an area where CLIL and EMI diverge from each other; this is the attention that each of them pays to language learning. While CLIL is a dual focused process, aiming to overtly develop both language and content knowledge, EMI focuses mainly on subject learning and exploits the language of instruction as a mere neutral tool to perform that goal.

The term CLIL was coined in Europe in 1994 by David Marsh (University of Jyväskylä, Finland) and launched by Marsh and Anne Maljers in 1996 (Europees Platform voor het Nederlandse Onderwijs, The Hague, The Netherlands) (Lucietto, 2008), though its origin goes even further back (Cummins, 1984, 2000), it is only since the nineties that research on this topic has begun to increase all over Europe. A major push was given by European Union Multilingualism policy⁶, which aimed to increase language competences of European citizens and, in 1999, by the Bologna process⁷, which aimed to increase mobility at Higher Education (HE) level.

Earlier research on CLIL has mainly focused on primary and secondary level of instruction; however, as a consequence of the **Bologna Declaration**

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⁷ The official website can be found at the following address: http://www.ond.vlaanderen.be/hogeronderwijs/bologna/
in 1999 and of the implementation of the European Higher Education Area (EHEA), teaching through a foreign language has become an increasingly raised issue also in academic settings (Wilkinson, 2004; Wilkinson / Zegers / Van Leeuwen, 2006; Coleman, 2006; Carrió-Pastor, 2009; Ricci-Garotti, 2009; Sisti, 2009).

It seems difficult to provide a complete view of CLIL teaching in HE, as its forms of implementation are very different from one country to another and also among different institutions in the same country. Universities can offer teaching through English courses or merely teaching in English courses, in which the main difference lies in the attention paid to the language content, often completely disregarded in teaching in English courses. In the latter, in fact, a mere switch of the linguistic code occurs and there are no other changes with respect to methodology or teaching strategies.

As already stated earlier in this chapter, the growth and interest in CLIL and EMI projects in HE is definitely linked to the Bologna process held in 1999. The Bologna Declaration set the foundations for the European Higher Education Area (Wächter, 2008):

The Bologna Process is an intergovernmental initiative that aims to create a European Higher Education Area (EHEA) by 2010 and to promote the European system of higher education worldwide. It now has 46 participating countries and it is conducted outside the formal decision-making framework of the European Union. Decision-making within the Process rests on the consent of all the participating countries. It was launched in 1999 when Ministers from 29 European countries, including the UK, met in Bologna and signed a declaration establishing what was necessary to create the EHEA by the end of the decade. The broad objectives of the Bologna Process became: to remove the obstacles to student mobility across Europe; to enhance the attractiveness of European higher education worldwide; to establish a common structure of higher education systems across Europe, and; for this common structure to be based on two main cycles, undergraduate and graduate. (my emphasis)

http://www.europeunit.ac.uk/sites/europe_unit2/bologna_process/index.cfm

In the above quotation some of the Bologna objectives have been emphasised because they are the objectives relevant to the international language policies of the European countries; in particular, improvement in student mobility and a more worldwide attractive European HE have important linguistic outcomes (D’Angelo and Garcia Pascual, 2009) as both
mobility and acceptance of foreign students and staff imply the use of languages different from the participants’ first languages. As a result the number of English-medium programmes and courses -mainly at postgraduate level- offered by European High Education institutions has been increasing since 1999 (Wilkinson 2005). In particular, Ramos (2009) offers a reflection on the reasons and implications of the implementation of a European Space of Higher Education (ESHE). Reasons and implications concern both the content and the language learning as ‘higher education cannot be reduced to the atomized transmission of contents. Nor does it seem logical to separate discipline-specific learning from language and social learning’ (Ramos, 2009:166). Over the past decades English as a foreign language has played a major role in language instruction and it is still so. What seems to be new is the status of EMI in academic settings. The issues related to the use of EMI in HE call for more contributions to the debate and need further investigation in the different disciplinary domains. However, it is a matter of fact that it is one of the responsibilities of the university –a privileged international context- to partake in the debate and to provide feasible ideas and solutions (Ramos, 2009).

In the previous chapter dealing with the status of ELF in education, the issues of assessment and intelligibility have been raised. Actually, the need for discussion derives from the acknowledgement that a different means of instruction causes changes or adjustments in the learning/teaching process. For this reason the investigation on the amount of attention that CLIL learning environment devotes to this issue is of paramount importance. This topic will be explored in the following paragraphs.

### 3.2.1 CLIL in Higher Education or ICLHE

The acronym CLIL applies to any language different from the learners’ mother tongue. In the same way, it applies to any level of education from primary or even infant school up to university. Before focusing on the implementation of CLIL in HE, it seems convenient to provide a general
overview of CLIL environment in education.

3.2.2 The CLIL educational environment

CLIL is often considered an umbrella term to mean that the ways of implementation can differ from each other to some extent.

CLIL is an umbrella term covering a dozen or more educational approaches (e.g. immersion, bilingual education, multilingual education, language showers and enriched language programmes) […] The flexibility of the approach is, above all, evident in the amount of time devoted to teaching and learning through the second language. CLIL allows for low- to high-intensity exposure to teaching/learning through a second language.

(Mehisto, Marsh, Frigols, 2008:12)

The analogy with the umbrella originates from the fact that CLIL cannot be labelled as a methodology neither can it be defined as an approach. It is basically a learning environment in which specific methodology and approaches have to be implemented:

CLIL refers to situations where subjects, or parts of subjects, are taught through a foreign language with dual-focused aims, namely the learning of content, and the simultaneous learning of a foreign language.

(Marsh, 2002)

The word situation used by David Marsh in the above quotation can be interpreted in this context as environment, that is the setting in which the learning communicative event takes place. Moreover, Marsh’s definition leaves freedom with regards to the nature of the subjects involved and with regards to the amount of the topic to be covered. Even the use of foreign to label the language is a general one: the language of instruction can actually be a foreign or a second or even a third language. The underlined part of the definition is, however, the core of it and the core of the CLIL environment, too. The teaching/learning goals must be dual-focused, that is equal or semi-equal attention must be paid to both content and language. An equal attention is probably an ideal and it can be only reached by approximation. It is important, however, to keep in mind that content and language cannot be separated. Bernie Mohan (1986), a former professor of English and a student of Halliday, offers the chance to reflect upon a linguistic paradox:
language is a system, which relates what is being talked about (content) and the means used to talk about it (expression). Linguistic content is inseparable from verbal expression. In subject matter learning people often overlook the role of language as a medium of learning and in language learning they often overlook the fact that content is being communicated. CLIL seems to be a consistent answer to the issue rose by Mohan’s statement because it integrates both content and language. In other words, it acknowledges that content must be conveyed by a language and that a language is the tool to convey that content.

Mohan’s statement helps with understanding the idea of integration between content and language; however, only practice can shape the concept of CLIL in that the integration of content and language can be implemented in different ways (Bartika, 2010:2) according to the available educational resources; the specific educational contexts; and the students’ language needs. Whatever differences in implementation, the hard core must remain unchanged, that is the integration of both content and language regardless of the level of instruction. Actually, language needs is a crucial point in learning and can be considered the common ground for both content and language education. The integration of content and language is even more crucial in HE in which knowledge of the subject is of paramount importance and in which a proficient mastery of professional and academic competences is necessary.

3.2.3 CLIL in Higher Education (HE)

CLIL in HE is also known as ICLHE that is Integrating Content and Language in Higher Education. CLIL in Europe has spread as a pilot project mainly in primary and secondary education, but it is only after the Bologna Declaration that it has increasingly developed in HE. The nature of CLIL –that is the integration of content and language- does not change according to the level of education in which it is implemented. What changes it is the knowledge level of the topic to be delivered through the
foreign language and the methodology used accordingly. At university level the disciplinary subject is of paramount importance. Students are required to acquire a sound knowledge of the subject together with the mastery of specific academic literacy skills (Ricci Garotti, 2009). In ICLHE contexts disciplinary contents must be clearly delivered by the lecturers and fully understood by the students; and consequently, the language used as a means of instruction plays a major role. The language is not a language in itself; it is, instead, the instrument to deeply access the discipline and to make efficient use of it while performing several functions in different academic domains.

The acronym ICLHE8 refers also to an association that is the outcome of two conferences held in Maastricht in 2003 and 2006. The aim of the association is ‘to provide a platform for the exchange of opinions, experiences, initiatives and research concerning the interface between content and language in higher education’ (http://www.iclhe.org/about/about). The conferences held in Maastricht, which focused exclusively on ICLHE, provided the opportunity to discuss the several issues that the use of English as a medium of instruction at university level is raising. Among those, I found to be of particular relevance for this thesis the following issues: the role of content acquisition in ICLHE; the cultural aspects of English-medium teaching; and, finally, the scaffolding and institutional support in foreign-language-medium programmes. These topics, in fact, provide useful insights to my research questions and to the analysis of the English-medium educational setting at the Faculty of Engineering in Naples.

The role of languages in integrated learning has been the focus of many research studies, while ‘so far, little attention has been given to the benefits to the acquisition of content knowledge and skills’ (Wilkinson and Zegers, 2007:6). The integration of content and language, in fact, implies a high degree of exposure to the foreign language and of course, as an indirect outcome, an improvement of it. However, in HE language improvement must go hand in hand with content acquisition otherwise the learning event

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8 http://www.iclhe.org/about/about
could result in disciplinary water down. Attempts to compare the results of courses held either in foreign or mother tongue have been conducted, although it is difficult to carry out such a comparison, as the settings where the learning takes place are often very different with regards to participants, staff, materials and disciplinary subjects (Wilkinson and Zegers, 2007).

In spite of the spread agreement on the close relationship between language and culture, English as a medium of instruction is unconsciously regarded as a culturally neutral language within the academic settings. However, it is a controversial issue the influence of the language – even when it used as a lingua franca - on the different European academic traditions and perhaps the meeting of global and local instances will give rise to new ways of structuring content courses in HE (further contributions on this issue will be discussed in paragraph 5.4 of this thesis).

Finally, the need for scaffolding (Gibbons, 2002) and for institutional support of the English-medium programmes underlines that in order to implement a successful ICLHE programme, the integration of different actions and participants is necessary. Students, lecturers, and institutions all play a role and all of them need specific support, which is both concerned with the language and the pedagogy (Pavon, 2010; Bartika, 2010; Klassen, 2010). Researches in this field highlight that the comprehension issues are related both to language proficiency and delivery strategies. In particular, Hellekjær found out that some problems in comprehension are present in L1 (First Language) too, and that the change of the language can even make them worst, as “effective lecturing behaviour is just as necessary in L1 as well as in EM (English medium) lectures” (p.26). The need for a more effective lecturing training is also underlined by Klaassen (2008) whose research is based on the analysis of a supportive module for English-medium staff run for about 5 years in the Netherlands. However, these results do not imply that language proficiency is of less importance. Klaassen and Bos a couple of years later stated that students require high levels of academic English proficiency and in order to achieve it, it is necessary ‘to offer them the opportunity to listen to lecturers with a C2 level
of English and provide the opportunity to acquire the languages at an acceptable level themselves’ (2010:75). Of course, the way in which this objective is achieved depends on the particular contexts, on the university policy and ambitions.

If a support is needed both for lecturers and students, it must be both linguistic and methodological. A group of researchers based in Belgium has conducted a qualitative research over a two years period aimed to verify the assumption that adaptations of teaching and learning procedures are necessary when a CLIL environment is implemented (Bartika et al., 2010): “and should HE content teachers remain unaware of the necessary methodological approaches required by CLIL there is a clear risk that the quality of teaching and learning may suffer” (p.12). The awareness is, indeed, a key issue of other researches on English-medium instruction (Airey / Linder, 2007): both students and lecturers should be aware of the changes their learning and teaching processes respectively undergo in order to cope with English successfully (Ingvarsdóttir / Arnbjörnsdóttir, 2010). Both students and lectures manage to cope in some way with the new challenge; however, raising awareness activities, like language difference discussions and exemplifications, extra time for students’ questions and doubts, pre-lecture readings, and use of complementary representations such as visuals, handout, etc. are highly recommended (Ingvarsdóttir / Arnbjörnsdóttir, 2010:7-8). An experience of good practice implemented at the Faculty of Applied Sciences of the Université Libre de Bruxelles, even suggested the design and distribution of a CLIL guide, which would contain useful recommendations both for students and lecturers, and which indirectly acknowledges the need of adaptations both in learning and lecturing styles (Bartika et al., 2010: 13-14). Thus, repetitions (Dafouz Milne / Linares García, 2008), lecturer speaking rate, role of interaction (Van Dijk / Jochems, 2002), use of discourse markers (Bellé Fortuno, 2006; Smit, 2006), pragmatic discourse features (Núñez Perucha / Dafouz Milne, 2007) are all elements that English-medium lecture participants should be aware of in order to deliver effective lectures and to comprehend them
properly.

3.2.4 ICLHE and English for Special Purposes (ESP)

The use of disciplinary contents for language learning purposes is not a completely new trend in HE. This is the reason why the current debate also entails the discussion on the relationship between ICLHE and ESP (English for Special Purposes) or EAP (English for Academic Purposes) programmes (Huan and Normandia, 2007; Fornanet-Gómez and Raisänen, 2008). An interesting contribution in this respect comes from Fortanet-Gómez and Ruiz-Garrido (2009) whose research aims to provide an overview of ICLHE or CLIL status quo in Europe – particularly Spain, Finland and Netherlands - by analysing experiences in different levels of instruction. It is in HE that the links between ICLHE and ESP/EAP become stronger as the goals of these approaches are similar with the only difference that in both EAP and ESP the main purpose remains the learning of the English language appropriate for certain situations while ICLHE aims at improving subject learning, too (Fortanet-Gomez and Ruiz-Garrido, 2009:49).

The definition of ESP by Dudley-Evans (1998) provides a list of ESP absolute and variable characteristics. Among the absolute characteristics, the main function of ESP is stated to be to ‘meet specific needs of the learners’ by using ‘methodology and activities of the discipline it serves’. ICLHE at any level of education aims at fulfil learners’ needs, too; however, it aims to provide an answer to both the language and the professional or academic needs of the learners. In the ESP policy/prospective it is widely acknowledged that language serves a discipline not only for vocabulary but also for discourse and discipline functions.

Scientific language is not just specialist vocabulary […] In fact it is possible to discuss a topic very scientifically without heavy use of technical vocabulary, if you can use the right kind of language to scaffold deductive and inductive reasoning, formulate hypotheses, make generalizations, identify exceptions, connect evidence to theses, classify, relate, organize, plan and persuade. […] The forms of scientific language scaffold support and
channel our thinking, reasoning, insight and even our creative imagination.

(Jay L. Lemke in Wellington and Osborne, 2001)

The quotation by Wellington and Osborne contains the word scaffold, which is a key term to any form of learning and teaching. Scaffolding in ICLHE contexts means to provide a specific set of strategies aimed to support the teaching/learning process. Language will be supported by content and content will be supported by language. Without a change of prospective in educational methodology it is hard to obtain significant results in education and in ICLHE environments in particular.

The practice of ESP courses relies often on the acquisition and consolidation of new disciplinary specific vocabulary, which is, however, only one among the several needs in professional and academic settings. ICLHE, on the contrary, translates into practice a fashionable statement by Postman and Weingartner, which goes back to the 1970s when the debate about language in education started:

Almost all of what we customarily call ‘knowledge’ is language, which means that the key to understanding a subject is to understand its language. A discipline is a way of knowing, and whatever is known is inseparable from the symbols (mostly words) in which the knowing is codified. […] This means, of course, that every teacher is a language teacher.

(Wellington and Osborne, 2001:3)

The quotation does refer to any kind of scientific education regardless of the language used as a means of instruction, no matter if foreign or first language. The assumption that all knowledge is a linguistic knowledge has the aim to raise awareness in education on the importance to always consider the role of the language while delivering disciplinary contents.

Particularly in education, the awareness of means and protocols of action is of paramount relevance. A change of the language used as a means to deliver knowledge is likely to have an effect on the communicative event in action. Next paragraph will deal with the English-medium lecture both from a theoretical and practical point of view.
3.3 English-medium lecture: definition and context of use

The English-medium lecture is the academic lesson that is delivered in English in a non-native speaker context. In particular, here I consider the English-medium lecture delivered by non-native speakers to other participants, which are non-native speakers and that might or might not share a first language. In Europe, however, the contexts of the English-medium lecture can be diverse in terms of participants' identity; for example, there can be the case of native speaker lecturers who deliver lectures to non-native speakers students who share the first language (it is the case of an English native lecturer who teaches in a foreign country); or there might be the case in which the native speaker lecturer is in front of a multilingual classroom, where students speak different first languages. Another case is the non-native speaker lecturer, who delivers lectures to non-native speaker students that usually share the same first language; and this is the case I have analysed in my dissertation. However, differences can also be observed in terms of disciplinary fields, for example scientific versus humanities subjects. Every discipline has its own discourse structure and this might require different way of delivering content. There might be more visual disciplines, which rely on a set of tools that allow the lecturers and the students to access information in a more pragmatic manner. On the other hand more theoretical disciplines, which heavily rely on the spoken medium, have to structure their lecture in a different way and perhaps they will employ different tools. Several researches have focused on the variations across disciplines with regards to disciplinary cultures, disciplinary discourses, and genres (Swales, 1990); the research has focused both on the variations within written academic genres especially in a native speaker context (Hyland, 2000; Hyland / Bondi, 2006), and also on the cross-disciplinary variation in spoken genres such as the lecture (Dudley-Evans, 1994; Biber, 2006). Next paragraph will focus on the major trends of research on the English–medium lecture mainly in a non-native context.
3.4 English-medium Lecture: literature review

Several studies have been conducted in the attempt to describe the different university registers (Biber, 2006:2), both written and spoken and the main motive for these studies is the need for preparing students to cope with the wide range of university registers and to help them in succeeding in that educational environment. Most of the studies focus on written academic discourse, such as research articles and textbooks; conference papers and scientific journals. Recently, however, a new interest has risen around spoken academic genres like lectures and conference papers (Biber, 2006; Hyland, 2006).

Researches that have been carried out on the academic lecture have focused on several issues such as the structure of the lecture (Lebauer 1984; Chaudron / Richards, 1986; DeCarrico & Nattinger, 1988; Young 1994; Flowerdew 1994; Miller 2002; Thompson 2003; Abberton 2009); some specific linguistic and pragmatic features like discourse markers (Smit 2006; Belles Fortuno 2006; Eslami / Eslami-Rasekh 2007), adverbials (Fortanet, 2006), personal pronouns (Fortanet 2004; Dafouz Milne 2006), modal verbs and stance (Dafouz Milne, 2006); the lexical bundles (Biber, 2006; Neely / Cortes 2009); the techniques and strategies for an efficient lecture such as reference to background knowledge and delivery strategies (Fortanet, 2005), interaction among lecturers and students (Bamford, 2005; Veronesi, 2008; Suviinitty, 2009, 2010; Wilkinson, 2010), listening skills for comprehension (Smit, 2009; Miller, 2003; Othman, 2007), questioning and highlighting (Bamford, 2005; Querol-Julian, 2005; Deroy, 2010; Veronesi, 2010); note-taking skills (Dunkel, 1988); ways to express positive and negative evaluation in the lecture (Mauranen, 2002; Anderson / Bamford, 2004); definitions (Flowerdew, 1992; Michael Lessard-Clouston, 2006).

An interesting thread of research is the identification of cultural connotations in the English-medium lecture; in particular, researchers have
deepen issues such as the *impact of the culture* on the learning and teaching processes in ELF contexts (Flowerdew / Miller, 1995; Deroy, 2008); the *cross-cultural communication* competencies (Malinovska, 2004); the *identity construction* of ELF participants (Leech / Svartvik, 1975; Nunez Perucha / Dafouz Milne, 2007; Camiciottoli Crawford 2008; Virkkula / Nikula, 2010); the forms and functions of *humour* (Wang, 2009).

Among all the branches of research, which I have mentioned in this paragraph, I have focused only on some of them. In particular, my main interests for the purposes of this thesis were the structure and the pragmatic functions at work in the lecture. Closely related to the pragmatics of the lecture was also the attention for the culture-relate features of the engineering lecture.

Next chapter will provide an overview of the English-medium lecture at the Faculty of Engineering in Naples and the main findings will be reported and discussed.
4. English-medium courses at the Faculty of Engineering

*English should be considered as an engineering tool*

Samuel C. Earle, 1911

This chapter introduces the case study I explored, that is the English-medium courses at the Faculty of Engineering in Naples. The results of this part of the study rely mainly on the analysis of the classroom observation grids, the interviews, the questionnaires, and on my participant observation to the lectures.

4.1 The Faculty of Engineering in Naples

Since the Bologna process, at the University of Naples *Federico II* more than one faculty has faced the new challenges of internationalisation by offering English-medium courses and programmes, in most of the cases at postgraduate level (www.unina.it); however, the Faculty of Engineering seems to be one of the leading faculties as it offers a large amount of single courses both at postgraduate and undergraduate level and also a few complete postgraduate programmes such as the *Specialistica* two-year courses (www.ingegneria.unina.it).

4.1.1 A brief historical background

The Faculty of Engineering is one of the oldest and largest in Italy. It was founded in 1811 in Naples in 1811 during the Napoleonic occupation, but it was only in 1863, two years after the Italian Unification, that it took the name of Royal School of Engineering. The aim of the school was to provide

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9 A recent international congress organised by the University Centre for Languages (CLA), held on 28th Sept 2011, has provided an updated overview of the English-medium courses and programs run by the University of Naples *Federico II* (for more information on the event http://www.cla.unina.it/flex/cm/pages/ServeBLOB.php/L/IT/IDPagina/405)
the graduates in mathematics with the knowledge and the skills to practice the Art of Engineering and Architecture. Later, in 1876, the school underwent a complete reorganization of the degree courses to comply with the *Regolamento Generale* of all the Royal Schools of Engineering in Italy. Since then, two 5-year degree courses became available, one in Engineering and one in Architecture.

In 1904 the Royal School of Engineering changed its name first into Higher Polytechnic School (*Scuola Superiore Politecnica*) and finally, in 1935, into the actual name of Faculty of Engineering of the University of Naples *Federico II*. Since then the Faculty has developed fast and nowadays offers more than twenty degree courses, several Master Programmes and Doctorate Schools. In 2011 the Faculty will be celebrating the 200th anniversary of its Foundation.10

4.1.2 The *Internationalization* policy

At the Faculty of Engineering in Naples about 40 courses11, mainly but not only at postgraduate level- are delivered in English. Each has a non-simultaneous Italian counterpart. Students freely chose the one they want to attend; however, by following the English-medium course the students might earn extra credits. Lecturers are recruited on a voluntary base. Moreover, a new two-year International Master course in *Structural and Geotechnical Engineering* started in October 2011. It is part of the Faculty policy to give a strong input to the internationalisation process; the faculty website owns a section named *Internazionalizzazione* in which all the information about international programmes, master programmes, Erasmus partnerships, and other activities is provided.

Internationalisation is a crucial aspect of the faculty policy. The former

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10 Adapted from the faculty webpage (visited on 29th Oct. 2011).
11 These data refer to the academic year 2009-2010.
Dean of the faculty, interviewed at the beginning of this research, pointed out how the number of foreign students attending the faculty is scarce. He also explained that the faculty of Engineering in Naples is attractive either to those researchers who need to come to Naples for specific scientific interests or to those foreign students who geographically are closer to the city (mainly Turkish and Greek students). This matter of fact made him aware of the need to internationalise the faculty by the offer of a range of English-medium courses that would have made the faculty accessible to students and researchers from all over Europe and the world. The actual Dean of the Faculty, who I interviewed later during the research, consolidated the same policy as internationalisation is now conceived as a winning card for the faculty future. The interest for internationalisation has become a *sine qua non* condition, as it is one of the leading criteria for the University Quality Assessment. A recent report, in fact, stated that the internationalisation actions and activities count as much as the 30% in the general evaluation of the university.\(^\text{12}\)

### 4.2 The data

This is a qualitative research that exploits an ethnographic method. The data collected consist in eight one-hour English-medium lectures, which have been digitally audio and video recorded. Two lectures for each lecturer have been recorded\(^\text{13}\). The recordings are now part of a larger corpus called ELC (The Engineering Lecture Corpus), which is “a growing collection of transcripts of English-medium engineering lectures from around the world. It currently contains video recordings and transcripts from the UK (Coventry), Malaysia (Universiti Teknologi Malaysia) and New Zealand


\(^{13}\) For one of the lecturers, two more lectures were recorded because he teaches the same subject in both languages but in the two different semesters (the first semester in Italian and the second in English).
(Auckland University of Technology). ELC aims are to:

- Identify and describe typical engineering lecture discourse features
- Compare English-medium engineering lecturing styles in different parts of the world
- Explore the current role of English-medium instruction in engineering”

(from the ELC website, www.coventry.ac.uk/elc)

Alongside the audio recordings the research relied also on other qualitative instruments of research such as:

- Questionnaires for the lecturers
- Questionnaires for the students
- Class observation grids
- Informal interviews both with lecturers and students
- Participant observation
- Researcher’s notes

The combination of the data collected aims to provide a general overview of the state-of-the-art of ELF at the faculty of Engineering in Naples.

The next paragraph will focus and discuss mainly the results of the classroom observation grids collected during the lectures.

4.3 Classroom observation

The aim of the classroom observation was to collect information in order to outline a sketch of the Engineering English-medium lecture features at the Faculty of Engineering in Naples. Also, as the researcher was a participant observer, the observation provided useful insights on lecturers and students’ behaviour in the English-medium setting.

The observation grid\(^\text{14}\) is an adapted version from different tested grids\(^\text{15}\)

\(^{14}\) See Appendix 3
employed in CLIL settings. It was designed and discussed with my supervisor and other scholars involved in the same research field.

The class observation grid is made of five sections focusing on:
1. Lecture Structure;
2. Classroom Interaction;
3. Lecturer’s Style;
4. Students’ Attitude/Reaction;
5. Teaching Aids.

4.3.1 Lecture Structure

As far as the Lecture Structure section is concerned, the data show that the lecture is conducted as a traditional front lesson where the lecturers speak in a monologue while standing in front of a seated and almost silent audience. However, the lecturers from time to time and according to their personal styles did try to make the lecture more interactive by asking questions in order to:

- retrieve previous knowledge,
- check concepts comprehension,
- elicit comments.

The interactive attempts on the part of the lecturers did not often correspond to a lively participation on the students’ side; the students, in most of the cases, were merely listening to the lecturer, taking notes, and rarely asking or answering the lecturer’s questions by using very short chunks of language. The issue of interactivity in a lecture, both in a native and non-native setting, is an interesting topic with many pragmatic implications. Interaction lecturer-students and students-students will be further explored in Chapter 5 of this thesis: at the moment it is just worth noting that interactivity does not seem to be a prior feature of these lectures.

15 Planning & Observation Checklist for professional dialogue between CLIL educators by Mehisto, Marsh and Frigols, 2008; Lecture Observation Grid (LOG) by the Centre for Educational Development, Imperial College London, 2003; Classroom Observation by Valcke et alii, 2009.
probably for two main reasons: the traditional format of the Italian academic lecture, that by convention, is usually an ex cathedra monologue; and the weak proficiency of students’ speaking skills who are afraid of making mistakes in front of the rest of the class and of the lecturer.

Lecturers started the lecture by implementing different strategies according to their lecturing personal style. Following there is list of the main introduction devices used by the lecturers:

- a comment about the lesson content by reading/discussing the first slide of that day presentation,
- a brief preview of that day contents,
- a summary/review of last lesson topic,
- an investigation among the students about last lesson topic,
- the request to one of the students to provide a short review of previous topic for the rest of the class.
- an evaluative comment on the complex issues of that day class.

Though the long list of different strategies employed by the lecturers, it seems that the summary of the contents -either being a preview or a review of contents- is the strategy mostly used at the beginning of the lecture.

4.3.2 Classroom Interaction

As already mentioned, Classroom Interaction was mainly made of lecturers questioning students in order to check understanding of the topic and sometimes language comprehension. Students used to answer in English, and English was the language used when asking questions –though rare- as well. Classroom interaction took place mostly in L2 but lecturers used L1 for classroom management talk (information about exams, future lesson schedule, etc.). When students questioned the lecturer about the meaning of a word, the lecturers behaved in two different ways: some used to paraphrase by using L2 but others translated straight into Italian.
Lecturers also spoke Italian when they did not know the L2 equivalent of a word but -sometimes at the end of an explanation- they rephrased in L1 a more complex concept to make sure it was well understood. Of course that was possible only in the classes where the participants shared the same language. In the lectures in which non-Italian speakers were present, communication was handled in L2 for classroom management talk, too. The switch between different languages is further investigated in chapter 5 in which the lecture’s transcriptions are analysed.

4.3.3 Lecturer’s Style

As for the lecturer’s behaviour, it is acknowledged that Lecturer’s Style is the result of training, acquired professional skills, and personal attitudes (Frank, 1989). In this respect it is difficult to generalise for all the lecturers who have been observed, as the variables at stake can be very different.

However, in my data I found rather homogeneous data with respect to many of the analysed items:

- lecturers were audible and delivered at suitable speech;
- they maintained eye contact most of the time except when turning either to the slides or to the PC in order to move to the next slide;
- they were responsive to the audience and faced the audience all the time;
- they were standing and moving around the room a lot;
- they sometimes used gesture and body movement;
- they made use of slide supports and sometimes of the traditional blackboard too, when they needed to write formulas and/or to draw pictures;
- they used to insert fillers in their speech: uhm, ok, so, I mean were the most frequent ones. Lecturers always knew in advance of the recordings but in one case as the lecturer had forgotten. On this occasion the use of fillers was much more frequent due to emotional reasons;
they lecturers rarely would self correct language mistakes, except one lecturer who used to self correct his pronunciation mistakes (give for gave);

lecturer’s general attitude was a relaxed one.

did not use personal notes but the slides functioned as a lesson plot and they were easily connecting one slide to the other showing appropriate and fluent speaking skills.

they often used non-technical words especially by providing examples from other semantic fields in order to clarify the technical concepts (linguistics, biology, everyday life). Only one lecturer used to livens up the lecture with appropriate use of humour, especially at the end of the lesson or before a break.

4.3.4 Students’ Attitude

The section Students’ Attitude/Reaction focused on how the students behaved during the lesson. In almost all the examined cases, students seemed interested to the topic and very concentrated on the lecture, but without showing any particular enthusiasm for what they were doing: they were seated listening to the lecturer; and some of them used to take few notes either in Italian or English or in both languages. Students used to nod when the lecturer spoke but rarely they asked questions and/or replied to teacher’s effort to interact with them. These results are in line with the lecturers’ response (see lecturers’ questionnaire results) about the problems lecturers face in involving students in critical thinking, which is a basic feature of foreign language instruction (Ricci Garotti, 2009)

4.3.5 Teaching Aids

All the observed lectures made extensive use of Teaching Aids, such as PPT slides. One of the lecturers used the slides as notes and used to spend much time on them while commenting each slide. In some cases the
traditional blackboard was used in order to draw formulas, graphs and other topic related pictures. Lecturers used *realia* like books, sheets of paper, etc. as an explicative support to the subject contents.

The analysis of the lecture observation grids provided a general overview of what happens during the lesson. However, these data must be interpreted by taking into account other information gathered through face-to-face interviews and the analysis of the questionnaires distributed to both lecturers and students. Next paragraph deals with the results of the lecturers’ questionnaires.

### 4.4 Exam Observation

I had the chance to observe the exams for two different English-medium courses. The materials (textbooks, slides, teachers’ notes, etc.) that students have to study are written in English and the exam must be taken in English, too. In the exams I have observed, students were asked to prepare in advance a project or other written work and, then, discuss it orally with the lecturer and/or in front of the other classmates.

Students had the choice to work in groups; however, each of them had to discuss orally part of the project. In all the cases the lecturers had already read the paper and the oral discussion was the chance to provide evaluative comments or to ask for more clarification questions. The projects were usually presented by using a Power Point Presentation support.

What struck me was, actually, the lack of interaction among students and lecturers during the exam session. Students usually spoke all the allowed time without being interrupted by the lecturer or the other students. This peculiarity is due to the lack of self-confidence in language proficiency. In fact, a few lecturers and students stated in the interviews that although following an English-medium course is not a problem for them, however, they still experience difficulties on the exam session. On that occasion, they would like to handle better argumentative skills, which would allow a
proper discussion as the one they would handle in the mother tongue. This situation affects for sure the linguistic choices of the participants; even the silence becomes a pragmatic code as it signals the impossibility to enter the discussion rather than the agreement on the topic under discussion.

4.5 Lecturers’ Questionnaire

Between December 2010 and January 2011 an informative questionnaire (see Appendix A) was distributed to the teachers lecturing in English at the Faculty of Engineering in Naples. About forty English-medium courses were on offer for the academic year 2010-11. Out of 38 lecturers involved in these programmes and/or courses, 25 lecturers completed and returned the questionnaire (a percentage of 65%). The lectures’ questionnaire was written in English, but the lecturers were given the choice to answer the open-ended questions either in Italian or in English. It was made of five pages and contained a total of 38 items. Most of the items were closed ended questions, including yes/no questions, multiple choice, and scaled questions; also a few open-ended questions were included. The questionnaire was designed according to the areas I wanted to investigate. In particular it aimed to gather information on the following areas:

- **Lecturer Data.** These questions focus on biographical information, English education, teaching experience, and reasons for entering the English-medium programme;
- **Course Information.** This set of questions investigates on details such as title, level, and length of the course; number of credits, number of students attending the course, number of foreign students at the course, and if the course has an Italian-medium counterpart;
- **Lecture Structure.** This section focuses on the structure of the lecture. The questions are about the language used as a means of instruction in the different parts of the lecture, the teaching aids
employed, the teaching method, and the assessment typology;

- **English Language Evaluation.** The items contained in this part of the questionnaire gather information on evaluation of students’ English proficiency trying to make a distinction between the start and the end of the course, and also on lecturers’ language self evaluation; the remaining items investigate lectures’ attitude towards English-medium teaching, problems of difficulties faced in classroom, need for a language or pedagogical support;

- **General questions.** This last set of questions deals with more general issues concerning lecturers’ personal opinions on students’ final results, on the way respondents experience English-medium teaching. This set ends with an open-ended question in which the respondents are given the opportunity to comment and suggest changes to the English-medium programme they are involved in.

The lecturers filled in the questionnaire on line and seemed to be helpful and willing to do it. Some of the lecturers were also contacted personally and it was possible to collect extra information on specific sections of the questionnaire by face-to-face interviews or telephone interviews.

The following paragraphs contain and discuss the results of each section of the questionnaire.

### 4.5.1 Lecturer data

All the lecturers were born in Italy and their mother tongue is Italian. Their age ranges between 30 and 65, but most of them are in the 41-50 slot. All of them studied English at secondary school (from 5 to 8 years); however, some of them have never stopped studying the language: 10 out of 23 state that they have studied English for more than 10 years. Most of them do not own any International English Language Certification; however, 5 own a TOEFL certification and only one lecturer a Proficiency Certification obtained abroad (University of Michigan). Lecturers were not language
tested before entering the programme that, as already said, was on a voluntary base.

The majority of the lecturers are not new to teaching through English; only five lecturers state that this is their first experience, the others have taught in English for more than one year and four teachers have an even longer experience (over 10 years) in this respect both in Italy and abroad. Their reasons for entering the English-medium programme are different. However, the majority of the lecturers state as one of the main reason the new institutional policies (84%). As the lecturers were asked to rank the reasons in order of importance to them, it is worth underlining that a percentage of 76% stated that the new institutional policy following the Bologna Process in 1999 was for sure the first and main reason that made them enter the programme. However, it is also interesting to underline that many others highlighted different reasons such as educational/pedagogical motives; the desire to enter international networks; research interests; the opportunity to improve their English competencies; unspecified personal interests.

![Figure 1: Q1.9: Lecturers’ reasons for entering the English-medium programme](image)

If the need to comply with the new institutional policies seems a rather obvious reason for entering an English-medium programme because of the new university policy (see chapter 4.1.2 of this thesis), the number of lecturers interested in the programme for educational/pedagogical motives is
of particular interest for this research. Later in the questionnaire they have been asked about the need for pedagogical and/or language support (Q4.6) and also about their methodology when teaching through a foreign language (Q5.3). In both cases only a minority of the lecturers answered positively, that is they acknowledged the need for pedagogical support, and they also recognised that their teaching style had undergone some changes.

**Figure 2: Q 4.6: Would you like to be supported by an English teacher and/or an expert in pedagogy?**

![Graph showing 71% NO and 29% YES](image1)

**Figure 3: Q 5.3: Is your way of teaching different when you use English as a medium of instruction?**

![Graph showing 79% NO and 21% YES](image2)

Other on-going researches (Annemieke Meijer 2010 –paper at the CLIL conference in Eichstätt –Germany; Pavòn and Rubio 2010) in this respect confirm the paradox that while lecturers join the English-medium programmes for educational reasons, then they are not aware that they might need a specific training for that. There is a general lack of awareness that
content comes always through language and that language conveys always content (Mohan 1986). However, our data show that only a small percentage of the lecturers who returned the questionnaine would require a language support in some areas (28%),

| 1. Writing skills          |
| 2. Grammar, vocabulary and pronunciation |
| 3. General English        |
| 4. Scientific-technical English |
| 5. Students preliminary preparation on technical language |

*Figure 4: Q 4.7: If you answered YES, which area of English would you like to work more on?*

and have changed their lecture format in some way (Q 5.4):

- Use of direct and simple style
- Slower speaking rate
- Use of shorter and plain expression
- More written text in the slides
- Simpler description of the subjects treated, to facilitate comprehension

*Figure 5: Q 5.4: If you answered YES, what changes or adaptations have you done to your course in English with respect to the one you teach in Italian?*

With regards to Q 4.7, in my intention, the item was addressing the lecturers, however, the answers are ambiguous, as it seems not clear whether the lecturers are referring to a language support for the students or for themselves or even for both. Only the answers 5 and 6 are unambiguous as the first refers to students and the second refers to the lectures. For the others, they might apply to both categories of participants, as they are features, which concern the L2 mastery.

The results of Q 5.4 provide interesting insights in the use of the language by the lecturers. As seen from the biographical data of the
lecturers, they are all Italian native-speakers (Q 1.4) and English is a second language to them. The small percentage of lecturers (20%) who acknowledged a change in the format of their English-medium lecture compared to the lecture they deliver in Italian, point the attention to a simplification of the language by using a more direct and concise style: shorter sentences, simpler syntax, plain words. The simplification of the language is probably related to both the will to make the lesson content more comprehensible to the students, but also to the limited mastery of the language on lectures’ side. Moreover, in some of the face-to-face interviews, lectures stated that they are more used to read and write English than to speak it; consequently, the familiarity with the English scientific written style has probably an influence on the way lecturers speak to their students. The limited mastery of the speaking skills is proved by the assertion that lecturers tend to use more text in the slides in English compared to the ones in Italian. Writing happens to be a support for the lecturers and a device for the students that can follow better the slides content and use them later for revision thanks to the increased amount of written text.

In the following table there is a summary of the results concerning the section 1 of the questionnaire:

<table>
<thead>
<tr>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>Italian native speaker</td>
</tr>
<tr>
<td>Aged 41-50 (40%)</td>
</tr>
<tr>
<td>International English Language Certification (2%)</td>
</tr>
</tbody>
</table>

Table 1: The English-medium lecturer at the faculty of Engineering in Naples

4.5.2 Course information

The second section of the questionnaire is devoted to a description of the courses the lecturers are in charge of. All the courses last a semester and
most of them are at postgraduate level (14), while only 4 are at graduate level. A more restricted number of courses (10) are taught within a PhD or Master programme.

Courses contribute with a different number of credits, but the lecturer is allowed to give extra credits to the students who register for the English-taught course. In fact, most of the courses have an Italian counterpart, consequently in order to persuade Italian students to choose the English course, extra credits – either half of the normal credit or even the double- is attributed. Out of 25 courses, 12 are taught only in English and the remaining in both languages. In the latter case, the Italian and the English courses are taught simultaneously in 3 cases, others are delivered in two different semesters (6) but by the same lecturer, or by two different lectures in 3 cases. The reason why the same course is delivered both in L1 and L2 is linked to one of the motives for entering these programmes, that is the need to implement new institutional/educational policies aimed to recruit a higher number of foreign students. The Faculty has to offer the chance to follow the course in English but it cannot oblige the Italian students to follow the foreign language-medium course. In the case of the Faculty of Engineering of Naples, the number of foreign students is extremely low especially at undergraduate level. From the present survey it results that classes are not crowded as the average number of students ranges from 11 to 30, and only less than the 10% is made of non-Italian speakers.
This is one of the main reasons for implementing English-medium courses according to the Presidenza offices. The current Dean of the Faculty, professor Salatino, joining the previous policies of the faculty (in the person of the former Dean, professor Cosenza), stated in an interview with the author of this research that the main goal is to make the Faculty competitive with the other European universities and, at the same time, to make it attractive to foreign students and researchers. It is not this the place where to draw a balance in this respect, however lecturers’ personal opinions are not completely positive about the results; in particular, one of the lecturers suggests that in order to attract foreign students the faculty should offer a whole English-medium programme at undergraduate level. Other suggestions are in favour of the abolition of the Italian counterpart course (see chapter 4.5.5 of this thesis for more details).

The questionnaire goes deeper with a set of questions concerning the lecture structure, which is the topic of next paragraph.

4.5.3 Lecture Structure

The lecture is always held in English in most of the cases (21 out of 25), however classroom interaction among students and lecturer is always conducted in English only in 15 cases and most of the time in the remaining 7 cases.

PPT slides is the most common visual support used by the majority of the lecturers (21 out of 25). Only a few lecturers still use the blackboard together with the PPT slides. The use of the traditional blackboard is linked in most of the cases to the contents of the lecture; for example for a few disciplines or for some topics, the use of the traditional board was necessary for writing formulas, mathematical calculations, and drawings.

In most of the courses students are required to do homework (17 vs. 7) and it must be returned in English. Students are assessed mostly through an oral exam (16), and only in scattered cases by producing project works and
discussion (2), computer programming (1), written exam only (2), written and oral exam (6).

Figure 7: Q 3.6: How do you assess your students?

The highest percentage of assessment through oral exams is not a surprising data in the Italian academic scenario. Most of the faculties have traditionally assessed students via oral exams—with the exception of the discipline, which are based on calculation or linguistic abilities. However, it is striking that although most of the exams are oral, there seems to be little attention to students’ speaking skills improvement.

This section ends with a question on the use of handouts support before, during or after the lecture. Lecturers use to distribute handouts in most of the cases (19 vs. 5) and mainly before the class (10), some do it after (8) and only 2 during the lesson. This item was inserted as it proved to be useful in providing information into preparing for English-medium instruction. There is no need to say that visuals can help comprehension both in L1 and L2 instruction; the same is true for the grammar expectancy activation, which allows students to follow and understand better if they can predict the contents they are exposed to. The distribution of handouts before the lesson can make easier the comprehension process when the medium of instruction is not the first language of the participants.

The research-based evidence of the above stated assumption is also made true by the experiential perception of a group of students who have spent a
semester abroad following the courses for a Master degree. The interviews with those students revealed how important is to be supported by didactic material prior the classroom lecture as they had the opportunity to read about the lecture content of that day (from an interviews held on 27th October 2012).

4.5.4 English Language Proficiency evaluation

Section four of the questionnaire aims to gather information about the English language knowledge both of the lecturers and of the students. Lecturers were asked to evaluate students’ language proficiency at the beginning and at the end of the course; a three step scale ranging from not so good to good has been adopted. According to the lecturers, none of the students has a good level of English neither at the beginning of the course (10 fairy good and 12 not so good) nor at the end (11 fairy good and 9 not so good). Only in one case, a lecturer evaluates the language proficiency of his students as good at the end of the course. It must also be said that some lecturers either did not feel at ease in judging their students’ language proficiency or stated that they do not check students’ language proficiency. It is likely that in the same group there might be different levels from not so good to good; lectures have the chance to evaluate students’ proficiency by the level of classroom interaction, where students who ask and answer questions have probably a good level –though it is the minority, while it is difficult to predict for those who remain silent throughout the lecture. Other lecturers underlined how the language proficiency does not always correspond to content preparation: there might be highly language proficient students who are weak for the course contents and vice versa. An oral informal interview to one of the few faculty language teachers pointed to the low language proficiency level of the majority of the students at graduate level. Actually, there is no formal teaching of English at the faculty of Engineering in Naples. Students have to pass an on-line exam, which tests their language competences; however, there is not a preparation course
offered by the faculty because of scarcity of funds (from the oral interview with the Dean of the Faculty). Courses in Technical English are activated only in few Departments, where there is the possibility to devolve part of the budget for these purposes.

As the lecturer language self evaluation is regarded, 13 lecturers state to own advanced competencies and 11 intermediate competencies. The questionnaire did not specify the different competencies (reading, listening, writing and speaking), however in the informal interviews with some of the lecturers it was found out that they feel more proficient in reading and writing skills.

![Figure 8: Q 4.3: How do you evaluate your own competencies in English?](image)

All the lecturers feel comfortable when teaching in English and 10 of them have never faced problems of whatever nature in interacting with students and involving them in discussion, in evaluating them and in finding materials for the course. However, some of them (3) faced problems in involving students in discussion and critical thinking; in asking questions (3); evaluating (2), and finding materials for the course (2). The problems they face in involving students is linked to the general lack of interaction, which has been already discussed (see chapter 4.3.2 of this thesis).

When asked whether they would like to be supported by a language expert (Q 4.6), the majority of the lecturers answered negatively (18). This
answer is consistent with the one in the next section (Q 5.3) where lecturers were asked about the variations in English-medium lecturing; in this case, only few lecturers think that their way of lecturing in English is different and they suggest a set of adaptations they make in order to compensate for the language change. Both these answers (Q 4.6 and Q 5.3) underline the unconscious lack of awareness that language plays an important role in content delivery and that a switch of the language-medium of instruction can cause changes to the educational context. However, a minority of lecturers would welcome some sort of language support and they specified the areas in which help would be much appreciated:

a. Writing skills  
b. Grammar, vocabulary and pronunciation  
c. General English  
d. Innovative teaching methodologies  
e. Scientific and technical areas

The interest for this question rose in the face-to-face interviews, when a few lecturers asked me about the reason for inserting this item. The discussion revealed how the discipline lecturers are unaware of the linguistic implications of their teaching and of their students’ learning. It was because of one of these discussions that a lecturer asked me to implement a pilot experimental project of ICLHE in his course; a very short language module was arranged and delivered during the content lectures, and whose details are later in this chapter examined.

The lecturers also mentioned the need for a more accurate preliminary preparation of the students on English technical language (see letter e. of the above list). The issue of technical vocabulary was a recurrent topic in the face-to-face interviews both with lecturers and with students. Some lecturers wished a more sound pre-class knowledge of scientific jargon at undergraduate level, while others stated that technical vocabulary is not a problem as students have already acquired it especially postgraduate
students. For other lecturers technical vocabulary difficulties are easily overcome by providing a translation of the term as soon as it is encountered. Students seem more concerned about technical vocabulary. For most of them the difficulties in English-medium lecturing rely exclusively in scientific jargon that is at a word level only. Students at the engineering faculty are not learners of English, they are just users of English; this status gives an insight on their lack of awareness of the different level of knowledge in languages. Understanding language is not a merely a matter of vocabulary; instead awareness of the sentence and discourse levels plays a paramount role in lecturing comprehension. Their lack of awareness was clear when a pilot project was implemented in order to provide support to the English-medium lessons in a Mathematics course. On that occasion, the participant students were given a needs analysis questionnaire whose results served to design a supporting language module appropriate to the students’ needs. The knowledge of technical vocabulary was the topic with the highest percentage of preferences (see chapter 4.7.3 of this thesis for more details).

4.5.5 General questions

This last section of the questionnaire aimed to investigate lecturers’ perceptions on students’ results and on the way they structure their English-medium lecturing. According to most of the lecturers, students’ results are independent of the language of instruction: English seems not to influence at all the level of subject knowledge achieved by the students attending English-medium courses. However, seven lectures state that students attending English-taught courses achieve the same level of the content knowledge as the students following Italian-medium courses. Whatever exam results, all of the lecturers think that the English programme can be advantageous for students in finding a job; however, according to a few lecturers, a longer observation period is needed before a reliable evaluation can be done.
When asked about their way of delivering the lecture, most of the lecturers (19) answered that their way of teaching remains the same regardless of the language of instruction. For some of the lecturers, this question was an odd one, as they do not think that a different linguistic code can affect the methodology or that an adaptation might be needed. However, a few lecturers acknowledged a change in their pedagogy when teaching in English; in particular, some stated that in English they use a more direct and simpler style, which is made of shorter and plain words and expressions. Others stated that when lecturing in English, they use more written text in the slides and they reduce the speaking rate of their speech. Interestingly one lecturer stated that by speaking slower he gets better results from the students compared to the results of the students following the Italian-medium course.

An open-ended question closed this section of the questionnaire: the lecturers were asked to express any comments or to suggest any improvements to the English-medium programme in which they were involved. Unfortunately, not all the lecturers filled in this question, but the answers collected were the following:

a. The programme should require a minimum basic knowledge of the language especially on technical terminology  
b. The abolition of the corresponding Italian-medium course  
c. The offer of a whole English-medium degree at graduate level in order to attract foreign students  
d. More funds to invite international colleagues for guest lecturing or co-teaching courses  
e. Italian and English-medium courses should be delivered simultaneously and by the same lecturer.  
f. A better exploitation of the students’ satisfaction survey is expected

A few of the above listed suggestions are in line with the institutional policy of internationalisation: the abolition of the corresponding Italian-
medium courses could be a stronger push towards the choice of the English-medium courses; also the implementation of a complete English-medium programme at graduate level could increase the number of foreigners who choose to come to Naples; this could be done also by creating joint degrees with other European faculties in order to increase guest lecturing and implement internationalisation among lecturers, too.

4.6 Students’ questionnaire

The aim of this study is to explore the state-of-the-art of the English-medium lecturing at the Faculty of Engineering in Naples. One of the research questions was about the participants’ perceptions of the English-medium teaching. A students’ questionnaire was designed with the aim to outline a sketch of the English-medium student at the Faculty of Engineering and of his/her attitude towards English-medium instruction. The students’ questionnaire (see Appendix B) was a three-page questionnaire and it was divided in two sections:

- Students’ data;
- Learner’s attitude.

The first section aimed to gather information about students’ identity and educational background, evaluation of English proficiency, and previous experiences in foreign language-medium instruction. A second part explored students’ behaviour in the English-medium class and students’ perceptions of English-medium programmes.

Questionnaires have been distributed on-line or in classroom. In the first case, a copy of the questionnaire has been sent to the lecturers who have then forwarded the file to the students. They have then returned the completed questionnaires only to my e-mail address. For the questionnaires that have been filled in the classroom, I have personally distributed and collected them by asking prior permission to the lecturers who stayed out of
the room while students were completing the questionnaires. All together, fifty-five questionnaires have been gathered and analysed.

4.6.1 Students’ data

The majority of the respondents consisted of male postgraduate and Master/PhD students who had studied English at secondary school for at least five years. They belonged to different degree courses of Engineering (Telecommunication – Civil – Geo-structural – Environmental - Electronic) and the great majority was made of Italian native speakers. However, seven students were either Erasmus or foreign postgraduate students (see Figure 9).

Figure 9: students’ level of education

A percentage of 58%, evaluated their own knowledge of English at the intermediate level (B1-B2 of CEFR\textsuperscript{16}) in the four language skills (speaking, listening, reading, writing). The Italian Ministry of Education recommendations state that the minimum level for entering foreign-language- medium programmes should be C1 (D.M. 10 settembre 2010 -

\textsuperscript{16} CEFR is the acronym for \textit{Common European Framework of Reference} for languages. The CEFR is a document which describes in a comprehensive manner i) the competences necessary for communication, ii) the related knowledge and skills and iii) the situations and domains of communication. The CEFR defines levels of attainment in different aspects of its descriptive scheme with illustrative descriptors scale (http://www.coe.int/t/dg4/linguistic/Source/Framework_EN.pdf).
www.istruzione.it/web/ministero). The average Italian student is expected to
leave secondary school with a B2 level; however, it is not rare the case that
this goal is not achieved, or at least is not achieved in all the four language
skills. It is worth noting that very few students evaluated as advanced (C1-
C2 of CEFR) their competencies (Figure 10). In particular, the results I got
from the questionnaires are consistent with the difficulties that Italian
students experience especially at speaking as the classroom methodology is
usually focused more on receptive than productive skills.

![Figure 10: students self-evaluated advanced (C1-C2) language competencies.](image)

As far as pre-university L2 subject learning is concerned, only a few
students reported previous experiences at secondary school (18%), and for
the following subjects: Electronics, Information Technology, Literature and
History.

### 4.6.2 Learner’s attitude

The second section focused on students’ perception of second language
learning and teaching environment and features. The students were asked to
express their point of view with regard to the skills that are most useful
when attending English-medium courses. The majority of them believe that
listening is the most useful skill when attending an English-medium course, while only a small percentage lists speaking as the most convenient one (see Figure 11).

Figure 11: most useful language skills when attending English-medium classes

These results are somehow in contradiction with the next question in which students were asked to state the teaching techniques they preferred. As from the Figure 12, it seems clear that the interactive class is their favourite learning technique, although they do not list speaking as the most useful skills.

Figure 12: preferred teaching technique

All the respondents take notes at the lesson and they do it either in English or in Italian. Only a minor part (14%) stated that following the
English-medium lecture; the difficulties were mainly due to the lack of knowledge of specific terminology and vocabulary in general. They underlined the difficulties they experienced with pronunciation: they did not know the meaning and pronunciation of some words.

Students were also asked about the reasons for choosing the English-medium course provided that there was an Italian counterpart too. It was an open-ended question and students were free to express their opinions, ideas, feelings, doubts and plans either in English or Italian. Not all the students completed this item (only the 69% of the participants) and they provided different reasons. Some stated that they earn extra credits when following the English-medium course but this was not the main reason. Most of the students, in fact, underlined the importance of studying through a foreign language for their future carrier and job opportunities. Interestingly, some students stated that learning through a foreign language means to learn both subject and language in a new, better and interesting way. For others, there was no alternative as the topic, which they were interested in, was delivered only in the foreign language. In the whole, the results seem to depict a positive attitude towards English-medium learning. Moreover, almost all of respondents (49 out of 55) think that their disciplinary learning will be the same as their colleagues studying in Italian.

When asked about their understanding, 74% stated to understand well the contents of the lecture; 18% not so well and only 3.6% signalled a bad understanding of the lecture (see Figure 13).
Figure 13: Do you find difficult to follow/understand an English-medium lesson?

The understanding of the lecture is a crucial issue because of the paramount importance of content in higher education. The students’ comprehension is not the main focus of this thesis, however, this issue was further explored by asking students to report their perceptions and reactions to the English-medium lecture (see box below). Students had to express their opinions on the following items:

- Lecturers’ speed of delivery
- Influence of the language medium on the understanding of the lecture
- Understanding of the disciplinary contents
- Non-native speaker competence of the lecturer

<table>
<thead>
<tr>
<th>How much do you agree with the following statements? (1 completely agree - 4 completely disagree)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. The speed of delivery is appropriate</td>
</tr>
<tr>
<td>II. I would understand the lecture better in my native language</td>
</tr>
<tr>
<td>III. The topic of the lecture is so challenging that the language used does not influence my understanding of the lecture</td>
</tr>
<tr>
<td>IV. The contents of the lecture remains secondary since I concentrate on the language so much</td>
</tr>
<tr>
<td>V. It is difficult to follow the lecture, but it has little or nothing to do with the language used</td>
</tr>
<tr>
<td>VI. I would prefer a native-speaker of English as a lecturer</td>
</tr>
</tbody>
</table>

Table 2: Students’ attitudes towards English-medium lectures
The results show that students show a positive attitude towards teaching through a foreign language. The speed of delivery seems not to be a problem and the language used for delivery does not affect their comprehension of the contents; actually, students are so much concentrated on the topic that the language used remains secondary and if they experience any difficulty, it would not depend on the language of instruction (61% of respondents). Nonetheless, part of the respondents still believe that they would understand better if the language used were Italian (56% against 40%) and 56% of the students would prefer a native speaker lecturer (see Table 2 and Figure 14 for a general overview).

![Bar chart](image)

*Figure 14: How much do you agree with the following statements? (For the full item see Appendix B)*

The questionnaire ended with a final open-ended question in which students could insert any other comment they would find relevant. Unfortunately, only three respondents completed the task. One of the answers expressed a positive opinion about English-medium learning but also suggested the students’ need for language support lessons and the need for higher language proficiency on lecturers’ side. The questionnaires’ results together with the informal interviews to students and lecturers is the basic motivation of the CLIL pilot project that was experimented at the Faculty of Engineering and that is reported in the next paragraph.
4.7 A pilot CLIL experience at the Faculty of Engineering in Naples

Teaching through a foreign language at the faculty of Engineering cannot be labelled a CLIL teaching (see chapter 3 of this thesis) because the lecturers’ attention is paid only on contents, while the knowledge of the language is taken for granted. This pilot experience, instead, wanted to explore and to experiment how CLIL teaching can be implemented in a course of Advanced Mathematics at the faculty of Engineering in Naples.

4.7.1 Introduction and motivations

The idea of starting an *English for Engineering* module at the Faculty of Engineering in Naples originates from an interview with one of the lecturers to whom a questionnaire had been administered. This lecturer was indeed struck by the item 4.6 of the lecturers’ questionnaire\(^\text{17}\) distributed to all the lecturers involved in English-medium teaching at the Faculty of Engineering (for more details, see chapter 4.5 of this thesis). He asked me what was the reason behind that question. As the reason was the hypotheses that *teaching through a foreign language* requires special linguistic and methodological adaptations, the lecturer expressed the will to experiment a short CLIL module with his students of the postgraduate course in *Advanced Applied Engineering Mathematics* to be taken in the second semester.

I was the language expert who planned the language support content in collaboration with the content specialist lecturer. I first had a meeting with the disciplinary lecturer in order to understand the course structure and the modality of delivery. The disciplinary lessons were delivered in English and also the exams were required to be taken in L2. In particular, the students were due to submit a written project report by the end of the course and to

\(^{17}\) Item 4.6 *Would you like to be supported by an English teacher and/or an expert in pedagogy?*  
YES  NO
discuss it in front of the class. Consequently, it was agreed with the
disciplinary lecturer to offer a support aimed to improve firstly students’
academic writing skills; however, interactive oral skills, revision and
consolidation of general English grammar topics were also considered. The
contents of the course is shown and discussed in details in the following
paragraph.

4.7.2 Course contents

The course was structured around three main topics and it covered the
following sub-topics:

<table>
<thead>
<tr>
<th>Paragraph Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Topic, supporting and concluding sentences</td>
</tr>
<tr>
<td>• Coherence and Cohesion</td>
</tr>
<tr>
<td>1. Key nouns and pronouns</td>
</tr>
<tr>
<td>2. Transition signals: phrases – adverbs – conjunctions</td>
</tr>
<tr>
<td>3. Punctuation</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Grammar</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Phonology: segmental and super-segmental traits</td>
</tr>
<tr>
<td>• Use of tenses</td>
</tr>
<tr>
<td>• Academic writing grammar issues</td>
</tr>
<tr>
<td>1. definite and indefinite articles</td>
</tr>
<tr>
<td>2. relative clauses</td>
</tr>
<tr>
<td>3. passive voice</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Communicative skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Language used for</td>
</tr>
<tr>
<td>1. classroom management talk</td>
</tr>
<tr>
<td>2. formulas, graphs and figures</td>
</tr>
<tr>
<td>• Discussion and presentation skills</td>
</tr>
</tbody>
</table>

*Table 3: Contents of the English language support module*
It was agreed to deliver the language classes with the simultaneous participation of both teachers. The module was of five hours distributed over three lessons: the first class was of three hours, and it was devoted exclusively to language teaching; the remaining classes were devoted for two hours to the discipline and for one hour to the language.

4.7.3 Methodology

I used an ethnographic approach and relied on the following instruments:

- a survey for the students at the beginning of the module,
- a survey for the students at the end of the module,
- preliminary discussion and planning with the content lecturer,
- participant observation.

A preliminary survey on students’ expectations was administered on the first lesson. The aim was to explore students’ language needs and the results (see Figure 15) helped to revise the contents plan previously arranged with the content lecturer. The students who completed the questionnaire were 14.

Figure 15: students’ expectations and language needs
As most of the students expressed the need to improve their technical vocabulary knowledge, a new topic, that is word-formation processes, was added to the previous plan.

The language lessons were delivered thoroughly in English; a PC and a projector were used together with the traditional blackboard. The materials used to provide examples and to allow in-class practice were mainly derived from the course textbook or other discipline-specific books in order to show the relevance of what was taught.

The lessons took place in a room equipped with pc and projector, traditional blackboard, and chairs arranged in rows. The students faced the teacher all the time. Slides were mainly used as a tool to show definitions, examples and activity prompts. Occasionally, the blackboard was also used.

The lesson was conducted in a lively manner by employing a communicative approach: students-teacher interaction; pair work; functional activities. The Table 4 shows the topics, which have been covered, and the schedule of the three lessons:

<table>
<thead>
<tr>
<th>Lesson n.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic writing: features and peculiarities</td>
</tr>
<tr>
<td>Paragraph structure: topic, supporting and concluding sentences</td>
</tr>
<tr>
<td>Simple, compound and complex sentences</td>
</tr>
<tr>
<td>Passive clause: forms and functions</td>
</tr>
<tr>
<td>Pronunciation: phonetic chart</td>
</tr>
<tr>
<td>Classroom talk: basic utterances</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lesson n.2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paragraph structure: unity and coherence</td>
</tr>
<tr>
<td>Transition signals</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lesson n.3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transition signals: revision and practise</td>
</tr>
<tr>
<td>Relative clause: form and functions</td>
</tr>
<tr>
<td>Technical lexicon and word-formation processes</td>
</tr>
</tbody>
</table>

*Table 4: schedule of the English Support Module*
After completing the language module, when the students met again for the next class, they were asked to fill in an end-of-module questionnaire in order to have a feedback of the experienced language support module (see Appendix D).

4.7.4 Results and conclusions

The number of feedback questionnaires is a limited one (10) as not all the students were present when it was distributed. However, it is worth discussing the main findings of the completed questionnaires.

The module was developed over three lessons. The first lesson was devoted exclusively to language teaching, while the remaining two lessons where divided into two sessions: two hours for the subject teaching and one hour for the language support. Students seemed to enjoy particularly the two sessions within the same lesson as they found it a more interesting and useful integration. Moreover, the lesson became lighter and it enhanced attention for both the disciplines. Students felt at easy with the presence of both teachers at both sessions.

Students were asked to comment on the topics they had liked most, and on the most useful topics for their studies. The results stated that the most appreciated topic and also the one that was perceived as the most useful one, was the topic about paragraph structure. It was definitely a new topic for them as they are not language students and they have never received a specific training in writing, least scientific writing. Students enjoyed also the phonology session; however, they did not perceive it as a useful one although they were asked to discuss orally the results of their written project that was also their assessment work.

As a final question of the survey they were asked if they would like more language classes and, if yes, which topic they would require. Only eight students answered this question and the answers were all positive. They further commented on the topic they would develop and most of the requests were for pronunciation and technical vocabulary. These results are
interesting, as the students had not mentioned pronunciation as an interesting topic for their study purposes in the previous question; however, they seem aware of the importance to improve pronunciation skills. The need for technical vocabulary improvement seems to be of paramount necessity for the students, although they are seldom aware that language competence goes well beyond the mere knowledge of technical vocabulary.

Then the respondents were asked to freely comment on the course. Only four students took this chance and the answers registered a positive attitude towards the experimental project. In particular, they underlined that the offer of English classes together with specialist discipline had made the course more complete and innovative.

The content specialist lecturer expressed a positive evaluation of the CLIL module experiment and he is planning to offer such a support on a regular basis in the future courses.
5. The structure of the Engineering Lecture at the University of Naples

An inability to recognize macro-structure is seen by a number of applied linguists as an important problem of non-native speakers in understanding lectures

John Flowerdew, 1994

The lecture is considered a university genre with ‘paradigmatic stature’ as it is the genre that, within the field of academic study, remains the central instructional activity (Flowerdew, 1994:1). The present chapter aims to contribute to the on-going research on the lecture genre by focussing, in particular, on the Foreign Language-medium Lecture in the Engineering field. Previous studies have focussed on lectures in general and on second language lecture (for an overview see Flowerdew, 1994); in this study the language used as a means of instruction has the status of a foreign language and not the status of a second language (Kachru, 1986). The lectures are held in Italy, which is a country belonging to the Expanding circle -in Kachru terminology, where English has the status of a foreign language; the participants are mainly Italian-native speakers who have studied English only in educational settings. These elements are important in setting the framework of the discourse I am going to analyse.

5.1 The corpus

This research is based on a corpus of eight lectures of about one hour each and consists of about 50,000 thousand words (see Appendix E for a complete overview). The lectures are held at the Faculty of Engineering in Naples, and the lecturers were all Italian native speakers with different levels of language proficiency. The students were mainly postgraduate students and the majority of them Italian native speakers (only in few
courses speakers of languages other than Italian were present and they were either Erasmus or PhD students – see chapter 4.6.1 of this thesis). The courses were part of Civil and Telecommunication Engineering degrees.

The present corpus is now part of a broader corpus set up at the university of Coventry. The ELC (Engineering Lecture Corpus) corpus is a growing corpus gathering engineering lectures from different parts of the world\(^{18}\). Hilary Nesi’s ELC research team (2009) has identified a list of pragmatic functions in order to ‘identify and describe typical engineering lecture discourse features’ and to study the ‘variation in the realisation and distribution of functions’ within the engineering academic lecture. As part of the ELC corpus, the lectures and the lecturers have both an identification code. For example a code for the lecture is NTELEngl_001, in which N stands for Naples; Tel for telecommunication; Engl for English; and 001 is the progressive number. In the lecturer’s identification code, for example nm4001, nm stands for non-student, male; the number 4 is the identification of the Neapolitan corpus (Malaysian corpus is identified by 1, Coventry by 2, New Zealand by 3 and Naples, as the 4th partner joining the corpus, has been attributed 4); and 001 is the progressive number of the lectures.

The lecturers of the corpus analysed in this thesis have the following identification codes: nm4001, nm4002, nm4003, nm4004 because they are four different male lectures. For each lecturer two lectures have been recorded. To distinguish between the two lectures held by the same teacher, an underscore followed by a number has been used (ex. nm4001_1).

The audio and video recordings took place in the classroom in which the lectures were usually held. The lecturers had been previously informed of the project aims and they had verbally authorized the recordings. As the students were not asked for permission, the video recordings only zoom in on the lecturers. I personally conducted the recordings by using the following instruments:

- Olympus digital voice recorder VN-5500PC for the audio recording;

\(^{18}\) For more information visit the web site www.coventry.ac.uk/elc
• Casio mega pixels digital camera EX-Z9 for the video recording.

The lecturers were not given a personal microphone, but the recording set was placed in a reasonably close position near to the speaker. The recording was sometimes affected by the distance as the lecturers moved away from the microphone while writing on the board or while walking around the class. This is the reason for the gaps in the audio recording transcriptions in that some words are inaudible.

5.1.1 Transcription conventions

Three different transcription protocols have been looked at before defining the conventions used for the transcriptions of this corpus:

- MICASE (http://micase.elicorpora.info/micase-statistics-and-transcription-conventions);
- ELFA (http://www.helsinki.fi/englanti/elfa/elfacorpus.html#documents);

The above quoted protocols were adapted and functioned as a reference to the convention guide that was built for the present corpus and that relied mainly on the ELFA protocol.

5.1.2 Transcription symbols

Utterances

Utterance begins <
Utterance ends >

Speakers

Male Known speaker <nm>
Female Known speaker <nf>
5.2 Models of analysis

The main research drive for my study was the exploration of the use of English in a non-native speaker environment. The first step was to gather a corpus to be investigated and analysed, while the next step was to identify a set of models of analysis, which would allow me to investigate my research targets. It was necessary to refer to a set of models rather than to a single model of analysis because the event I wanted to investigate was a complex one and I wanted to provide an overview of its main linguistic and pragmatic features. In the following sections I will refer to Systemic Functional Grammar; Young’s model of phases; Biber’s university registers; and last, but not the least, Brown and Levinson's politeness theory, and House’s pragmatic approach to Lingua Franca.
5.2.1 Systemic Functional Grammar

The model of Systemic Functional Grammar (SFG) was the starting point of my investigation of the collected corpus. Actually, this model was the premise of my research as the phenomenon I was interested in was a social linguistic event that could be truly investigated only taking into account the complexity of the event itself.

The SFG considers the language as a resource that users employ to perform their communicative acts in a specific context; in order to understand the users’ intentions it is necessary the combined analysis of several contextual elements, which make discourses different according to the setting, participants, purposes, channels of communication, etc. Any variation within one of these elements will vary the discourse as a whole. In the SFG perspective, language cannot be investigated in isolation; instead, there is a mutual relationship between situation and language that is between situational factors and linguistic choices.

Figure 16: The context of situation for the lecture at the Faculty of Engineering in Naples
The Figure 16 provides an overview of the complexity of my data context of situation. In fact, my corpus is a collection of eight English-medium lectures delivered by non-native speakers to a non-native audience, which, in most of the cases, share their first language. The setting of the communication is the university classroom at the faculty of Engineering in Naples, a geographical region where English has the status of a Foreign Language (EFL), and in a context where English is used either as a Lingua Franca (ELF) or as a Medium of Instruction (EMI). A proper analysis and understanding of the background complexity of the language in use I have been investigating (see Figure 16) becomes extremely important in defining and interpreting the structural and pragmatic features of the academic lecture. For the purposes of my study, the SFG approach proved to be a better background scenario for the description of my corpus, and in particular for the analysis and interpretation of my data.

5.2.2 Young’s model of phases

Young’s contribution as a model of analysis for my thesis consists in the attention that this model pays to the lecture. Young’s research aim was to facilitate lecture comprehension by providing a description as detailed as possible of the university lecture to non-native speakers of English in a non-native environment. The author’s intentions are mainly pedagogical and are supposed to provide a set of information useful to students and lecturers involved in English-medium programmes, and in ESP/EAP courses. Young’s model of phases overcomes the traditional schemas for university lecture structure, which tend to segment the lecture in a mere three-part structure, beginning, middle and end, disregarding the complexity of the system in which the lecture is embedded. On the contrary, Young’s model suggests the idea of phases or strands in order to analyse the lecture’s structure. Young’s system also relies on SFG, as it links the different parts of the lecture to the different situational factors that occur throughout the
communicative event. For the purposes of my thesis, I opted for Young’s model because the corpus analysed by Young presents similarities with my corpus, but also because the flexibility of that model allows its implementation within different disciplines and topics. However, a few adaptations had to be made to this model as my corpus showed peculiarities, which did not occur in Young’s corpus, or at least had not been identified. The application of this model is discussed throughout chapter 5.

5.2.3 Biber’s university registers

University genres have been investigated by different perspectives and by using different methodologies. Biber’s analysis, in particular, has provided interesting insights on the use of linguistic items and patterns in different academic genres included spoken genres such as classroom teaching. Biber’s concern is for the complexity of academic discourse and for the fact that universities do not do much for preparing students, whether native speakers of English or non-native speakers, to cope with the wide range of registers they encounter in their course of study. Thus, his attempt is to provide a description, as comprehensive as possible, of the university registers linguistic features, which contribute to fulfil their particular communicative goals. In particular, Biber’s theory of lexical bundles turns to be useful and interesting in identifying particular linguistic features that have functional relevance in the lecture context. Lexical bundles are multi-word sequences, that is ‘the most frequent recurring sequences of words’ (Biber, 2006:133), which are identified by using a frequency-driven approach. Biber’s point of view is that lexical bundles have identifiable discourse functions; thus, they are important in academic discourse as they can allow an easier understanding of the lecture and a more effective production. Alongside lexical bundles, Biber’s investigation of academic registers focuses on grammatical variation in university language; in particular Biber’s findings about discourse connectors, and about discourse markers such as okay and so, provided useful insights for the analysis of
pragmatic features of my lectures (see chapter 5.12.2)

5.2.4 Brown and Levinson’s politeness theory

Pragmatic theories provided a further theoretical background to my research, too. Brown and Levinson’s politeness theory, in fact, provided useful insights for the analysis of the pragmatic functions in my corpus. The difference between positive and negative politeness proved to be particularly useful in discussing and investigating the different uses and the discourse functions of the personal pronouns, which occurred in my data (see chapter 5.6)

5.2.5 House’s pragmatic approach to Lingua Franca

Julien House has long investigated the issues related to the use of a lingua franca in multilingual contexts. In particular, she focused on the definition of a new research paradigm for English as a Lingua Franca in educational contexts. This paradigm is based on the assumption that ‘the origin and results of ELF acquisition and use are social processes’ (House, 2003:571) and that in order to examine ELF in its different domains – included the educational ones- it seems necessary to accept the hibridity of ELF and its potential creativity for each individual speaker’s communicative purposes. Moreover, House particularly focuses on the social aspect of the lingua franca phenomenon because the context in which ELF is used can be considered a community of practice (Wenger, 1998) in that all the dimensions, which characterise communities of practice, are found: mutual engagement, joint enterprise and negotiable resources. This paradigm proved to be useful and convenient for my research as it offered an alternative way to examine English as a medium of Instruction in the particular setting I was investigating (see chapter 2 and chapter 6).
5.3 Lecture styles

Describing the structure of a lecture is not an easy task as there are different angles from which it is possible to outline a sketch of this particular type of spoken discourse. A recent study on the state-of-the-art research on the lecture by Fortanet (2005) stresses the importance of the lecturing styles as ‘the key to the understanding of lectures is an appreciation of lecturers’ individual styles’ (Dudley-Evans 1994, quoted in Fortanet 2005:163). Dudley-Evans and Johns (1981) in particular propose the classification scheme of lecturing according to three different styles:

- the *reading style*, which implies a lecturer reading a scripted paper or notes while an audience silently listens to him/her;
- the *conversational style*, when the lecturer speaks informally and tries to interact with the audience;
- and the *rhetorical style*, in which the lecturer performs his/her role by using a wide range of intonation and other rhetorical strategies such as jokes and digressions.

Lecturing style is of paramount importance for listening comprehension, as students need to become acquainted with their lecturers’ way of delivering disciplinary contents; the familiarity with the lecturer’s style helps to predict the sequence of lecture moves and, consequently, it enhances content comprehension. The classification by Dudley Evans and Johns is not the only one, other studies have suggested different classifications (Morrison, 1974; Goffman, 1981) and they all reveal a general tendency towards a greater informality in lectures both to native and non-native speakers (DeCarrico and Nattinger, 1988; Dudley-Evans 1994). The interesting question that rises from this general tendency is to investigate how much the use of a foreign language as a medium of instruction can influence the degree of interactivity in a lecture (Bamford, 2005), to what extent interactivity is disciplinary-bound or culture-bound,
and what role strategies and accommodation processes play in the ELF communication (Pickering, 2006).

5.3.1 Lecture styles at the Faculty of Engineering in Naples

By referring to Dudley Evans classification, the lectures gathered in the corpus of this study seem to fit different lecturing styles. It is actually rather difficult to fit them into one single category of the three-part classification schema suggested above. The analyses of both audio and video recordings of the lectures, combined with the participant observation of the researcher, provide a general overview of the individual lecturers’ styles - conversational, rhetorical and reading - which often overlaps among the categories.

The lessons of Lecturer nm4003, for example, are instances of conversational and rhetorical style. The lecturer often interacts with the audience by asking questions or by using humour and/or irony:

\[
\text{nm4003}_2 \quad \text{we shall address of course this general procedure as a by-product as a specialisation produces the stiffness matrix you already know and you already evaluate on the basis of you elementary knowledge of structural mechanics and I emphasise elementary}
\]

\[
\text{nm4003}_1 \quad \text{differently from er the Sica metre you already know you should already know er we exploit here a different, a totally different procedure}
\]

\[
\text{nm4003}_1 \quad \text{then I I have written in symbolic form in the just to er make er doctor of the doctors, how do you say doctor Francomacaro, doctor is it correct?}
\]

He also moves a lot around the room and makes a wide use of facial and body gesture like on a stage.

Lecturer nm4002, on the other hand, presents a different style as he adopts a more formal attitude towards the audience: he speaks only of the disciplinary topic, he does not make digressions and he rarely uses humour, although he does in this instance:

\[
\text{nm4002}_2 \quad \text{So okay so let’s review what we have seen in one of the previous classes also}
\]
so Mrs Francomacaro can understand us [and then he laughs]

However, from time to time he asks questions to the students that he answers by himself. This lecturer’s style can be labelled as conversational but surely it has no features of the rhetorical style.

The style of Lecturer nm4001 seems to fit features of the reading style as the lecturer speaks by following the notes that appear on the slides. He moves around the room and looks at the slides most of the time. However, he is friendly with the students, who sometimes interrupt his monologue by asking questions to which the lecturer is willing to answer:

```
nm4001_2
Student: Sorry
Lecturer: Yes?
S: I don’t understand what means shrinking
L: Shrinking means reducing err the size perhaps
S: Why it’s not important reduce all the sines?
L: No it is important because if you ..
```

Lecture nm4004 shows an attitude, which is similar to nm4001. However, in this case, the lecturer is mainly standing in front of his pc and comments the script that appears on the slides; this lecturer’s reading style shows also features belonging to conversational style, because of the use of informal words and expressions:

```
nm4004_2
Ok I don’t just want er want to lose much time on this example ok
Ok so we are imposing that Lagrange principle is satisfied this is the idea otherwise it would be strange ok

I don’t remember it but you have before your eyes

But this is easy to say but not to make (the lecturer laughs)
```

and the high frequency of I and you pronouns\(^\text{19}\):

```
nm4004_2
I was saying that now I show you an example where…
Ok if I consider this system where also these are unknowns I have to move this to the left side and the result is this ok where just I use this er notation for
```

\(^\text{19}\) More details on the use of pronouns are in paragraph 5.6 of this thesis.
brevity…

these are difficult er er problem ok it is better and I show you how to organize a problem er next time

However, in spite of the different styles, the data collected and registered in the class observation\(^{20}\) sheet that I have personally filled in during each lesson, show a few common traits consistent throughout the lectures regardless of the lecturer’s personal style. Extensive use of slides, lecturers standing and moving during the lesson, occasional use of traditional blackboard, predominance of monologue style and lack of interaction are some of the common features that have been observed (see chapter 4.3.2 of this thesis for more details).

The participant observation has allowed pinpointing features of the lecture that are probably culture-bound. One interesting example is the use of *uhe!*, an interjection typical of Neapolitan, which functions as a turn-initiating marker:

\[
\text{nm4003}_1 \\
\text{<uhe! avete detto dovete iniziare dalla procedura B, allora dott.ssa Francomacaro quando lei è pronta ce lo dice e noi partiamo tanto i ragazzi, slide 18? 28? Ok si [he looks for the slide 28] Ok let’s er start er with this lecture …}
\]

Culture-bound features can make the lecturer’s style more rhetorical and conversational and somehow they might help the interaction among students and lecturers, and also can function as a device to fill the gap between the participants to the lecture. The notion of culture in ELF settings is an interesting issue, and it will be debated in the next paragraph.

### 5.4 The role of culture

The role of culture in lecturing style and discourse has not been much investigated yet. Carrió-Pastor in a publication on cultural diversity within the context of Content and Language Integrated Learning (Carrió-Pastor, 2009) underlines the central role of the culture in the multicultural academic

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\(^{20}\) See Appendix C
environment that nowadays most of the European universities are experiencing. Alongside language and content, lecturers and students should develop a multi-cultural awareness of the teaching and learning processes, which would allow a better understanding and a more effective communication. In fact, teaching through a foreign language offers the added value to study disciplinary contents from different perspectives, and to provide access to multicultural professional communities.

5.4.1 Academic and Disciplinary culture

Flowerdew and Miller (1995), reporting the findings of ethnographic research on L2 lecturers working in a non-native speaker context, suggest a new model for interpreting lectures which is based on four **cultural dimensions**: *ethic culture*, *local culture*, *academic culture* and *disciplinary culture*. The research aims, in fact, to make lecturers and students conscious of the ‘danger of a clash of culture’ (1995:346) when participants do not share the same cultural and linguistic background. Flowerdew and Miller’s research was based on data from a university in Hong Kong where Western native speaker lecturers taught non-Western non-native speakers, namely Cantonese students.

My data here are slightly different as the participants of the English-medium lectures at the Faculty of Engineering in Naples are mainly Italian native speakers. It means that in almost all the cases, both lecturers and students share both language and culture. Consequently, to use Flowerdew’s labels, they share both the **ethic culture** and the **local culture**, as they are almost all Italian and they mainly come from the same geographical area; they also share the academic culture, as they are mostly postgraduate students and expert of the Italian academic system. Disciplinary culture, however, can raise a few problems because of the close link between language and disciplines, language and discourse. According to Flowerdew, **disciplinary culture** is bound to a set of specific theories, concepts, norms and terms; perhaps, the most striking feature of a discipline is its specialised
vocabulary. However, it is not just the lexis the core of a discipline, whose proper identity stems from ‘the fundamental relation between the structure of the body of knowledge of a given discipline and the discourse and related language structures (not just lexis) which gives rise to’ (Flowerdew, 1995:366), and in our contemporary society, students need to grasp not only a sound knowledge and mastery in the L1 academic and disciplinary discourses, but also in styles, which belong to languages others than their own mother tongue. Flowerdew’s quotation is meant to focus the attention on how the use of a different language can affect lecturing styles and lecture discourse structures and, consequently, lecture comprehension in many respects; moreover, it implies that comprehension is a complex goal to be achieved, as it involves several disciplinary, cultural and academic skills and competencies.

The interviews I conducted with the Master students after a semester of study spent in the USA, support Flowerdew theoretical background as the students experienced the difficulties due to a different way of lecturing and studying (see Appendix F for the a report of the interviews). In particular, the students pointed to the different disciplinary and academic culture that was evident in the group works they were involved in; in the homework, whose schedule was very tough compared to the one they were used to; and in the different approach to the subject contents. It can sound obvious that the students’ reflections on the differences in lecturing came only after the semester abroad that is only after having experienced two different situational contexts. However, it confirms that higher education students very often lack of any awareness of the way language and culture can affect the educational activities, study groups, lectures, etc. A similar result stems also out of the questionnaires distributed to the lecturers, as they pointed out that the language of instruction does not affect their way of delivering a lesson and that they had no need to be supported by any language or

\[21\] For example, the students who spent their semester in the USA noticed that the Americans were much more pragmatic and fast in learning the contents, while they needed more relaxed times to think and elaborate the information. They also underlined that the American students are very good at solving problems they have been trained for, however they find difficulties at operating beyond the known procedure.
methodology expert (see chapter 4.5.4 of this thesis).

5.4.2 Local features in English as a Lingua Franca

It is definitely intriguing to investigate how local languages, values and identities ‘are negotiated in the new role of English as a global contact language’ (Canagarajah, 2006). Qualitative studies, in particular, have researched on the negotiation of values and identities in ELF oral communication and this thesis is alongside this trend. In fact, the identification of Lingua Franca Core features, that is the identification of common traits, which would make homogeneous the ELF, might be not enough in explaining the intrusion of local features in the global ELF. Scholars suggest that the focus should shift from the search for phonological and grammatical features to the investigation of pragmatic and discourse strategies (Canagarajah, 2006:204), which would allow or facilitate communication in multilingual contexts where a lingua franca is used. These strategies include rephrasing and repetition in order to reduce misunderstandings in ELF interactions; suspension of expectations regarding norms; the ‘let it pass’ principle when the overall understanding has been achieved; and the attitudinal strategies such as patience and tolerance towards the ELF speakers (Canagarajah, 2006:205). Interestingly, these attitudes, which are common among non-native English speakers, are rarely found in the interaction between native English speakers and non-native speakers. The students I have interviewed for my research reported that the attitude of the native-American colleagues was little tolerant towards the difficulties that the non-native speakers were experiencing because of the language gap. It is striking that students were able to understand better the non-native speaker lecturers and colleagues rather than the native speakers; in Italy during the English-medium lectures, students had no difficulties in understanding their Italian native speakers lecturers while lecturing in English. This supports the idea that understanding is not only a matter of phonology, semantics and grammatical
structures, but that the different attitudes among lingua franca speakers determine a successful interaction. Canagarajah (2006), in fact, suggests that researchers should invest more on investigating pragmatic and discourse strategies that facilitate the use of local varieties and/or culture-bound strategies into cross-cultural communication.

My data offered the chance to further investigate the role of local pragmatic strategies in the specific domain of EMI lecturing at the Faculty of Engineering. A striking cultural aspect, I believe, is the limited interaction among students-students and students-lecturer. The Italian academic lecture is by tradition a monologue delivered by the lecturer to a silent audience. Although there is a recent general trend towards more interactive lecturing, the monologue-like lecture is still a strong cultural feature, which is mutually accepted both by lecturers and students. In my data, actually, the lecturers tried to interact with the students in several ways (see chapter 5.7), but most of the times students reacted very passively; they either nodded or answered to the questions with short utterances and seldom interrupted the lecturer’s monologue. The lecturer’s intention to informally interact with the students is also evident in the habit to address students by their first name, as in the following example:

nm4003_1
Just to…. Silvia! We have the pleasure to have with us Mrs Francomacaro and you are late you are coming, she’s coming from Salerno so it’s a long way for her to go. What about your beliefs?
So Silvia we were er er just, illustrate procedure B of the more general iterative procedure we are going to exploit to solve the er US problem (xx) you have already seen the procedure A illustrated by Doctor Manno

But, of course, in the Italian academic culture the reverse is never possible because of power distance unspoken rules.

Another culture-bound feature is to show empathy for any participants to the lecture. As I was a participant observer, lecturers tended to involve me in their lecture by repeating often my name and by repeating or giving more explanations in order to make me understand the topic:

nm4003_1
Ok So FR, Mrs Francomacaro, collects the values of these quantities this is the axel force this is the generic section of a (dee) or of (con) for instance of
your house…

The index R, I mean I explained to Mrs Francomacaro and of course to you, this is a mathematical symbol which means that we are evaluating something associated with something else.

Please do not hesitate to ask me whatever you like so don’t be er not scared of me or worried about the presence of Mrs Francomacaro she’s making her job and we are making of course ours.

Then I evaluate the residual, the residual you should remember and I explain with a drawing, with a figure just to make Mrs Francomacaro to understand better.

Or they even tried to interact with me:

That’s why Italian is probably one of the most difficult languages I know because it is sufficient to move a small portion of the sentence from one part to another to completely change the meaning of your sentence or to give the reader the possibility of understanding two things which are not exactly the same I hope that Mrs Francomacaro agrees with me.

then I have written in symbolic form in the just to er make er doctor of the doctors, how do you say doctor Francomacaro, doctor is it correct?

Next, I want to highlight the use of a pragmatic strategy, which seems to be very typical of Neapolitan interactions. In paragraph 5.7.2 I will provide results of my investigation on the frequent use of okay; however, the use of this word pronounced with raising intonation at the end of a sentence resembles the Italian expression capito? (English do you understand?), which is commonly used in the southern Italy dialects (Cerrato, 2002), to make sure that the interlocutor has rightly understood:

So if we consider the first floor we have the inertia force uhm the elastic forces due to the column below and above the floor and the external force applied okay?

The use of capito? in Italian is rather informal and it can be considered rude by Italians who do not come from the same geographical area, as it assumes that the interlocutor might have difficulties in understanding for a sort of mental impairment.

Another common feature to my data is the use of the irony that lecturers use towards the students. The power distance between students and lecturers
is rather high in Italian academic settings\textsuperscript{22}, as the students are willing to accept the lecturers’ superior position. This mutual agreement allows the lecturers to use irony as the following examples show:

\begin{quote}
Silvia! \textit{We have the pleasure to have with us Mrs Francomacaro and you are late} you are coming, she’s coming from Salerno so it’s a long way for her to go

Ok? Now when you you arrived I was asking to your colleagues which of course they did not answer to me it’s just \textit{that they are scared from Mrs Francomacaro}

Please do not hesitate to ask me whatever you like so \textit{don’t be or not scared of me or worried about the presence of Mrs Francomacaro}

Is that what we call that… \textit{don’t whisper please say}>
\end{quote}

In some cases the irony is also due to a personal lecturing style, and it is more often found in one specific lecturer’s style. However, it is a matter of fact that students in Italy are willing to accept it because of cultural background.

\section*{5.5 Discourse structure}

Discourse analysis has widely focused on written academic genres such as the research articles (Swales 1990), while not much research has developed in the field of spoken academic genres. There is evidence of research in classroom discourse (Sinclair and Coulthard 1975) and it is from those studies that researches on lecture discourse structure have developed (Coulthard and Montgomery 1981). The aforementioned studies have the merit of having proved how important the recognition of a \textbf{macro-structure} in the lecture is for a better understanding of it (Flowerdew, 1994). The need for lecture structure understanding is fundamental both for native and non-native speakers, although it appears clear that non-native speakers will benefit more (Smit, 2009), as it would fill the gap that non-native speakers

\textsuperscript{22} See Hofstede’s cultural dimensions (http://www.geert-hofstede.com/)
might have in disciplinary culture or academic culture.

A widely quoted system of lecture structuring is the one suggested by Young (1994) who listed six main strands or phases that can be identified into a lecture; these phases are divided into two sub-categories, the **meta discoursal** and the **non-meta discoursal phases**. For each of the Young’s phases it is, then, possible to identify microstructures, which make clear the different functions of the oral message. Prior to Young’s classification, the lecture was usually analysed as a three-component structure: a beginning or introduction, middle or body, and a conclusion. The novelty in Young’s classification is the acknowledgment that a lecture is a type of discourse in which different phases intersperse with each other and not always in a linear sequence. For example, in one lecture there might be more introductions and conclusions, and a conclusion could be the introduction of the next topic. This fact makes difficult to apply the three-part model to the lecture, while the phases or strands of discourse seem to be a more convenient and flexible way of outlining the structure of a spoken discourse such as the lecture. It is the interweaving of the different strands that yields as a result the macrostructure of the lecture. This position implies that the macrostructure is not a static entity; on the contrary, lecture structure is susceptible to change due to disciplinary needs, personal styles, and even feedback from the audience. Young’s classification of lecture structure is, at the moment, the approach, which allows us to apply the same structural pattern to different situations, regardless of the disciplines involved and of the language of instruction used.

The three-metadiscoursal phases described by Young are:

- **Discourse Structuring** phase ‘an announcing phase in which a lecturer indicates to listeners new directions of the lecture’;
- **Conclusion** phase ‘where lecturers summarize points they have made throughout the discourse’;
- **Evaluation** phase where ‘the lecturer reinforces each of the other strands by evaluating information which is about to be, or has already been transmitted’ (Young 1994:166-7).
While these phases are defined *metadiscoursal phases* because their function is to ‘comment on the discourse itself’ (Young 1994:166), and serve to structure the lecture as many other academic genres, there are three more phases, which are typical of university lectures. They are:

**Interaction**, which is ‘the extent to which these lecturers maintain contact with their audience’;

**Content** or **Theory**, in which ‘theories, models, and definitions are presented to students’;

**Examples**, in which ‘the speakers illustrate theoretical concepts through concrete examples familiar to students in the audience’ (Young 1994:167-8).

These phases, as the *metadiscoursal ones* -mentioned before- occur throughout the lecture, several times and in different parts of the lecture and are interspersed with the others. Young suggests, however, that the metadiscoursal phases are the prominent strands in structuring the lecture as they have pedagogical implications. In Young’s view, which relies on systemic functional grammar, this kind of structural system is influenced by:

"the situational factor of tenor in the sense that, because of the relationship between lecturers and students, the former explicitly structure their discourse by indicating how they will proceed (the Discourse Structuring phase), following this with a summation of what has been said (the Conclusion phase), and reinforcing both with an appraisal of material (the Evaluation phase), to facilitate the processing of information by the students".

(Young 1994:167)

The attention to **situational tenor** underlines how the relationship among participants of a communicative event can shape consistently a given macro-structure. According to functional grammar there is actually a whole context that can shape and influence communication and the language medium of instruction is one and perhaps the most significant of those contextual elements that can account for differences and peculiarities of the English-medium lecture.

Young’s classification has been adopted in my research for its intrinsic
flexibility, which can contribute to detach the macrostructure of the lectures of my corpus.

5.5.1 Discourse structuring phase

The introduction to the lecture has the function of starting the lecturer’s discourse and it is necessarily found in every lecture. The way in which lecturers realize it can vary with regard to the functions they want to perform. Differences can be due to diversity of subject content, personal lecturing styles, or even language-medium of instruction competence, especially in a foreign-language-medium lecture context. Following there is a list of lecture’s introductions taken from my corpus. They are the first paragraphs or beginnings of each recorded and transcribed lecture:

nm4004_2
the second part of the lesson after the interval the second part of the lesson will be devoted to English lesson ok so it is optional if you don’t want er er last example of (starx) by using finite different method ok? we are considering this system instead of (xx) equation ok? these system are been (xx) in this way by using the central approximation for both second space derivatives ok? I have already show two example where the two system subsystem of this big system can be solved separately before this before this from the external law and then from the displacement from the moment ok and one big system must be considered ok?

nm4001_1
so our lesson will be, will be about multicarrier modulation er so er this is the outline of our lesson er and we will see there are basically two different strategies multicarrier with overlapping or multicarrier with no overlapping bands we will er see how multicarrier can or cannot be used to as a form of diversities so what is compensation of failing some issues regarding implementation and what is most specifically considered as the main multicarrier technique which is a (xx) transmission (xx) strongly related with OFDM is the specific prefix a significant example is the standard IPF number 2.11 in version A or HG

nm4001_2
ok so this lesson will deal with network planning and in particular is split into lessons one with interference mitigation and the other one with chunking and channel allocation techniques so they both are characterized by the common term network planning so now we are starting to look at some characteristics which are at higher level we should say the system level of our network so we will review briefly example network topologies and after that we will focus on cellular networks because most part of this

---

23 The phrases or sentences in bold type are examples of Discourse Structuring phases and are later in the text commented on.
Lesson will deal with cellular networks we will review or introduce the concept of channel reuse and the concept of co-channel interference which are very important to perform network planning in cellular networks and after that we will try to evaluate the capacity of cellular systems considering both TDMA FDMA systems and CDAM systems and finally I will give you some introduction to capacity expansion techniques so what are the techniques which can be used to increment the capacity of a cellular network.

nm4003_1

suhe avete detto dovete iniziare dalla procedura B, allora dott.ssa Francomacaro quando lei è pronta ce lo dice e noi partiamo tanto i ragazzi, slide 18? 28? Ok si (he looks for the slide 28) ok let’s er start er with this lecture and first of all I have already introduced to you Doctor Francomacaro, er and er she will record er the lecture for us for scientific purposes she’s er going to write er a report I think on the way which er er er lectures are given in English and er not only in in engineering but also in other other<scientific faculties so scientific subjects>

<scientific subjects mainly of scientific subjects er as you already know we are dealing er we are going to er address the ultimate state analysis of the section er the er (xx) thing you already know we are going to evaluate the maximum load intended as a triplet of bending moments and axel force which a given section an arbitrary section can sustain er according to some specific routes which are some maximum values which are enforced on the straights in the materials that compose the section so you the main objective of this er lecture er series of lectures because this is the second lecture on the this subject is to understand which is the maximum value of the load which can act on the section provided that the strains on the section.

nm4003_2

<allora ragazzi oggi la lezione è un po’ pesantuccia>

<la data di esame è possibile…?>

<giovedì 23 allora dottoressa oggi la lezione è un po’ frastagliata perché non ho le slides preparate e quindi devo fare delle cose alla lavagna che dovrebbero sapere e non sanno (pausa) soprattutto è un po’ tecnica quindi non riusciremo a farle capire granché allora allora last lecture we saw we have just explored the problem of affording a step by step analysis of a frame structure of course we are dealing with a non-linear analysis and then this is the reason for which we we have to cope with a step by step analysis.

nm4002_1

<now we summarise what was said in the previous class and hopefully the other students will arrive and so we will use the first part in summarising what we said last what doctor (xx) told you last Thursday so the topic of the class is the dynamics of multi degree freedom of system and we will first describe uhm what is a multi degree freedom of system and write the equation of motions then we will er study the free vibration response in the case of an undamped system a classically damped system then the response to an harmonic excitation and a response to a ground motion uhm an earthquake ground motion at the base using the modal analysis procedure er and in particularly we will see the how to use the concept of response spectrum in the case of multi degree of freedom system so the spectral superposition method and okay er so sorry in other words what we will do for multi degree of freedom system is very similar to what we have done for the singular degree of freedom system uhm so we will go through the same topics but considering a more complicated system now you have seen last time what is called a shear type building uhm? telaio attraverso infinitamente rigidi shear type building and what can be considered er what are the hypotheses for shear type building er the we consider the masses that are
concentrated at the floor levels uhm so in other words the columns have no mass and all the masses are concentrated at the floor er the beams and the slabs are infinitely rigid so they cannot deform both flexurally and in the axially both axially and flexurally inde indeformable and the columns are flexurally deformable but axially rigid so there is no axial deformation in the column but only flexural deformation uhm so because of this we can determine the Laterals what we call the lateral stiffness of each storey which is the stiffness between two subsequent storeys uhm two subsequent floors

nm4002_2
<Io scritto abbiamo detto lo limitiamo alla parte del sistema murario di libertà ma almeno facciamo questa prima parte preliminare di esame gli assegni a casa di stamattina me li avete portati li raccogliamo?>
<io devo stampare non sono riuscita quindi dopo semmai subito dopo la lezione>
<va bene sì certo perfetto ah allora vi confermo anche che martedì nella terza ora di martedì verrà il professor Meyers dell’università del Missouri che sarà molto contento di specie per coloro che vanno a (xx) farà proprio una presentazione di tutti i corsi dell’offerta didattica darà delle informazioni molto specifiche quindi e questo sarà molto positivo per lo dirò anche ai ragazzi che non stanno nel mio corso e che comunque andranno a (xx) so solo due assegni?>
<not audible>
<ok mi raccomando anche perché ormai mancano due settimane e poi abbiamo finito qui quindi diciamo siamo proprio al rush finale grazie tu devi ancora finire? perfetto so okay so lets review what we have seen in one of the previous classes also so that prof. Francomacaro can understand us (he laughs) we will go through some very don’t say equations but the main idea is that if we have a simple structure like this simple degrees of freedom system subjected to external dynamic excitation uhm

I have listed a set of examples of Discourse Structuring phases from my corpus (they are extracts of the above paragraphs):

nm4004_2
we are considering this system instead of (xx) equation ok

nm4004_2
now we’ll consider last example where the two subsystem cannot be separated

nm4001_1
first we’ll review er a little bit of history regarding multicarrier modulation and some applications, after that I will introduce what is the main principle of multicarrier transmission

nm4002_1
we will use the first part in summarising what we said last

nm4002_1
so the topic of the class is the dynamics of multi degree freedom of system and we will first describe uhm what is a multi degree freedom of system

nm4002_1
then we will er study the free vibration response in the case of an undamped system
so okay so let’s review what we have seen in one of the previous classes

we will go through some very don’t say equations but the main idea

we have to cope with a step by step analysis

we are going to er address the ultimate state analysis of the section

we are going to evaluate the maximum load intended as a triplet of bending moments

Most of the strands used to announce the lecture direction, show a similar pattern made of the use of future tense in its different aspects (the will form as in: ‘we’ll consider’; or the be going to form as in: ‘we are going to evaluate’; or the progressive form as in: ‘we are considering’). These expressions have the function to structure the upcoming discourse by introducing the topic or referring to previous topics. They are metadiscursive devices that lecturers use consistently throughout the lecture.

It is noteworthy that the verbal expressions that realize the DS phase occur not only in the introduction to the lecture, but also in other segment of it:

remember that we are considering only one element now … I give you all the necessary information

now we have to discuss some theoretical problems

I want now to consider an example of Neuman problem

and I will consider not in theory this problem but in practice

now let’s go to see some examples of active control systems

now let’s go to the concept of mode shapes

okay so let’s consider what is the er our measure of the co-channel interference
The examples above are taken from the middle part of each lecture and they all serve the meta-discoursal functions of introducing the next move in the lecture. I have noted that, while in the introductions there is a prevalent use of future tenses (see table 5), here other structures appear such as modals (we have to discuss, I will consider); verb clusters like I want to consider, and I give the information; and again the use of let’s + infinitive (let’s go/consider). Moreover, the frequency of these structures in my corpus confirms also the findings in Young’s corpus (Young 1994:169) that different grammatical patterns can serve similar functional moves, in this case the Discourse Structuring strand. In the following paragraph I will discuss the use of personal pronouns occurring in Discourse Structuring phases.

<table>
<thead>
<tr>
<th>Verb forms</th>
<th>Examples from the corpus</th>
</tr>
</thead>
<tbody>
<tr>
<td>will</td>
<td>we will review a little bit of...</td>
</tr>
<tr>
<td></td>
<td>we will use the first part ...</td>
</tr>
<tr>
<td></td>
<td>I will consider not...</td>
</tr>
<tr>
<td>be going to</td>
<td>we are going to address the ultimate...</td>
</tr>
<tr>
<td></td>
<td>we are going to evacuate the maximum...</td>
</tr>
<tr>
<td>be + ing</td>
<td>we are considering this system...</td>
</tr>
<tr>
<td>let us (let’s) + infinitive</td>
<td>let’s start...</td>
</tr>
<tr>
<td></td>
<td>let’s review what..</td>
</tr>
<tr>
<td></td>
<td>let’s go to the concept...</td>
</tr>
<tr>
<td>have to + infinitive</td>
<td>we have to discuss...</td>
</tr>
<tr>
<td>verb clusters</td>
<td>I give the</td>
</tr>
<tr>
<td></td>
<td>I want to</td>
</tr>
</tbody>
</table>

Table 5: verb forms in the Discourse Structuring (DS) phase
5.6 The pragmatic functions of personal pronouns

In the Discourse Structuring strand (see extracts presented in 5.5.1), the first person personal pronoun *we* occurs frequently and it seems to signal the speaker’s will to include the listener in the discourse and/or to interact with the audience. However, also other pronouns are found in my corpus; they are the second person pronoun *you* and the first person singular pronoun *I*. These results made me investigate into the use of pronouns in academic discourse and thus I have noticed that it has been long debated.

Biber (2006:184) has identified four dimensions of academic discourse, and personal pronouns are present in almost all of them. In particular, 1st and 2nd person pronouns are ranked as high positive features of Dimension 1, which is *oral vs. literate discourse*, within the functional domain of interactiveness and personal involvement in classroom teaching, too. The 2nd person pronoun, on the other hand, is a typical positive feature of Dimension 2, *procedural vs. content-focused discourse*, even in classroom teaching.

Apart from this, a more specific trend of research has focused in particular on the pronouns *I, you* and *we*, with the aim to investigate how they give cohesion to the discourse and which discoursal functions they serve (Fortanet, 2004; Fortanet / Bellés Fortuño, 2005; Dafouz Milne, 2006; Okamura, 2009, 2010; Chapman / Wulff, 2010). The findings of these studies report only in one case the prevalence of the use of *we* in university English-medium lectures delivered by Spanish native speakers; in that context, the *we* pronoun seems to function not only as a *solidarity strategy* among the participants, but also as ‘a macro-organisational principle guiding both lecturers and students throughout the speech event’ especially when the pronoun is followed by modal verbs (Dafouz Milne, 2006:13).

A different view is provided by Fortanet (2004) whose study shows a prevalence of *you* and *I* over *we*. This study relied on a corpus of lectures in mathematics taken from the MICASE corpus and it was meant to research
not only the pronouns frequency but also the referents and discourse functions of the different pronouns.

More recent research confirms the prevalence of you over the other personal pronouns in undergraduate lectures, in particular (Okamura, 2009); this research also focuses on the collocates of the personal pronouns and it is also based on the Michigan MICASE corpus.

Similar results are found in Chapman and Wulff (2010) who selected a corpora from MICASE within the physics science-related speech events and among different registers; these results are consistent with Fortanet’s study and also suggest that the frequencies of we in the different disciplines appear insignificant and that instead there might be ‘a possible positive correlation of the frequency of we with informal non-classroom registers’ (2010:2) such as study groups and office hours.

To sum up, previous literature on this topic shows different results between the studies conducted on the MICASE corpus and the studies on the Spanish corpus. This difference, perhaps, can be related to the nature of the corpora they have investigated; in fact, the MICASE corpus is made of lectures delivered by native speakers of English in a native speaker context, while the other one is set in a non-native context where non-native speakers deliver lectures.

The Table 6 shows the frequency of the above-mentioned pronouns in my corpus:

<table>
<thead>
<tr>
<th>ID</th>
<th>Lecturer</th>
<th>Lecture total words</th>
<th>We</th>
<th>You</th>
<th>I</th>
<th>Lectures’ introductions total words</th>
<th>We</th>
<th>You</th>
<th>I</th>
</tr>
</thead>
<tbody>
<tr>
<td>nm4001 - 15661</td>
<td>95.77</td>
<td>257.96</td>
<td>119.40</td>
<td>305</td>
<td>2.95</td>
<td>0.32</td>
<td>0.65</td>
<td></td>
<td></td>
</tr>
<tr>
<td>nm4002 - 12955</td>
<td>181.39</td>
<td>91.85</td>
<td>22.38</td>
<td>430</td>
<td>2.79</td>
<td>0.46</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>nm4003 - 10953</td>
<td>92.21</td>
<td>296.72</td>
<td>210.90</td>
<td>410</td>
<td>2.43</td>
<td>1.46</td>
<td>0.48</td>
<td></td>
<td></td>
</tr>
<tr>
<td>nm4004 - 10054</td>
<td>187.98</td>
<td>40.77</td>
<td>164.11</td>
<td>289</td>
<td>1.73</td>
<td>2.42</td>
<td>0.34</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total 49.623</td>
<td>136.02</td>
<td>179.15</td>
<td>123.32</td>
<td>1434</td>
<td>2.51</td>
<td>1.11</td>
<td>0.34</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 6: Occurrence of personal pronouns in lectures
As far as my data are concerned, the overall picture of the Table 6 reveals the highest numbers of occurrences for \textit{you}, followed by \textit{we} and \textit{I} (\textit{you}, 179,15; \textit{we}, 136.03; \textit{I}, 123,32). Actually, if I calculate the average between \textit{you} and \textit{I} occurrences, the result is higher than the \textit{we} occurrences (151 vs. 136), and it would suggest that, in the whole, \textit{we} is less frequent than the other pronouns.

This result is consistent with most of the previous literature on the same topic I have commented on earlier, in spite of the fact that my corpus is made of English-medium lectures delivered by Italian native speaker lecturers in a non-native speaker environment, that is a context much closer to the research carried out by Dafouz Milne (2006), although it reports an opposite result.

5.6.1 Personal evaluation on the data

However, a close look at my data allows also reflection on the use of the different personal pronouns according to the lecturer’s styles (see chapter 5.3.1). In fact, the use of \textit{you} is prevalent both in the lecturer nm4001 and in the lecturer nm4003; the latter, in particular, who combines rhetorical and conversational styles, shows a definitely higher frequency of \textit{I} and \textit{you} compared with the \textit{we} pronoun. Lecturer nm4001, on the contrary, while reporting the highest number of occurrences for \textit{you}, does not show a particularly relevant difference between \textit{I} and \textit{we}, though \textit{I} is more frequent. Both these lecturers use a conversational style, although they combine it with other styles, reading style for nm4001 and a rhetorical style for nm4003. This would suggest that \textit{you} is more frequent in conversational styles while \textit{I} is an ‘added value’ of rhetorical styles. Moreover, as both lecturers register in the whole similar occurrences, I would suggest that the prevalent use of \textit{you} in both cases is also associated to the interaction device of using question/answer sequences during the lecture; this would explain the similar results against the different lecturer’s styles.
However, lecturer nm4002, who mostly employs a conversational style, does not show a prevalence of you; instead, the we occurrences double the you occurrences and multiply nine times the I occurrences. This finding could perhaps suggest that it exists a closer relationship between the use of I and you with the rhetorical style and with a more teacher-centred dimension (Biber, 2006:199); in this situations, in fact, lecturers tend to deliver their lectures as being on a stage and as playing the role of the main character of the communicative event.

Lecturers nm4002 and nm4004, who I have identified as using a more conversational style, do show the highest frequency for the we pronoun, and it seems to suggest that the use of the inclusive we as a cooperation seeker device applies especially to conversational styles. However, it is also striking the difference between these two lecturers with regard to the number of occurrences for the I pronoun. In fact, while lecturer nm4002 shows a very low frequency for the I pronoun (22.39 per 10,000), lecturer nm4004 reveals a striking opposite result (164.32 per 10,000). Again I would suggest that the explanation for such a difference is not much related to a single style but to the combination of more styles within the same lecture. In the case of lecturer nm4004, in fact, whose style can be classified as a combination of conversational and reading styles, the high frequency of the I pronoun is probably linked to the fact that the lecturer often reads from his notes which are derived from the classroom textbook whose author is the lecturer himself. A further reflection can be made on the differences among academic disciplines, which, according to Biber, are important differences with regard to Dimension 2 (procedural vs. content-focused discourse), in particular. Engineering, which is the discipline that my corpus is concerned with, is ‘procedural’ in orientation and this allows a more frequent use of the pronouns, especially 2nd person pronoun you, and this is definitely confirmed by my data.

However, as the main interest in this thesis is the observation of the structure of the lecture in its different phases, I noticed in my data that, although the overall analysis registers a prevalence of you and I over we,
this result is not consistent throughout the lecture. In fact, the distribution of the personal pronouns shows a different pattern if their frequency is analysed only in the **introductions** to the lectures. In that context the occurrences of *we* exceed both the *you* and *I* occurrences (see *Table 6*): this is true in almost all the lectures and for almost all the lecturers. It is noteworthy that while the use of *you* is prevalent in the whole of the lecture, the use of *we* seems to be prominent only and especially in the first segment of the lecture, that is the introduction.

The predominance of *we* occurrences in this context seems to imply the will for a shared building of the structure of the lecture: structuring the discourse is in fact not only lecturer’s responsibility; the speaker/lecturer owns of course the duty to outline and shape the structure, but, actually, by using the pronoun *we*, he/she wants to signal that also the students are included in the lecture process making. This segment of the lecture is the one in which the Discourse Structuring phase takes place and it is also the segment in which the Housekeeping function is performed. Thus, it seems interesting that in this particular strand the use of *we* is almost exclusively used. The reason for that could be also explained with the **positive politeness** theory by Brown and Levinson (1987:127), which relates the use of the inclusive *we* to a move of cooperation among participants; while the use of *I* and *you*, exclusive terms, would relate to **negative politeness**. Thus, cooperation seems a more feasible intention at the beginning of the lecture or in the DS strands whose aim is to set the scene of the upcoming communicative event. In this respect my findings confirm partly the results of the Dafouz’s research (2007), in which the prevalent use of *we* is explained as a device to increase cooperation and identification with the audience.

It is difficult to draw definitive conclusions, as I believe that more investigation should be conducted on this topic in order to have a clearer view of the use of the pronouns but especially of their pragmatic functions within the English-medium lecture.
5.7 Interaction phase

One of the Young’s non meta-discoursal phases is interaction phase that is the set of tools, devices and strategies that a lecturer can activate in order to establish an active relationship with his students.

Interaction, a key element for any type of discourse, is of paramount interest for the lecture as it is a major strategy to promote negotiation of meaning and, thus, to enhance learning. It is, in fact, conversational interaction that seems to enhance acquisition of both content and language topics (Lightbown and Spada, 1993; Long, 1983). Interaction can be implemented in different ways and one of the most common is the use of question/answer sequences (Bamford, 2005):

```
Q. so which is the the ratio of the the er the main goal of each procedure?
A. in procedure A you basically try to find a an admissisable value of the multiplied lander …
```

```
Q. so how many channels do you have?
A. this total number of available channels depends on basically on two parameters one is how large is the radio spectrum that you have okay and the other is what kind of channel…
```

```
Q. the number will be three uhm why?
A. because we have the rotation of the nodes and then…
```

These excerpts show the use of questions as an interaction device. Bamford analyses a corpus of lectures in Economics in order to find out the reasons for the almost universal use of lectures in Higher Education as an instructional device, and then to verify if ‘this universality is explained by the interactive nature of the lecture’ (2005:125). The question/answer sequence is definitely a feature that lectures share with conversations, although questioning in academic lectures is characterized ‘by one interactant performing both the questioning and the answering roles’ (2005:127). In spite of the differences, Bamford shows how in her corpus the question/answer sequence aims to facilitate the ‘information processing’ in that it provides the focus of the information; at the same time, the
question can also serve to ‘enliven and dramatise a narrative’ because it breaks the lecturer’s monologue and insert a bit of rhetorical style. Moreover, the questions in a lecture stem from the speaker’s assumption that the questions he/she asks are those that the audience would like to ask, and the question becomes an information focus, that is a way of pointing attention to the answer. Thus, question/answer sequences create a **dialogic atmosphere** in a context where monologue approach is prevalent as a genre-specific feature.

Bamford’s findings proved to be true in my corpus, too, as it can be seen by the extracts I reported above and by the observations on the use of pronouns in lectures (see paragraph xxx). However, questioning is not the only way to interact. Interaction in our corpus is also achieved through the use of meta-discoursal expressions such as okay? - do you understand? - is it clear? as in the following examples:

```
nm4004_1
I don’t know **if you understand**
```
```
nm4001_1
if you increase the number of sub-carriers, perhaps, there is an increasing complexity **okay**?
```
```
nm4003_1
the actual estimate of the string parameters at this stage of the interactive procedure the global one which is indexed by I and the local one the B one which is indexed by K **is that clear for you?**
```

The above excerpts provide an example for the different meta-discoursal expressions I came across to. In particular, the use of okay is spread throughout the corpus, and it will be further explored in paragraph xxx of this thesis.

### 5.8 Conclusion and Evaluation phase

The other two meta-discoursal strands of the lecture are the **Conclusion** and the **Evaluation** phases. As for the **Conclusion phase**, the features that characterize it are, according to Young, mainly two: ‘the repetition of key aspects forming a chain of elements’ and the lack of any ‘evaluative
commentary on the material’ (Young 1994:171). In other words, in the conclusion phase the lecturer just focuses the key aspects of the lecture in a neutral way:

I told you that the stiffness matrix of a given element so you should not confuse this with the stiffness matrix of the structure because you know that the stiffness matrix is part of the structure is obtained as a suitable combination possibly of the stiffness matrix of each element so the real problem to address is the evaluation of the stiffness matrix of an element you are accustomed to writing this this stiffness matrix in this form,y on the basis of your actual knowledge your knowledge in this moment you know that if I have this (xx) which for simplicity I consider in the (xx) so the stiffness matrix is represented by a six by six matrix

In the above extract of lecturer nm4003_2, within the same paragraph the lecturer builds a chain of key terms to suggest the importance of the key idea of stiffness. A similar example is found in the following lecture:

first one is the isolation system isolation system a system which (xx) the structure with respect to the predominant component of the dynamic excitation so the structure rests on special isolation devices which are particularly flexible and avoid which allow significant relevant displacement and provide sufficient energy dissipation capabilities to limit this result uhm then we can have passive energy dissipation systems in which we insert in the structure some energy dissipation devices which increase the er the dissipation capability of the structure and are based on different mechanisms like metallic yielding friction friction effect discuss or disc elastic damping or xx xx these are all mechanism which we have dissipation of energy which reduce as you know xx damping structure reduce the structure response […] this in general passive system may be isolation energy dissipation

Here, the key words isolation and dissipation form a chain, which emphasizes the key aspects of the topic under discussion, and are repeated several times. The role of repetition in spoken discourse has been one of the research interests of conversational analysis; in particular, it is worth mentioning the classification by Tannen (1989) that makes a distinction between self-repetition, that is repeating what the speaker has just said, and other-repetition, that is the repetition of someone else’s statement. Moreover, the scholar distinguishes between exact repetition, when the speaker repeats exactly the same utterance, repetition with variation, and paraphrase, which is the repetition of the content but by using different words. As far as this thesis is concerned, I did not rely on conversational
analysis as my corpus is made of lectures, which are mainly monologue
speeches and only rarely interrupted by some other speaker’s speech.
However, even in monologue, repetitions have specific functions, which can
be different according to the speaker’s purposes or because of other
situational elements such as disciplinary discourse, lecturer’s style, and even
language proficiency. A previous research on repetition in Engineering
CLIL tertiary education (Dafouz Milne / Llinares Garcia, 2008) has
observed that lecturers tend to use self-repetition more than other-repetition,
as the interaction with the students is a limited one, and its main function is
to guarantee cohesion in order to reinforce understanding of the disciplinary
content.

In my corpus I have observed many instances of self-repetition that
might have different discourse functions according to the context:

nm4004_1
this is C page ok? stream line and equipotential line which are mutually
orthogonal ok? stream line stream line and equipotential line ok?

nm4001_1
you can also use the same kind of modulation for every for every for every
stream

nm4002_1
now if we consider first the case of two a two storey building um just two
storeys and we can …

In the above three examples, which have been extracted from three
different lecturers, self-repetition functions, if I may say, as an idea
reorganizer.

I think it is a sort of pause device, as I have noticed that lecturers repeat
because they need time to plan the next move.
Apart from this, the repetitions can function as lexical cohesive devices that
link the ideas by emphasising the key word, as in the following examples:

nm4001_2
the other dominant topology is ad-hoc network. In ad-hoc network you
don’t have a central point of access…

nm4001_2
one is that you have a multihop network so a multihop network means that
basically communications can occur in different hops from one terminal to
another one
Self-repetition has been observed as a tool that lecturers employ to *reinforce students’ understanding* of the topics, as in the following example:

The main objective of this series of lectures because this is the second lecture on this subject is to understand which is the maximum value of the load which can act on the section provided that the *strain on the section, the strains in the section, the maximum strains in the section* do no exceed...

The lecturer, in fact, repeats the expression *the strain on the section* three times but every time with a slight difference. The same can be observed in the next extract:

For a given *value of lander the value of lander* we have have evaluated at the *generic iteration for our algorithm* so for a given *value of lander* and hence of the applied load which we call F1

One last type of self-repetition I have observed in my corpus is the *repetition with insert*, that is the use of an extra word while repeating phrases or words. An example can illustrate better what I am trying to say:

In the above example, the lecturer repeats the expression in bold but he also adds a new word: *multiple streams multi transmission streams*, or *capability and transmission capability*. Again, I believe that the function of this type of repetition is to underline once more the key concept the lecturer is stating. The same effect can be gained by repeating part of the expression and replacing the remaining part with a *synonym* as in the following example:

Another typology which is perhaps less known compared with the other two ones is the so called *mash network mash network* perhaps you have some typical behaviour some typical characteristics

I also observed examples of *other-repetitions* in the interaction moves with
students, though they are small in number as the interaction is a numerically restricted move in my corpus:

nm4002_1
L: this is the stiffness matrix which is portioned in the same way so ut are the translational degrees of freedom which are u1 and u2 okay
S: together?
L: together! Okay this is…

nm4002_1
S: why we have a m1?
L: m1 because why we have that vectors of 1’s? okay because …

nm4002_1
L: how many nodes will they have?
S: n minus one
L: n minus one nodes okay so

S: is it always positive?
L: it is always positive definitely provided that…

In all the cases above illustrated, the repetition occurs after a student’s question and thus it functions as a reinforcement of the right answer.

In the whole, it is possible to suggest that the repetition employed in the Conclusion phase functions as a tool to underline the key concepts and at the same time to enhance students’ comprehension. In so doing, the lecturer creates lexical patterns in the text, which function as lexical cohesion devices in a sort of net-like relationship that can support effective communication even more than pure grammatical cohesive devices (Hoey, 1991).

The Evaluation phase has the function to emphasize the disciplinary content as for the conclusion phase. However, while the conclusion phase is a neutral one, the evaluation phase has the function of adding connotative meanings to the elements previously stated, as in the following examples:

nm4001_1
obviously compared with actual with present system they are a little bit obsolete in some sense

nm4001_1
it could be complex it could be expensive especially when you increase the data rate
so it is difficult to satisfy this requirement if you have the singular carrier system

but not really important that to show that er ok the most interesting subject topic for this lesson is the introduction to FEM

and this is not so easy to do

so it is very important to understand the difference between this two concepts

the real problem to address is the the element the definition

there is also another reason which you will understand why and represents the real reason, the most important reason for the absence of that term

the fourth fifth and sixth rows are a little bit more difficult because I have to express…

The lecturers use the above expressions in bold type in order to add their personal views of the subject content. The content can, in fact, be important or complex or difficult or even a little bit obsolete; and in so doing the lecturers ‘evaluate’ lecture materials and also direct or diverge students’ attention to or from a particular point. These examples are, of course, only a small selection for each lecture; however, there is evidence of recurrent lexical patterns such as the most important reason, the real reason, the real problem; really important, very important; this is not easy versus it is difficult, a little bit more difficult.

5.9 Content Phase and Example Phase

Content phase and the Example phase belong to the non-metadiscoursal phases and are among the most typical university phases together with the Interaction strand that I have already commented on.

The Content Phase (CP) is the principal move of the lecture as its goal is to convey information. In this strand the lecturer delivers content through explanations, definitions, comparisons and also exemplifications; this is the
reason why the Content phase is often interspersed with the meta-discoursal strands of Discourse Structuring and Evaluation as it can be seen in the following extracts:

In this example the content is transmitted through a definition, which is enriched by an evaluation (perhaps, a more general...).

In the next example the CP is interspersed with an attempt to structure the discourse through the use of a review of a previous move (as a matter of fact I have reported this two examples...) and a preview of the next move (so we will focus mainly on ...). Moreover, the lecturer also underlines the importance of the content of his statements by expressing an evaluative comment (this is more important...):

<table>
<thead>
<tr>
<th>nm4001_2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>as a matter of fact I have reported this two examples</strong> as the more representative ones in both cases but I should say <strong>this is more important</strong> in the mobile phone network you reuse the channels with the cellular approach so also in wireless lan applications you can reuse channels but this is done perhaps not in a systematic way <strong>so we will focus mainly on</strong> mobile phone networks to explain the concept of channel reuse.</td>
</tr>
<tr>
<td><strong>Pragmatic function</strong></td>
</tr>
<tr>
<td>review</td>
</tr>
<tr>
<td>evaluation</td>
</tr>
<tr>
<td>preview</td>
</tr>
</tbody>
</table>

One last example that I find significant in this respect is the following one where three phases intersperse with each other, Content, Discourse Structuring, and Interaction:
Here, the content phase is often interrupted because the lecturer, while delivering the content, interacts with the audience by creating a contact (see the underlined phrases), and structures the discourse by providing the ongoing outline of the lecture (see phrases in bold type).

<table>
<thead>
<tr>
<th>Discoursal phases</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Content phase</td>
<td></td>
</tr>
<tr>
<td>Interaction phase</td>
<td></td>
</tr>
<tr>
<td>Discourse Structuring phase</td>
<td></td>
</tr>
<tr>
<td>Interaction phase</td>
<td></td>
</tr>
<tr>
<td>Interaction phase</td>
<td></td>
</tr>
<tr>
<td>Interaction phase</td>
<td></td>
</tr>
</tbody>
</table>

The Content phase is also characterized by the frequent use of examples. That is the reason why in the **Example phase** the lecturer provides practical and clear examples in order to illustrate the theoretical concepts expressed in the Content phase. It is feasible that theory and example phases intersperse with each other as often lecturers employs examples to provide theoretical content, as it appears in the following:
all the communications take place through the access network or the base station typically the base stations are connected to the wired network so for example public switch telephone network or internet depending on the kind of communication that you have to support

The fact that the lecture’s phases interact among each other is a signal that the structure of the lecture is a complex one and this implies that a correct awareness of this phenomenon must be raised among both lecturers and students. The next paragraph will focus on one of the aspects of this complexity: the multifunction phases.

5.10 Multifunction Phases

A study conducted by Núñez Perucha and Dafouz Milne (2007) on lecturing through foreign languages in university context, underlines how Young’s phases are not comprehensive of all the lecture discourse moves because of the frequent overlaps, which might need to be labelled by using other classification categories. In their study, different researchers were asked to signal the phases of the lectures recorded at a Spanish university and they realized how difficult it was to agree on some labels because of the multifunctionality of some of the phases.

When I tried to analyse the lectures of my corpus I experienced similar difficulties as I have noticed that it is extremely difficult to rely only on the written transcriptions. The context of situation includes many elements that need to be taken into account before interpreting an utterance. The ethnographic approach made of participant observation and supported by the video recording provided a valuable help in labelling the phases in my corpus. Thus, lectures in most cases show an overlapping of functions within the same strands. For example, I observed how frequently the Discourse Structuring (DS) phase combines either with the Evaluation (E) or the Interaction (IN) strands:

but not really important that’s to show that er the er ok **the most interesting subject topic for this lesson** is the introduction to FEM for B
In the example above, the lecturer while providing the outline of the lesson he also evaluates the topic he is about to discuss; in fact rather than stating the topic of the lesson in a direct and neutral way, he underlines that the topic is also the most interesting one. Thus, the Discourse Structuring combines with the Evaluation phase.

In the following example there is a different combination, which involves the Content phase and again the Evaluation phase:

```
what helped introduction of multicarrier techniques in the real communication world was discovering perhaps that multicarrier can be implemented by using fast furrier transform techniques so obviously fast furrier transform was well known at the time technique for mainly for digitally signal processing but the main discovery was that multicarrier techniques can be implemented by using FFT.
```

The lecturer is discussing the content of the lesson and often he expresses personal evaluative comments on it by using perhaps, obviously, the main discovery. In this case, as in the one above commented on, it can be difficult to determine which strand is dominant as more than one function is performed. The multifunctionality, instead, can be an easy way to define such cases.

The fact that the multifunctionality of phases has been found both in a Spanish and an Italian corpus might shed lights on the interference role of the speakers’ first languages and cultures; Spanish and Italian are both Romance languages, the lecturers were native speakers of these languages and the similarities of the features found in the two corpora might have a relevance in this respect. It is, of course, a topic that requires more deepen investigation and linguistic evidence; however, if that assumption would prove to be true, it will further enrich the complex scenario of English as a medium of instruction in non-native speaker environments.

The relationships among the different phases, I have analysed so far, can be summarised and visualized through the use of a schema such as the following:
In the outer circle there are the meta-discoursal phases, while in the inner circle the three non meta-discoursal strands are found. The latter phases can be found in combination with any other of the former ones. Actually the analysis of my corpus confirm Young’s model of phases though in my data new strands were observed, such as multifunction and housekeeping strands.

What seems to me interesting is that this specific lecture’s structure, that is the one of the Faculty of Engineering in Naples, can be visualized as a **circular structure** (see Figure 17). The different strands of the lecture, in fact, do not progress in a linear way but they follow each other in a circular way with some strands, such as Interaction, Example and Evaluation, that intersperse with some of the others, as seen in the previous examples that I have already commented on.

The novelty in this structure, as far as my data are concerned, is the occurrence of a new strand, the **Housekeeping phase**, which is located at the beginning and at the end of the lecture. Lecturers use the Housekeeping phase for class management purposes, that is they provide information or
answer students’ questions on course timetable, class-work deadline, etc. Thus, the housekeeping strand functions as a framework with a specific collocation and a specific pragmatic aim that will be further investigated in the next paragraph.

5.11 The schematic structure of Engineering Lecture Discourse

The general structure of the engineering lecture in ELF or EMI contexts is one of the interests of the Engineering Lecture Corpus (ELC) research group based in Coventry, that has produced several studies in search of ‘variance of ELF and the emerging rhetorical style that comes with it’ (Ibrahim and Ahmad, 2009). The schematic structure proposed by Ibrahim and Ahmad consists of four macro-stages (1. opening; 2. setting the topic of the lecture; 3. delivering content instruction; 4. closing) each divided in different sub-headings such as Housekeeping, for the first macro-stage; Announcing today’s topic, Reviewing previous lecture, for the second macro-stage; Delivering content, Interacting with students, and Managing the discourse, for the third macro-stage; Expressing point of stopping, and Housekeeping, for the last macro-stage.

The Engineering Lectures in my corpus display a structure that is not very different from the one identified by Ibrahim and Ahmad. The Engineering lecture in Naples, in fact, shares many similarities with the ELC lecture analysed by Ibrahim and Ahmad: both lectures are foreign medium-lectures taught in a context where English has the status of Lingua Franca and in which all the participants—or the majority of them in few cases- share the same first language. However, in spite of the similarities it is worth noting a few peculiarities.

In my corpus, stage 1, which is the opening of the lecture, is often used for Housekeeping purposes that are performed either in Italian or in English, though more often in Italian. The choice of the language in the housekeeping stage does not seem to depend on the discipline or on the lecturer’s language proficiency. It seems, actually, to be motivated by the
presence of students whose first language is not Italian. In those cases, the switch to Italian would be unfair and inconvenient in that most of the contents delivered and discussed in the housekeeping session is about exams and other course-related announcements, as in the following example:

```
m4004_2
the second part of the lesson after the interval the second part of the lesson will be devoted to English lesson ok so it is optional if you don’t want
```

In the classes where the students share the same language, the lecturers seem more willing to handle the housekeeping in Italian:

```
m4002_2
lo scritto abbiamo detto lo limitiamo alla parte del sistema murario di libertà ma almeno facciamo questa prima parte preliminare di esame gli assegni a casa di stamattina me li avete portati li raccogliamo
```

```
m4002_2
allora vi confermo anche che martedì nella terza ora di martedì verrà il professor M. dell’università del M. che sarà molto contento per coloro che…
```

The use of Italian seems to offer the opportunity to insert some humour or irony, too:

```
m4003_2
allora ragazzi oggi la lezione è un po’ pesantuccia […] allora dottoressa oggi la lezione è un po’ frastagliata perché non ho le slides preparate e quindi devo fare delle cose alla lavagna che dovrebbero sapere e non sanno (students laugh)
```

While the ELC corpus offers evidence of lecture’s stage 1 that contains greetings, even prayers –but only in the Malaysian lectures- and housekeeping, my corpus has no instances of greetings at all. Either the lecturers start with housekeeping or they just skip this stage and go straight to **stage 2**, which is devoted to setting the topic of the lectures. The stage 2 sub-headings fit exactly with the Neapolitan corpus. In this stage, lecturers a) **introduce the topic of the lecture** b) **review the content of the previous lecture** and c) **provide an outline of the lecture’s contents**.
Ok so this lesson will deal with network planning and in particular is split into lessons one with interference mitigation and the other one with chunking and channel allocation techniques so they both are characterized by the common term network planning so now we are starting to look at some characteristics which are at a higher level we should say the system level of our network so we will review briefly example network topologies and after that we will focus on cellular networks because most part of this lesson will deal with cellular networks we will review or introduce the concept of channel reuse and the concept of co-channel interference which are very important to perform network planning in cellular networks and after that we will try to evaluate the capacity of cellular systems considering both TDMA FDMA systems and CDAM systems and finally I will give you some introduction to capacity expansion techniques so what are the techniques which can be used to increment the capacity of a cellular network.

Now we summarise what was said in the previous class and hopefully the other students will arrive and so we will use the first part in summarising what we said last what doctor (xx) told you last Thursday so the topic of the class is the dynamics of multi degree freedom of system and we will first describe uhm what is a multi degree freedom of system and write the equation of motions then we will er study the free vibration response in the case of an undamped system a classically damped system then the response to an harmonic excitation and a response to a ground motion uhm an earthquake ground motion at the base using the modal analysis procedure er and in particularly we will see the how to use the concept of response spectrum in the case of multi degree of freedom system so the spectral superposition method and okay er so sorry in other words what we will do for multi degree of freedom system is very similar to what we have done for the singular degree of freedom system uhm so we will go through the same topics but considering a more complicated system now you have seen last time what is called a shear type building

In the above examples, all the three sub-heading moves of stage 2 are found. The lecturer introduces the topic of the lecture (this lesson will deal with network planning); then he reviews the content of a previous lecture (we will review briefly example network topologies); and finally the lecturer provides an outline of the lecture’s contents (we will try to evaluate the capacity of cellular systems).

Stage 3, on the other hand, is the most comprehensive one as it includes many different sub-headings that are peculiar to classroom discourse. The first and probably most proper function of a lecture is the informative one that is to deliver a disciplinary content. In delivering content, lecturers have to deal with concepts, explanations, and definitions, such as:
The first type of topology is what is called infrastructured base network which is perhaps more general a more general term which is used to describe this kind of situation where you have some base stations or access points which are the central point to provide the access to the network.

Or with exemplifications,

Linear amplifiers are both expensive and also energy consuming because non-linear amplifiers consume less power compared with the xx amplifiers so this is this is a basic result of electronics I mean when you compare er class A class B class C amplifiers they they er they are sorted according to the energy they use basically class C consumes a lot of energy class B intermediate and Class C less energy.

So this is just to make another to make another example let's take another example again for example.

And references to the future professional activities of the students:

When you will work in a design office and you will use you will certainly use a computer program software to make your calculations non-linear calculations the ninety percent of your non-linear calculation will stop for a problem associated with the stiffness matrix.

Stage 4, the closing, is devoted to two sub-headings: expressing point of stopping and housekeeping. I have already discussed the use of the housekeeping phase, which functions as a frame for the engineering lecture in Naples (see chapter 5.10 and Figure 17) because it occurs both at the beginning and at the end of the lesson. The other sub-heading, expressing point of stopping, is a move that has to occur necessarily at the end of the lecture and in my data it is realised differently according to the lecturers’ personal styles.

So we stop here.

I think you can have just a stop for a while for five minutes you eat something okay? okay ragazzi mi state seguendo ….

Okay! Questions? Okay!

Okay? Okay questo abbiamo finito oggi so we have seen examples of (xx) active semi active and (xx) systems per chi è arrivato in ritardo …
so we will **stop now** and er after the break we’ll see something regarding one example one significant example of usage of multicarrier which is the standard for wireless line okay

**okay so perhaps we can have a break now** and after that we will be considering we will start from orthogonal systems okay

er I think **we can stop here** the these are difficult er er problem ok it is better and I show you how to organize a problem er next time now the interval er ten minutes and er English support okay many thanks

It is worth noting how the lecturer’s style makes the difference among the ways in which the *expressing point of stopping* move is realized. Both lecturer nm4002 and nm4003 end their lectures by using a consistent pattern:

a) first move: use of closing expressions such as *okay, we stop here, we can have a stop*;

b) second move: code switching between Italian and English;

c) third move: follow up with the classroom management talk.

Moreover, lecturer nm4003 is also consistent with his personal lecturer’s style when he ends the class with a bit of humour (see example nm4003_1) by suggesting to the students how to use the lesson break. Lecturer nm4001 also is consistent in his way to end the lesson: he utters an explicit statement of closing (*we will stop now, we can have a break*) followed by a preview of the next lesson (*after the break we’ll see something regarding…; after that we will be considering…*). Only in one case a sort of greeting is found: lecturer nm4004 ends the lecture by thanking the students for the attention (*okay many thanks*).

The analysis of my corpus has revealed that there is an underlining structure to the English-medium lecture and that this structure is similar to other engineering lectures delivered in similar contexts (see the ELC Coventry corpus). The acknowledgement of an existing structure can be a tool and guide for all the subjects involved in that specific communicative event. Alongside the lecture structure, it seems very interesting, for the purposes of my research, to investigate the pragmatic features that characterise the engineering English-medium lecture. An attempt towards
this aim is made in the following paragraph.

5.12 Engineering lecture pragmatic functions

Pragmatic analysis is paramount for every speech event. Speech events are performed through speech acts that realize the different functions of a communicative genre. Lecture is a genre that has a range of specific functions performed through specific speech acts.

Hilary Nesi’s research team (2009), within the ELC corpus, has identified a list of pragmatic functions in order to ‘identify and describe typical engineering lecture discourse features’ and to study the ‘variation in the realisation and distribution of functions’ within the engineering academic lecture. The list of pragmatic tag is a provisional one as the ELC corpus is a growing corpus, which is expected to welcome engineering lectures from other countries in the world. Pragmatics is strongly linked to cultural norms and behaviours; for example the Malaysian lecture includes a pragmatic feature which is absolutely absent in other countries whose corpora are part of the ELC corpus – at least up to now; in the future, there might be the case, in fact, that the analysis of lectures from more countries could provide evidence of new pragmatic functions, which will enrich the list already existing.

At the moment, the list of ELC Pragmatic Tags is the following:

<table>
<thead>
<tr>
<th>Greetings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prayer</td>
</tr>
<tr>
<td>Housekeeping</td>
</tr>
<tr>
<td>Preview/review</td>
</tr>
<tr>
<td>Advice</td>
</tr>
<tr>
<td>Defining</td>
</tr>
<tr>
<td>Reference to students’ future profession</td>
</tr>
<tr>
<td>Personal narrative</td>
</tr>
<tr>
<td>Teasing</td>
</tr>
<tr>
<td>Self-recovery</td>
</tr>
<tr>
<td>Black humour</td>
</tr>
<tr>
<td>Disparagement of out-group member</td>
</tr>
<tr>
<td>Register / word play</td>
</tr>
</tbody>
</table>

Table 7: ELC pragmatic tags
Not all the features are due to be present in each lecture. There might be differences related to lecturers’ styles and cultural settings. For example the Prayer only occurs in the Malaysian lectures, and probably not in all the lectures (Ibrahim and Ahmad 2009). The ELC research team has set up the list of the above pragmatic tags by analysing the MICASE pragmatic tags and making a few changes because ‘some tags refer to functions that are not prevalent in our [the ELC corpus] lecture data (Directives, Disagreement) and some functions that are prevalent in our lecture data are not listed’ in the MICASE (Nesi, Ahmad, Ibrahim 2009). The identification of pragmatic functions is not an easy task as it is not enough to identify and analyse forms in isolation. Barbara Seidlhofer (2010:40-42) highlights, in fact, the differences between two approaches to ELF research: a formalist versus a functionalist approach. There is no need to say that both, form and function, are important in order to fully understand a speech act or any other text; however, when one comes to the interpretation of intentions through the verbal media it is crucial the combined analysis of different elements, which all together contribute to the realisation of the communicative event. According to Seidlhofer the main issue of ELF research should be the understanding of ‘how ELF users exploit the resources of the language to achieve their communicative outcomes’ (2010:49); to achieve that goal it is important to contextualize the communicative event and to take into account all the elements that interact and interweave in that specific context. The English-medium lecture among non-native speakers occurs in a situation, which has its own peculiarities and can only be analysed by keeping into account all the specificities of its environment.

5.12.1 Pragmatic functions in the Engineering lecture in Naples

The English-medium lecture at the faculty of Engineering in Naples requires an accurate analysis of the situation in which it is held. This analysis is the only way to clearly identify the pragmatic functions activate in the lecture. For this reason, I think it is useful to outline the situation in
which the lectures take place. ELF in Italian-speaking academia usually entails groups of people who speak the same native language. This is also the case of my data. As already stated previously in this thesis (chapter 4.5.2), only in two cases there were speakers of languages other than Italian; however, they were a minority compared to the Italian native speakers. Most of the lectures that have been recorded took place in an Italian native speaker environment in which both students and lecturers spoke Italian as a first language. In this respect the data of my corpus are somehow unique as most of the previous studies on this topic deal with international audiences, which do not share the same first language. Moreover, there is not yet such a study focusing on the Italian academic setting.

<table>
<thead>
<tr>
<th><strong>ELC pragmatic tags</strong></th>
<th><strong>Engineering Lecture Corpus in Naples</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Greetings</td>
<td>No</td>
</tr>
<tr>
<td>Prayer</td>
<td>No</td>
</tr>
<tr>
<td>Housekeeping</td>
<td>Yes</td>
</tr>
<tr>
<td>Preview/review</td>
<td>Yes</td>
</tr>
<tr>
<td>Advice</td>
<td>No</td>
</tr>
<tr>
<td>Defining</td>
<td>Yes</td>
</tr>
<tr>
<td>Reference to students’ future profession</td>
<td>Yes</td>
</tr>
<tr>
<td>Personal narrative</td>
<td>Yes</td>
</tr>
<tr>
<td>Teasing</td>
<td>Yes</td>
</tr>
<tr>
<td>Self-recovery</td>
<td>No</td>
</tr>
<tr>
<td>Self-deprecation</td>
<td>No</td>
</tr>
<tr>
<td>Black humour</td>
<td>No</td>
</tr>
<tr>
<td>Disparagement of out-group member</td>
<td>No</td>
</tr>
<tr>
<td>Register / word play</td>
<td>No</td>
</tr>
</tbody>
</table>

*Table 8: pragmatic functions in the ELC corpus and in the Engineering Lecture Corpus in Naples*

*Table 8* draws a comparison between the ELC pragmatic tags and the pragmatic tags actually found in the Neapolitan corpus. The grey
highlighted areas include the pragmatic tags, which are common to both corpora.

Following there is an example for each of the pragmatic functions I have observed in my corpus:

<table>
<thead>
<tr>
<th>Pragmatic tag</th>
<th>Neapolitan lectures corpus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housekeeping</td>
<td>I remind you also of the fact that you have to write a report in English (nm4003_1)</td>
</tr>
<tr>
<td>Preview</td>
<td>Er so er this is the outline of our lesson, er first we’ll review er a little bit of history regarding multicarrier modulation and some applications (nm4001_1)</td>
</tr>
<tr>
<td>Review</td>
<td>So okay so lets review what we have seen in one of the previous classes so that.. (nm4002_2)</td>
</tr>
<tr>
<td>Defining</td>
<td>now you have seen last time what is called a shear type building uhm? <em>Telaio attraverso infinitamente rigidi</em> shear type building and what can be considered er what are the hypotheses for shear type building (nm4002_1)</td>
</tr>
<tr>
<td></td>
<td>this problem is called eigenvalue and eigenvector <em>problema degli auto valori e auto vettori</em> the eigen values will be the value of will be omega n omega n square are actually the eigen values the eigen vectors are the vectors of the modes shapes (nm4002_1)</td>
</tr>
<tr>
<td>Reference to ss</td>
<td>This is the the core of our activity or our professional activity, so your design we say must be safe must be safe means that you er have to ensure this and er in our professional activity this is, these are some important legal consequences there are penal consequences if you do not respect the the grey the the the safety factor which the the building codes er oblige you to respect (nm4003_1)</td>
</tr>
<tr>
<td>future profession</td>
<td></td>
</tr>
<tr>
<td>Personal narrative</td>
<td>Prof, her nickname is prof she reminds me of my English professor at lyceum ok of course not for the age but for the attitude and the glasses (nm4003_1)</td>
</tr>
<tr>
<td>Teasing</td>
<td>I always repeat the same thing as a hammer on the nail dang dang the nail the the the chiodo the nail remains impressed fixed in your brain (nm4003_1)</td>
</tr>
</tbody>
</table>
5.12.2 The use of Okay and So

From the analysis of the corpus, the use of two connectors seemed to be very frequent. They are the discourse connectors: okay and so.

Previous literature has already widely discussed the pragmatic functions of these connectors in different domains. In particular, Biber (2006) deserves much attention to the use of discourse connectors in spoken university registers. He distinguishes between two categories of discourse connectors: discourse markers on one side, which ‘are restricted primarily to spoken discourse. These forms have distinct discourse functions, but it is difficult to identify the specific meaning of the word itself’ (2006:66); and linking adverbials, on the other side, which ‘are found in both spoken and written registers, and they have greater inherent meaning than discourse markers’ (2006:66). The words Okay and So fall within the larger category of discourse connectors; however, while okay is considered a discourse marker, so is ‘intermediate, sometimes functioning more like a discourse marker and sometimes more like a linking adverbial’ (2006:66). Biber in his analysis of university registers regards both as discourse markers and provides interesting data on their distribution across spoken registers. In particular, both are very common in classroom teaching discourse, which is the university register I am interested in for this thesis. In Biber’s data okay function as a discourse marker employed with different functions such as marking a transition to the next step in the discussion, or initiating a new topic. Also so can serve turn-initiating functions, and because of this okay and so can often be used together. While okay as a discourse marker does not have a precise meaning in itself, so keeps its specific meaning and function of resultant or inference linking adverbial as therefore or consequently but more commonly found in the spoken registers.

My data show results, which do not diverge from Biber’s findings. Both so and okay are very frequent in my corpus and they are often used in combination
Okay so this lesson will deal with network planning.

Okay so lets review what we have seen in one of the previous classes.

Okay so perhaps we can have a break now and after that we will be considering we will start from orthogonal systems.

In the above examples, the combined use of *okay* and *so* is certainly redundant in the sense that any of the two markers could have been used individually. However, what is interesting is that they are used as discourse structuring devices; they structure the discourse by introducing the topic of the lesson or by summarising previous contents and by making clear the start of the break in the lesson. Borrowing Young’s terminology, they function as introducers of the Discourse Structuring phase, but not only. In fact, they seem to introduce other discourse phases such as:

the Exemplification phase

Okay so for example you can try to with this model you can try to evaluate with a very simple mathematic the number of channels that you have in the service area.

Okay so when you apply a unit acceleration uhm at a certain degree of freedom there will be also movement of the distributed masses okay so for this reason the mass matrix *writes on board* will be a full matrix.

and the Content phase:

Okay so we must provide some fading compensation techniques so we must add some features otherwise our system will be very sensitive to er fading on different subcarriers.

Okay so in order to okay perhaps better appreciate multicarrier modulation this is a very simple scheme of a single carrier modulation systems.

Okay so in this case the number of kinematic parameters which univocally determine a possible deformation of this system uhm corresponds to the translation of degrees of freedom of our original system.

It is interesting the use of these markers to introduce the Interaction phase by asking a question which is then answered by the lecture himself.
Okay so, what is the structure of multi carrier transmitter? Er a general structure

Last but least, they can introduce the Conclusion phase:

Okay so in other words we will have in the case of concentrated masses at the nodes uhm er only the terms of the main diagonal will be different from zero

that is often introduced by so alone with the meaning of therefore as in the following example:

Okay and so function as meta-discoursal markers when they are used in isolation, too. As in Biber’s findings, my data reveal the extensive use of okay as a device to mark a boundary between topics

Okay here are some hints and some specification more or less we have I have already said to you but it’s useful to remind them just with me to make them well fixed well impressed in your brain

What I found particularly striking is the intonation related to the use of okay. In my data I could distinguish between okay spoken with rising or a falling intonation patterns. Okay with a rising intonation functions as a yes-no question, which the speaker uses as a comprehension checker. The lecturers of my corpus seem to employ the rising intonation as a device to interact with the students and as a response getter (Biber, 2006). As in Biber’s findings, when okay functions as a response getter in my data it usually occurs at the end of a statement or question:

and there is no effect on the solid structure interaction okay?

you are accustomed to writing this this stiffness matrix in this form, on the basis of your actual knowledge your knowledge in this moment you know that if I have this (xx) which for simplicity I consider in the (xx) so the stiffness matrix is represented by a six by six matrix and so on okay?

we are considereing this system instead of Laplace equation okay?
Okay with a falling intonation is also frequent in my data. As in Biber, it functions as a topic shifter signal but also as a summary signal. The following excerpts provide examples for that:

Okay

nm4002_2
this in general passive system may be isolation energy dissipation or (xx) mass damper and are combined with an active or semi active system they have both the advantages of passive both advantages and disadvantages of active passive and semi active systems okay now lets go pause 10 secs we have already seen something about energy dissipation devices we will see more in other classes

nm4003_1
so whatever is the kind of function you adopt to extend the function over three point five per thousand means this and this okay

When okay is used as a summary signal means also that the speaker has finished what he/she wanted to say

nm4002_2
Yokohama is a quite an important city in Japan which is close to the sea and this is a tower a (xx) tower of Yokohama a tower for tourists and on the top of the tower you can see the landscape and the sea and there is a restaurant on the top and the in order to avoid the this is quite a flexible structure which is very sensitive to the wind vibration and so on the top a xx mass damper like this type where is (xx) (xx) vibration of wind okay question okay now lets go to see some examples of active control systems active control systems they are quite sophisticated but there have been quite a few applications up to now and there will

The use of okay and so, in the English-medium lecture among NNS, does not differ from the lecture among NS, as if their use was somehow a universal one.

5.12.3 The use of Code switching

Another phenomenon, which has attracted my attention while analysing the transcription of my corpus, is the use of code switching.

Code switching is a wide spread phenomenon in bilingual and multilingual contexts and it refers to the use and alternation of two or more different languages in the same speech event. David Crystal in his dictionary of Linguistics and Phonetics defines code switching as
“the linguistic behaviour that can be illustrated by the switch bilingual speakers may make (depending on who they are talking to, or where they are) between standard and regional forms of English, between Welsh and English in parts of Wales, or between occupational and domestic varieties”. (1991:59)

Crystal’s definition seems worth of attention also because it underlines the close link between language and context, or in other words between linguistic forms and social functions of communication. He seems to assume that the how and why of code switching can be rightly interpreted only by looking at the situation in which the speakers is involved. The background of the participants, the place and time, the aim of communication are important elements in order to better identify the code switching behaviour. Crystal’s definition reminds of the domain theory by Fishmann (1972), which states that the use of different codes is bound to different domains. The domain is the situational context in which communication takes place and it is defined in terms of situational and social factors. Situational factors are the setting, the topic, the participants and the aim of the speech event, while social factors invest the affective area of discourse: solidarity, status, formality, and affective scale. In the quoted dictionary, Crystal also underlines a distinction between code switching and code mixing, which instead ‘involves the transfer of linguistic elements from one language into another’ (Crystal 1991:59). Although other linguists have tried to define clear-cut differences between code switching and code mixing (Liu, 2006:4), more recent definitions of this linguistic phenomenon do not engage in such a distinction any longer. Generally, the term code switching refers to the alternation in the use of different languages regardless the fact that the alternation be intra-linguistic (varieties of the same language) or inter-linguistic (among different languages). Consequently, the term is now commonly used in the sense of Gumperz (1982) and Romaine (1989), that is:

“[code switching is] the juxtaposition within the same speech exchange of passages of speech belonging to two different grammatical systems or subsystems” (Gumperz 1982:59)

Bearing this definition in mind, code switching has been investigated by many scholars belonging to different research fields, from linguistics to
sociolinguistics to pragmatics; and the literature on this topic is definitely large (for an overview see Nilep, 2006:1). However, most of these studies relies on bilingual communities and focus on conversational genres. The corpus of this research is instead made of examples of spoken discourse but not in form of conversation. The academic lecture is, in fact, a spoken genre, which shares features both with the conversation and the narrative prose; however, it is an autonomous and special type of spoken discourse characterized by its own features (Biber, 2006; Swales, 1990). A few recent studies on code switching in academic settings are based on the ELFA corpus by Mauranen et al. (2010); however, they mainly concentrate on conversational genres and they include a wider range of academic spoken genres or speech events, like lectures, seminars, conference presentations and thesis defences (Mauranen et al., 2010:186). The challenge of this paragraph is to investigate the use, form and function of code switching within only one type of academic genre, which is the English-medium lecture among non-native speakers in the Engineering educational context.

5.12.4 Code switching as a discourse function in Engineering Corpus

In the previous paragraph I quoted Crystal’s definition of code switching, which underlines the link between language and context. Scholars who have acknowledged this relationship leads have also provided the following interesting insights on code switching as a discourse function.

Code switching has been considered as a discourse strategy with emphatic function (Gumperz, 1982; Romaine, 1989:121); as an element contributing to the speaker’s identity creation (Milroy and Gordon, 2003); as a discourse function aimed to clarify what is being said (Gumperz, 1982). In all of them the pragmatic function of code switching seems paramount. In particular, Gumperz lists a number of metaphorical code switching discourse functions: quotations, reiteration, message qualification, personalization vs. objectivisation, interjections, and addressee specification (Gumperz, 1982 quoted in Guth, 2002:17). In Gumperz’ s terminology, metaphoric code
switching corresponds to the Jacobson phatic function, in that code switching has a pragmatic meaning and it can even shape the spoken discourse. In my data the functions, which seem more relevant from a pragmatic point of view are reiteration and interjections. For reiteration Gumperz means the alternation, which ‘takes the form of two subsequent sentences, as when a speaker uses a second language either to reiterate his message or to reply to someone else’s statement’ (Gumperz, 1982:59):

nm4002_1
so this is a system of linear equations and in order to have a solution which is not the trivial solution which (xx) band is equal to zero uhm it is necessary that determinant of this matrix is equal to zero uhm so is a un sistema di equazioni lineari omogeneo e la soluzione non banale è quella si può verificare solo se è determinante e la matrice è diversa da zero so in order to have $\psi$ sub n ..... 

nm4002_1
this problem is called eigenvalue and eigenvector problema degli auto valori e auto vettori the eigen values will be ..... 

In the above examples, the lecturer switches to Italian (see the parts in italics) because he provides a reiteration of what he has just said in English. He does it very naturally and smoothly and without stopping the fluency of his speech. It is a sort of incidental sentence, which seems to have the only function to make sure that an important point or definition is correctly understood.

The following two examples of reiteration, that is a repetition of what already stated, are of particular interest as the switch is from Italian to English and not vice versa as in the previous examples.

nm4003_2
you cannot really understand where are the problems when you want to extend the procedure to non-linear to a non linear setting. Avete capito? uhm did you understand? not (xx) this this matrix if I arrange the parameters of the element in this way ....

nm4003_2
ragazzi due minuti it’s a break 

The last example is even more interesting as the switch to Italian contains an anticipation of what the lecturer is about to say in English. In this case the switch is not a literally translation but it is a rephrase of the message.
Being an observation participant of the event, I dare to say that the use of code switching in this particular lecture seemed to function as a lively tool to break the monotony of the lesson.

Code switching can be classified also according to the position within the discourse. Poplack’s classification (Poplack 1980 quoted in Romaine, 1989:122) distinguishes among tag-switching, inter-sentential, and intra-sentential code switching. Tag-switching is the insertion of a tag in one language into a sentence spoken in a different language, like I mean, you know, to use English expression; inter-sentential code switching implies the use of a clause in one language next to a clause or sentence in the other language; and intra-sentential code switching refers to the insertion of a word or phrase within the same sentence.

In my data there are a few instances of tag switching, which corresponds to the interjection in Gumperz’s terminology that sometimes seems automatic and unconscious or seems to be a slip of the tongue. A tag-switching as a slip of the tongue usually occurs in the lectures where speakers of different languages are present, as in the following example:

```
nm4004_2
this is er a sum of n with er sum coefficient è chiaro? oh sorry (he laughs)
this is a sum of er ok? u is a sum this are coefficient unknown coefficient in
statics real coefficient in dynamics a function of T this are known functions
ok …. 
```

The lecturer uses Italian to check whether the students are following him, but he uses the Italian expression and soon after he apologizes and laughs over his mistake. A similar case is the one recorded in a lecture among students all sharing the first language. In this case the lecturer, as in the example above, self correct himself by repeating the code switched phrase in English

```
nm4002_1
L: now lets look now to the concept uhm prego yes
S: why we have a m1?
```

```
nm4003_2
if the side is splitted in part of the structure in that part of the structure there
should be a constraint inequally giusto?
```
While the intra-sentential code switching seems to occur mainly in contexts with a high bilingual proficiency, the inter-sentential code switching occurs more often and in all sorts of contexts. In my data a few examples of inter-sentential code switching have been found too.

nm4003_1
you remember from solid structure solid er scienza delle costruzioni uhm? that when you have a displacement you can compose the displacement in three shares pure (xx) (xx) and er er what the English call deformation I mean the share of the totals of the total displacement associated which actually produce strain ok? so strains are produced from deformations from displacements quelli che si chiamano in italiano gli spostamenti della deformazione in pratica è chiaro?

nm4003_2
reaction of the contrary reazione ragazzi sone le reazioni chiaro? because the whole body the whole body is subject to a complete (xx) of forces on a sub part of the body …

nm4002_1
we will go through the same topics but considering a more complicated system now you have seen last time what is called a shear type building uhm? telaio attraverso infinitamente rigidi shear type building and …

In all the above examples, the switch to Italian seems to function as a reiteration in order to make sure that the information has been understood correctly. This function seems clear by the expressions following the switch that is a question to ask explicitly whether the information is clear to the students. However the function is, lecturers switch the languages very casually and that does not surprise the students, who all share Italian as a first language.

The use of code switching in the Housekeeping phase is typical of my data. All the lecturers who teach in a monolingual class seem to use Italian at the beginning and end of the lesson to give information about the course, the exams and/or other details, which typically occur in the Housekeeping phase. Soon after that phase they switch into English and they start what, in Young’s terminology, is the Discourse Structuring phase. For this reason, the language switch appears to function as a discourse-structuring device in that it signals to the students that the lecture is about to start. Following there are a few examples from the lectures’ introductions:
L: allora ragazzì oggi la lezione è un po’ pesantuccia
S: la data di esame è possibile…?
L: giovedì 23 allora dottoressa oggi la lezione è un po’ frastagliata perché non ho le slides preparate e quindi devo fare delle cose alla lavagna che dovrebbero sapere e non sanno (pausa) e soprattutto è un po’ tecnica quindi non riusciremo a farle capire granché (laughs) allora allora last lecture we saw

L: lo scritto abbiamo detto lo limitiamo alla parte del sistema murario di libertà ma almeno facciamo questa prima parte preliminare di esame gli assegni a casa di stamattina me li avete portati li raccogliamo?
S: io devo stampare non sono riuscita quindi dopo semmai subito dopo la lezione
L: va bene sì certo perfetto ah allora vi confermo anche che martedì nella terza ora di martedì verrà il professor Meyers dell’università del Missouri che sarà molto contento di specie per coloro che vanno a xx farà proprio una presentazione di tutti i corsi dell’offerta didattica darà delle informazioni molto specifiche quindi questo sarà molto positivo per lo dirò anche ai ragazzi che non stanno nel mio corso e che comunque andranno a (xx) so solo due assegni?
S: (not audible)
L: ok mi raccomando anche perché ormai mancano due settimane e poi abbiamo finito qui quindi diciamo siamo proprio al rush finale grazie tu devi ancora finire? perfetto so okay so lets review

and one example from the end of the lecture:

Okay any questions? okay allora ci vediamo comunque giovedì pomeriggio giusto siamo rimasti così e invece venerdì non ci vediamo

According to some scholars, code switching can also be employed as an identity builder (Milroy and Gordon, 2003). My corpus is made of lectures held in a mainly monolingual setting as most of the participants share the same first language. Consequently, the participants have no need to use code switching to build or assert their identity. However, I found a few passages in which the speaker, that is the lecturer, asserts his own Italian identity by acknowledging the difficulties he faces when speaking in English

ok? ragazzì mi state seguendo? io sto parlando molto piano sia perché l’argomento non è facilissimo anche per me spiegare parlare in inglese sia perché la questione diciamo è abbastanza delicata dal punto di vista matematico eh? quindi se volette vi spiego qualcosa in italiano

This passage occurs at the end of a session of the lecture just before the
break. In this sense it seems that the use of code switching fits the category of Housekeeping phase that usually occurs at the beginning and the end of the class. Identity through code switching is also a matter of personal styles as in the example below, in which the lecturer exploits a cultural idiom to justify his repetitive actions:

The difficult part of the problem we are trying to solve is you understand how this choice affects the most x part of the algorithm as I have already told you and I stress each time we encounter each lecture I always repeat the same thing as a hammer on the nail dang dang dang the nail remains impressed, fixed in your brain when you will work in a design office and you will use you will certainly use a computer program, software to make your calculations non-linear calculations the ninety percent of your non-linear calculation will stop for a problem associated with the stiffness matrix the ninety percent ninety-nine ok?

The use of code switching in this case is due to the will to be clear and to make sure that students understand.

Research on code switching mainly focuses on conversational spoken discourse in multilingual settings. My data are quite different as the context is mainly a bilingual one and the language involved are usually two, and only in a few cases three. Moreover, the communication is more likely to resemble a monologue rather than a dialogue. The context is due to influence the use of code switching and the interpretation of it is certainly influenced by the situational elements. The interesting question to investigate is why the Italian lecturers at the faculty of Engineering use code switching during their lectures. Auer (1984) suggests that code switching can be either discourse-related or participant-related according to the participant motivations. A participant code switching is often bound to the speaker’s mastery of the languages involved in conversation. On the other hand, a discourse-related code switching has the function to contextualize some aspect of the conversation. Here I tried to apply Auer’s category to my data. Bearing in mind the particular situation in which my participants are involved, it seems that code switching in the English-medium lecture among NNS is probably more discourse than participant related. The lecturers seem to have used code switching for a range of pragmatic functions, which are mainly relevant for classroom discourse orientation. Through code
switching lecturers perform different functions: they make sure the main information is correctly delivered and understood; they indicate a turn of the lecture phase; they personalize their style. It is debatable whether the use of code switching in this context can also improve interaction with the audience.
6. CONCLUSION

We are entering a phase of global English, which is less glamorous, less news-worthy, and further from the leading edge of exciting ideas. It is the ‘implementation stage’, which will shape future identities, economies and cultures. The way this stage is managed could determine the futures of several generations.

David Graddol, 2006

This thesis has explored for the first time the use of English as a Medium of Instruction (EMI) in a particular context, which is the Engineering English-medium lecturing at the University of Naples Federico II. It has sought to shed light on the structural, linguistic and pragmatic features of the English-medium lecture in a non-native English context, and to report on the students and lecturers’ perceptions of this new learning environment.

The research adopted an ethnographic approach and the data were collected by means of multiple instruments such as interviews, questionnaires, structured classroom observation, and transcriptions of lectures.

It was, thus, functional to my purposes the investigation on the use of English as a Lingua Franca (ELF) in Europe and all over the world that, as seen in chapter 2, is the object of the current scientific debate, and it is still far from reaching exhaustive conclusions. The academia, in particular, is one of the domains in which English serves the function of a lingua franca for teaching and learning purposes especially in Higher Education. In fact, the need for internationalisation and the globalisation forces have, in fact, urged the universities to offer an increasing number of English-medium courses and programmes; the academic institutional aims are to increase students and researchers’ mobility and to provide new learning
environments, which seem appropriate to the global trends of our contemporary societies.

However, the way in which \textbf{English as a Medium of Instruction} (EMI) in Higher Education is implemented, varies across countries, institutions and disciplinary fields (Chapter 3) and the many variables at stake have been discussed: from institutional policies, to cultural and academic contexts, to human and material resources, to disciplinary fields, and to foreign language proficiency. The researches carried out up to now on these topics have been debated in chapter 2 and 3 but it is acknowledged that more investigation needs to be conducted with reference to specific domains.

The remaining chapters of the thesis, chapter 4 and chapter 5, were devoted to the analysis, discussion and interpretation of the ELF or EMI implementation at the Faculty of Engineering in Naples; while, this final chapter complements the data, already presented in the previous chapters, with personal evaluations, and it aims to provide answers to the research objectives, which have guided the development of my study.

\textbf{6.1 Concluding remarks}

The outcomes of this research can be divided into two main themes: \textit{English-medium university policy and participants’ attitudes}, and \textit{Structure of the English-medium lecture}. The five research targets\textsuperscript{24} listed in Chapter 1 fall in either of these two fields of interest. In particular, the first two targets (\textit{a} and \textit{b}) relate to the \textit{English-medium university policy}

\begin{itemize}
  \item \textit{a.} The-state-of-the-art of English as a Medium of Instruction (EMI) at the Faculty of Engineering in Naples.
  \item \textit{b.} Students’ and lecturers’ attitudes to English as a Lingua Franca (ELF) as medium of learning.
  \item \textit{c.} The way subject content specialists structure and deliver their lectures in a foreign language.
  \item \textit{d.} Changes in the lecture format due to the change of the language of instruction.
  \item \textit{e.} The extent language proficiency and lecturing behaviour contribute to the understanding of the lecture.
\end{itemize}

\textsuperscript{24}
and participants’ attitudes theme; while the remaining three targets (c to e) relate to the Structure of the English-medium Lecture theme.

6.1.1 English-medium university policy and participants’ attitudes

The primary objective of this study was to provide an overview of the Engineering English-medium lecturing in Naples in terms of university educational policy. In this respect, the following research target was stated:

a. The-state-of-the-art of English as a Medium of Instruction (EMI) at the Faculty of Engineering in Naples.

The Faculty of Engineering, in this respect, proved to be one of the leading faculties in the Neapolitan academic scenario because of the well-defined institutional policy in favour of internationalisation.

The internationalisation has resulted, in fact, the main drive for implementing English-medium lecturing at the Faculty of Engineering in Naples. In the name of the internationalisation, the Faculty:

- has started offering English-medium programmes and courses at both undergraduate and postgraduate level (paragraph 4.1);
- has motivated Italian students to choose English-medium courses through the accreditation of extra CFU credits;
- has motivated the lecturers to enter the programmes by small and symbolic economic incentives;
- has favoured the implementation of joint Master degree with foreign European and non-European universities;
- has increased the number of students in mobility through the Life Long Learning (LLP) Erasmus programmes.

The overview of the internationalisation implementation policies at the Faculty of Engineering has been complemented by the investigation of the pedagogical settings and strategies enacted by the Departments and/or by the single lecturers of the Faculty and whose results are reported under the
second set of research targets (see chapter 6.1.2).

A triangulated approach made of questionnaires, face-to-face interviews, and in-class personal observations contributed to outline a sketch of the typical English-medium lecturer and of the typical English-medium student.

As discussed in chapter 4, lecturers are mainly male Italian native-speakers in their middle age who do not own any international English language certification, but who often use English in their professional life (*Table 1*, chapter 4.5.1). These lecturers mainly enter the English-medium programmes because of the institutional policies of the Faculty; however, the results have also shown that a second reason for entering the English-medium programme is the pedagogical interest for the new learning environment.

On the other hand, the students involved in the programmes are mainly male post-graduate students with a basic English language educational background acquired at secondary school level. They self evaluate their English at an intermediate level, though they have had little previous experience of English-medium lecturing (see *Figures 9* and *10*, chapter 4.6.1). As shown in chapter 4, these students freely choose to follow the English-medium courses because they believe that studying through a foreign language, and English in particular, can improve their future carriers and job opportunities.

Although the quantitative analysis of data has indicated interesting insights, these results cannot be generalised beyond the specific participants and contexts involved in the present study.

The second objective for this thesis was the views that participants to the lecture have with regards the use of English as a medium of instruction. The research target was set as follows:

*b. Students’ and lecturers’ attitudes to English as a Lingua Franca (ELF) as medium of learning.*

The research has shown that both the participants to the lecturing event,
lecturers and students, express positive attitudes towards the English-medium learning environment.

In the case of the students, the research showed that the widespread acknowledgement of the leading role of English in the engineering professional community was the main reason behind the students’ positive attitude towards English-medium lecturing. Students believe that a sound knowledge of English is an indispensable skill to enhance their carrier and to achieve better and more prestigious job positions. Besides, they also think that the combination of content and language in pedagogical settings has a positive outcome on the learning of both (see chapter 4.6.2).

The same positive attitude was found among the lecturers, though it was perhaps a predictable result in that the lecturers involved in the English-medium lecturing had been recruited on a voluntary base. Nevertheless, the research revealed new information about the reasons behind the voluntary choice. In fact, the main motivation for entering English-medium programs was to comply with the internationalisation policy of their Faculty (see research target a).

Lecturers and students’ opinions on the effects of the EMI approach on comprehension and disciplinary learning was positive, too. In fact, both participants state that the language medium of instruction is not an obstacle in either comprehension or learning. Students’ perception, in fact, is that both the quality and quantity of the learnt discipline is the same as their colleagues studying through the medium of Italian, as showed in chapter 4.6.2. Lecturers, similarly, state that disciplinary learning is in no way affected by the language-medium of instruction. According to most of them, students’ results are independent of the language of instruction, and students attending English-taught courses achieve the same level of the content knowledge as the students following Italian-medium courses. Apart from the results of the students’ final assessment, the lecturers believe that the English-medium programmes are a professional added value for the students (chapter 4.5.5).

My participant observation of the exam sessions further complemented
these results. In fact, although the students successfully passed the exam sessions and in spite of their positive attitude towards the English-medium lecturing, my results confirm previous researches on the negative influence that limited language proficiency and context specific communicative functions can play at the exam sessions. My data has proved that in spite of the lack of problems in understanding the subject matter, participants, both students and lecturers, have experienced difficulties in performing certain communicative functions, such as the argumentative one, which are, indeed, proper of the exam sessions (chapter 4.4).

These results have actually opened to further pedagogical implications concerning the issues of lecturers’ proficiency in the language of instruction, and the methodological aspects of learning through a foreign language (see following chapter 6.1.2).

The raising of these issues has provided insights, though limited to the case of my investigation, for the remaining three objectives$^{25}$ of my thesis, which have concerned the investigation of the features of the English-medium lecture by focusing on the linguistic and pragmatic aspects that are affected by the use of a foreign language as a means of instruction.

6.1.2 The Structure of the English-medium Lecture

The second broad theme concerning the results of my study regards the three research objectives that focus on the structure of the English-medium lecture. In particular, the third research target was as follows:

c. The way subject content specialists structure and deliver their lectures in a foreign language.

$^{25}$ Research objectives: 3. The way subject content specialists structure and deliver their lectures in a foreign language; 4. Changes in the lecture format due to the change of the language of instruction; 5. The extent language proficiency and lecturing behaviour contribute to the understanding of the lecture.
As discussed in chapter 5.11, the Engineering English-medium lecture at the University of Naples shows an easily identifiable structure, which confirms that the model of phases suggested by Young is a feasible paradigm for university lectures even in EMI context. However, the lecture held in Naples has shown local traits, which are not found in the model I took as a starting point of my analysis. In fact, the engineering English-medium lecture presents a circular structure where different strands recur one after the other in a cyclic way; the novelty of my data is that, apart from those strands, a new peculiar strand has been found: the Housekeeping phase, which is usually held in Italian and that serves the function of framing the speech event (see chapter 5.11 and Figure 16).

The housekeeping strand, which, however, is also found in other models where it is labelled as a pragmatic function or tag (www.coventry.ac.uk/researchnet/elc), sheds light on the style of the communicative event I have investigated. Firstly, the Housekeeping phase frames the lecture by providing the initial and the final move; it is part of the lecture but it also functions as an external scaffolding of the same lesson. Secondly, I suggest that the widespread use of Italian in this particular strand holds a peculiar pragmatic function as it signals the particular perception of English-medium instruction in non-native contexts. Italian is, in fact, used as a bridge between the real context of life and the artificial context of education. In the real context of life Italian is used for every communicative purpose, while in the educational artificial setting students and lecturers have mutually agreed to use English for communication within the engineering domain.

My findings reveal the lecturers make extensive use of visual teaching aids, mainly Power Point slides, that play a key role in delivering content; in particular, the use of more written text in the English-medium slides, as asserted by the lecturers (see chapter 4.5.3 and 4.5.5), confirm that writing has the function of a linguistic support for the lecturers and a learning support for the students that can follow better the slides content and revise them after class.
Throughout chapter 5 the interaction issues have long been discussed. Those results show that interaction among students, and between students and lecturers is usually a limited one for two main reasons: academic culture-bound reasons and limited language proficiency. On the other hand, my data confirm that pragmatic strategies come to play an important role in overcoming linguistic deficiencies. In particular, the use of personal pronouns (chapter 5.6) and question/answer sequences (chapter 5.7) are two of the main devices to implement a successful communication among the participants. In fact, my findings confirm previous results on how the use of accommodating strategies is meant to increase cooperation and engagement among participants to the communicative event, but also to enhance comprehension in ELF or EMI discourse.

The investigation on the structure of the English-medium lecture led to the next research objective of my study that is the exploration of possible changes in the lecture because of the language switch. The research objectives was the following one:

\[ d. \textit{Changes in the lecture format due to the change of the language of instruction.}\]

As discussed in chapter 4.5.5, only a minority of the lecturers who were interviewed and/or to whom the questionnaire was administered recognised that their teaching style had undergone some changes when lecturing in English. However, they pointed to a process of simplification of the language - direct and concise style, shorter sentences, simpler syntax, plain words (Figure 5, chapter 4.5.1) - with respect to the Italian-medium lecture; this simplification of the language is related to the will to make the lesson content more comprehensible to the students, but also to the lecturers’ limited mastery of the language.

In terms of changes in the format of the lecture, an interesting aspect that has emerged from my analysis is the code-switching paradigm (chapter 5.12.3 and 5.12.4), which is used throughout the lectures and that confirms the role of Italian as a bridge; actually, code-switching becomes a device
aiming at justifying the use of the foreign language in that specific situation. It has, however, a dual pedagogical purpose: on one hand, it is a bridge that overtakes the communicative gap between speaker and audience, and, on the other hand, it enhances comprehension of the disciplinary contents.

A striking result that has emerged from my study is the widespread lack of awareness among lecturers that a change in the language of instruction can cause a change in the way the lecture is structured. This result has important pedagogical implications that are further commented in 6.1.2 of this conclusion chapter.

The last research objective highlighted the issues related to the role played by participants’ language proficiency and lecturers’ teaching styles in the English Medium of Instruction environments. The research target was as follows:

\[ e. \text{ The extent language proficiency and lecturing behaviour contribute to the understanding of the lecture.} \]

The overall attention to understanding disciplinary content, which is crucial in Higher Education, proved to be the primary aim shared by all the lecturers I have monitored, and this attention was behind the different linguistic and pragmatic choices and devices that were implemented in the English-medium lecture and that I have investigated: housekeeping phase; code switching; repetitions; use of discourse connectors (okay and so); use of personal pronouns (I, you, and we); interaction moves; culture-bound mechanisms (see chapter 5).

The ultimate goal of the above listed devices is to encompass rather than to expel structures, methodologies, and pragmatic strategies that might belong to Italian discourses and styles. It seems that in the name of a clear understanding and an effective communication every strategy is welcomed to play a role in the communication process. This result confirms that the use of English as a Lingua Franca or as a Medium of Instruction does not imply the straight adoption of native norms, but, on the contrary, it implies
the inclusion of the local norms and the adaptation of the native norms to the local functional needs.

My investigation has thus proved that the role of culture in EMI or ELF contexts is paramount especially for comprehension. All the cultural dimensions observed by Flowerdew have played a role in my data (chapter 5.4.1).

This result has been proved also by the face-to-face interviews I have conducted with the Italian students who, after completing their English-medium course in Italy, have spent a semester abroad where they have followed English-medium classes delivered by American native speakers (see appendix F). These students, in fact, have affirmed that while they have never experienced difficulties in understanding the Italian native speakers lecturers delivering the lesson in English, they had serious problems in understanding the American lecturers for two main reasons: language variation and different lecturing methodology. They managed to overcome the difficulties thanks to their previous disciplinary knowledge. Thus, it seems clear that the role of culture, in all the Flowerdew’s dimensions, is an important factor in this context: local and ethic culture together with academic and disciplinary culture. If the Italian students had no problems in attending English-medium courses delivered by non-native speakers of English, it was due to the sharing of the same ethic, local and academic culture. On the contrary, the Italian students who attended English-medium lesson abroad could manage to understand successfully thanks to the sharing of the disciplinary culture.

In conclusion, I suggest that in English-medium instruction the mastery of specific communicative styles plays a key role more than a proficient mastery of linguistic skills. It has been shown (chapter 2.2.1) that there is, in fact, a general trend towards a change in approaching the issues about English lingua franca and English medium of instruction from a pragmatic point of view (Canagarajah, 2006; Björkman, 2011; Jenkins, 2011; Ljosland, 2011). Although the need for an improved mastery of the language medium of instruction remains an important aspect of the lecturing
communicative event as it was also proved by previous studies (chapter 3.2.3), my results confirm that, beyond any linguistic description of the phenomenon, the core of the use of ELF and EMI is probably in the **pragmalinguistic features** of the speech event. Analysing my data I observed that many linguistic paradigms or features seem more dependent on a personal and cultural style rather than on a pure linguistic norm. Students and lecturers in my study understand each other because they share cultural elements, which allow them to overcome and accept possible linguistic deviances from the norms.

Moreover, the personal styles that lecturers have implemented confirm that even in EMI or ELF context it is possible to express a speaker’s social identity; besides, the accommodating strategies employed by the non-native speakers are the proof of the creativity of EMI speakers.

### 6.2 Pedagogical implications

The results of the present study have confirmed that the **structure of the lecture** is a factor that must be recognized as **important** in EMI educational contexts. However, it has also proved that there is often a gap between the understanding of the advantages of any internationalisation project and the ways in which it is implemented under a pure pragmatic view.

The problems do not concern the disciplinary content of the lecture but the **methodological aspects** of conveying disciplinary information within the lecture. While the need for English language improvement in support to the students is widely recognised both by content and language teachers, there is an as well widespread **lack of awareness** that also lecturers might need pedagogical support in English-medium lecturing.

In the Italian academia there has been, by tradition, very little concern for the methodological aspects of lecturing and this trend is confirmed by the responses of most of the lecturers at the Faculty of Engineering in Naples, who do not believe that they might need a pedagogical or linguistic support in this specific educational action, which is the English-medium lecturing.
From my results, I believe, instead, that it is necessary to improve the standard of the English-medium lecture, which at the moment relies only on individual and experimental initiatives.

The improvement might start by raising awareness, among all the participants to the lecturing event, of the fundamental function that language plays in any learning process. Lecturers in general are often not aware that the medium of communication, that in this context is English, is part of the disciplinary information they convey to their students. Moreover, my results have shown that in order to facilitate and/or enhance comprehension, it is all the same important to raise awareness of the various lecture discourse structuring devices. The knowledge of discourse structuring devices and of the way in which they can be used would be beneficial both to lecturers and students (see the pilot project outcomes in chapter 4.7.4). Lecturers, in fact, might benefit in planning, organising, and delivering the lecture; while, for the students, this awareness might positively support the comprehension process especially in non-native speaker contexts.

What has been identified in this study is the general lack of interaction between lecturers and students due to the limited proficiency in English and to the culture-bound features. It was found that students’ favourite lesson technique was the interactive lesson, leading to the conclusion that the obstacles to interaction should be removed either by arranging the lesson in a different way and/or by improving the language speaking skills of both lecturers and students. Even though the use of English does not seem to heavily influence communication, however it has an effect on some skills such as the argumentative ones, as it was especially proved by the exam session observations.

6.3 Further research

The results have provided further evidence confirming that English-medium lecturing is positively welcomed by the participants to the lecture event. In particular, what the present study has shed light on is that
contextual variables do influence the way in which the disciplinary content is delivered during the lecture and the different pragmatic strategies that are implemented in such educational contexts.

However, the extent to which students’ disciplinary acquisition is affected by the use of foreign language, as a medium of instruction has not been fully addressed in this study. Further research in this direction would help a great deal in implementing more successful English-medium courses and programmes not only at the Faculty of Engineering but also in the others.

Moreover, the present study was limited to a limited number of participants and it was not therefore possible to generalise its finding. Further research incorporating a larger sample size and extending the research over a longer period of time would be of value and would provide richer data and potential for a more reliable evaluation of the effects of English-medium lecturing and learning in Italy.

The ethnographic approach employed in the present study was valuable because it validated the participant observation, and the other qualitative tools as useful methods for examining the use of English in the non-native educational contexts. However, further research could consider more quantitative methods, such as the instruments offered by the corpus linguistics, in order to deeper examine the features of English as a Medium of Instruction employed in academic settings.

Last but not least, I want to remark that one of the main findings of my research was the acknowledgment of the role played by the local culture in EMI instruction. However, my research has focused only on the Engineering sciences in the Neapolitan context. It would be of value to carry out further research that focuses on different disciplinary fields such as Social Sciences or Humanities and in different geographical areas.
7. REFERENCES


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8. APPENDICES

A. Informative Questionnaire for Lecturers
B. Students Questionnaire
C. Lecture Observation Grid
D. Language Support Module Feedback
E. Corpus of Lectures Transcriptions
F. Informal Interviews to Master Around students
A. Informative Questionnaire for Lecturers

This questionnaire is intended to gather information on the use of *English as a Medium of Instruction* (EMI) in Higher Education. It is part of a research in *English for Special Purposes*, a PhD programme of the University of Naples *Federico II*. All the information gathered will be used exclusively for the above stated purposes.

Date:

<table>
<thead>
<tr>
<th>Section 1: Lecturer data</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Name:</td>
</tr>
<tr>
<td>2. Country of birth:</td>
</tr>
<tr>
<td>3. Age (highlight one)</td>
</tr>
<tr>
<td>30-40</td>
</tr>
<tr>
<td>41-50</td>
</tr>
<tr>
<td>51-60</td>
</tr>
<tr>
<td>above 60</td>
</tr>
<tr>
<td>4. First Language/mother tongue:</td>
</tr>
<tr>
<td>5. How long have you been studying English?</td>
</tr>
<tr>
<td>6. State the International English Language Certification you possess, if any:</td>
</tr>
<tr>
<td>7. Is this the first time you are teaching through English?</td>
</tr>
<tr>
<td>YES</td>
</tr>
<tr>
<td>NO</td>
</tr>
<tr>
<td>8. If you answered NO, how long have you been teaching through English?</td>
</tr>
<tr>
<td>9. Why did you enter this programme (Teaching through English)?</td>
</tr>
<tr>
<td>(rank the answers by their importance, starting with the most important one)</td>
</tr>
</tbody>
</table>
• To improve my English language skills
• Because of new institutional/academic policies
• For personal interests
• For research interests
• To enter international networks
• For educational/pedagogical motives
• Other reasons:

___________________________________________

Section 2: Course information

1. Course Title:

2. Level (highlight one)
   undergraduate – postgraduate – master course

3. Number of credits for the course:

4. Is the same course taught in Italian, too?
   YES  NO

5. If you answered YES, highlight one or more of the following options:
   • Both courses are taught simultaneously
   • They are taught in different semesters
   • The same lecturer teaches both courses
   • One lecturer for the English course and another for the Italian one

6. Number of students attending the course (highlight one)
   1-10  11-20  21-30  more than 30

7. Number of foreign students at the course (highlight one)
   less than 10%  10%  20%  more than 20%

8. Length of the course:
   semester  year

9. Will the exercise or laboratory seminars be taught in English?
   YES  NO

Section 3: Lesson structure

1. The lecture is held in English: (highlight one)
   always – most of the time - 50%
2. Classroom interaction between lecturer and students and among students (i.e. questions and other requests) is conducted in English: (highlight one)

always – most of the time - 50%

3. What visuals/supports do you use during the lesson? (highlight one or more)

- PowerPoint slides
- Charts and diagrams
- Videos
- Textbook
- None
- Other: (please specify)

4. Do your students have to do homework?

YES  NO

5. If you answered YES, will the work be done in English?

YES  NO

6. How do you assess your students? (highlight one or more)

- written exam
- oral exam
- written and oral exam
- online test
- other:

7. Do you distribute handouts of the lesson contents?

YES  NO

8. If you answered YES, you distribute them:

- before the lesson
- during the lesson
- after the lesson

---

**Section 4: English Language Proficiency**

1. How good is the students' language competence in English at the beginning of the course? (highlight one)

   good - fairy good - not so good
2. How good is the students' language competence in English at the end of the course? (highlight one)

   good - fairy good - not so good

3. How do you evaluate your own competencies in English? (highlight one)

   • advanced (C1-C2)
   • intermediate (B1-B2)
   • elementary (A1-A2)

4. How do you feel teaching your subject in English? (highlight one)

   • comfortable
   • uncomfortable

   Add any comment you find relevant:

   ___________________________________________________
   ___________________________________________________

5. Have you ever faced any problem in…?

   • asking questions in class        Yes/No
   • answering student questions     Yes/No

   • involving students in discussion and critical thinking Yes/No
   • evaluating students             Yes/No
   • finding and organising materials for your course Yes/No

6. Would you like to be supported by an English teacher and/or an expert in pedagogy?

   YES          NO

7. If you answered YES, which areas of English would you like to work more on? (*feel free to write either in English or Italian*)

   ___________________________________________________
   ___________________________________________________
   ___________________________________________________
   ___________________________________________________
Section 5: General questions

1. Do students attending English-taught courses achieve as good level of knowledge in the subject as the students following Italian-taught courses?

   YES   NO   It is independent of the language

2. Is attending English-taught programmes advantageous for students in finding a job?

   YES   NO

3. Is your way of teaching different when you use English as a medium of instruction?

   YES   NO

4. If you answered YES, what changes or adaptations have you done to your course in English with respect to the one you teach in Italian? *(feel free to write either in English or Italian)*

   __________________________________________________________
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________

5. Would you change anything in the structure of the programme *(Teaching through English)* you are involved in?

   __________________________________________________________
B. Students Questionnaire

<table>
<thead>
<tr>
<th>Students Questionnaire</th>
</tr>
</thead>
</table>

This questionnaire is intended to gather information on the use of *English as a Medium of Instruction* (EMI) in Higher Education. It is part of a research in *English for Special Purposes*, a PhD programme of the University of Naples *Federico II*. All the information gathered will be used exclusively for the above stated purposes.

### Student’s data

**Highlight as appropriate:**

<table>
<thead>
<tr>
<th>MALE</th>
<th>FEMALE</th>
</tr>
</thead>
</table>

**First language:**

- Italian
- other: __________

**You are:** *(highlight one)*

- An undergraduate student
- A postgraduate student
- A Master/PhD student

**How long have you studied English before starting university?** *(highlight one)*

- Less than 5 years
- Between 5 and 8 years
- More than 8 years

**Self evaluate your English skills:** *(highlight one for each heading)*

#### Reading

- Elementary A1-A2
- Intermediate B1-B2
- Advanced C1-C2

#### Listening

- Elementary A1-A2
- Intermediate B1-B2
- Advanced C1-C2

#### Speaking

- Elementary A1-A2
- Intermediate B1-B2
Advanced C1-C2
Writing
Elementary A1-A2
Intermediate B1-B2
Advanced C1-C2

List the English-taught courses you are following now or in the past.
1. _______________________________________________________
2. _______________________________________________________

Have you ever studied English-taught subjects (materie disciplinari in inglese) at the secondary school?

YES  NO

If YES, list the subjects
1. _______________________________________________________
2. _______________________________________________________

Learner’s attitude

According to you, what language skills are most useful in order to attend an English-taught course? (highlight one or two)
1. listening
2. reading
3. writing
4. speaking
5. other (specify) _______________

Which teaching techniques do you prefer? (highlight one or two)
1. Front lecture (lezione frontale)
2. Group work
3. Interactive class (lezione interattiva)
4. Listening and note taking
5. Other (specify) ___________________

Do you take notes (prendere appunti) at the lesson?

YES  NO

If YES, in which language?

ITALIAN  ENGLISH

Do you find difficult to follow/understand an English-taught lesson?

YES  NO
If YES, please specify why *(feel free to write either in English or Italian)*

______________________________________________________________

______________________________________________________________

______________________________________________________________

Do you earn *(ricevi)* extra credits when you follow an English-taught programme?

YES  NO

Why did you choose an English-taught course? Please express your opinions, ideas, feelings, doubts, plans, etc. *(feel free to write either in English or Italian)*

______________________________________________________________

______________________________________________________________

______________________________________________________________

Do you think that you will learn the disciplinary contents as well as your colleagues studying in Italian?

YES  NO

If NO, specify why *(feel free to write either in English or Italian)*

______________________________________________________________

______________________________________________________________

______________________________________________________________

When attending an English-taught lesson, how well do you understand the contents of the lecture? *(highlight one)*

well – not so well – bad

How much do you agree with the following statements? *(1 completely agree - 4 completely disagree)*

- The speed of delivery is appropriate 1 2 3 4
- I would understand the lecture better in my native language 1 2 3 4
- The topic of the lecture is so challenging that the language used does not influence my understanding of the lecture 1 2 3 4
- The contents of the lecture remains secondary since I concentrate on the language so much 1 2 3 4
- It is difficult to follow the lecture, but it has little or nothing to do with the language used 1 2 3 4
- I would prefer a native-speaker of English as a lecturer 1 2 3 4

Add any other comment you find relevant:

______________________________________________________________

______________________________________________________________

______________________________________________________________

*Thank you for your time!*
**C. Lecture Observation grid**

### Lecture Observation Grid

<table>
<thead>
<tr>
<th>Date:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Title:</td>
<td></td>
</tr>
<tr>
<td>Topic:</td>
<td></td>
</tr>
<tr>
<td>Number of students:</td>
<td></td>
</tr>
<tr>
<td>Language:</td>
<td></td>
</tr>
</tbody>
</table>

#### The structure of the lecture

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>How was the lecture structured?</td>
</tr>
<tr>
<td></td>
<td>Was there a clear sequence of phases?</td>
</tr>
<tr>
<td>2</td>
<td>How was the direction of the lecture outlined?</td>
</tr>
<tr>
<td></td>
<td>How was the planned content specified?</td>
</tr>
<tr>
<td>3</td>
<td>Were there signals to mark beginning and ending of a topic?</td>
</tr>
<tr>
<td>4</td>
<td>What links were made to previous/future lectures and other</td>
</tr>
<tr>
<td></td>
<td>teaching?</td>
</tr>
<tr>
<td>5</td>
<td>Were mini-summaries given?</td>
</tr>
<tr>
<td>6</td>
<td>How were important points emphasised?</td>
</tr>
<tr>
<td>7</td>
<td>Were many examples/explications provided?</td>
</tr>
<tr>
<td>8</td>
<td>Did the lecture end in an interesting/original way?</td>
</tr>
<tr>
<td>9</td>
<td>Was the lecture a front lesson?</td>
</tr>
</tbody>
</table>
Was it interactive? Did it allow group work?

Classroom interaction

1. Did the lecturer ask questions?  
   When? How? Of what type?
2. Were there opportunities for students to ask the lecturer questions?
3. Were there opportunities for students to talk to their colleagues during the lecture?  
   How was this organised and did it work?
4. Were the students given any written or oral activity to do during the lecture? Why? How?
5. Was some ‘classroom management talk’ used?
6. Was the lecture held always in L2? Did the lecturer/the students ever use L1? If yes, when?

Lecturer behaviour

1. Was the lecturer audible and delivered at suitable speech?
2. Did the lecturer project enthusiasm about what he/she is doing?
3. Did the lecturer maintain eye contact?
4. Was the lecturer responsive to the audience?
5. Did he/she use gestures/body movements effectively?  

6. Did the lecturer face the audience?  

7. Did the lecturer livens up the lecture with appropriate use of humor?  

8. Did he/she use fillers (*um, er, you know, etc.*)?  

9. Did the lecturer move around the room?  

10. Did the lecturer use non technical language?  

### Students’ behaviour  

1. Did students show willingness to participate and engage as asked by the lecture?  

2. Did students take notes during the lecture? In which language?  

### Teaching aids  

1. Did the lecturer use slides?  

2. Did the lecturer use the blackboard?  

3. Were images and pictures used?  

4. What other teaching materials were used (textbook, handouts, etc.)?
D. Language Support Module Feedback

Language Support Module feedback

Dear student,

I would very much appreciate if you could give me a feedback of the language support module we experienced together.

Would you please fill in the questionnaire and send it back to me via e-mail.

Feel comfortable to answer in English or Italian.

Which topic did you like most?

1. Paragraph structure: topic, supporting and concluding sentences
2. Paragraph structure: unity and coherence
3. Passive clause: forms and functions
4. Relative clause: form and functions
5. Pronunciation: basic notions and phonetic chart
6. Classroom talk: most common utterances
7. Transition signals
8. Technical jargon and word-formation processes

Which topic did you find more useful for your study needs?

1. Paragraph structure: topic, supporting and concluding sentences
2. Paragraph structure: unity and coherence
3. Passive clause: forms and functions
4. Relative clause: form and functions
5. Pronunciation: basic notions and phonetic chart
6. Classroom talk: most common utterances
7. Transition signals
8. Technical jargon and word-formation processes
Did you enjoy having both sessions (discipline plus language) in the same lesson?

YES  NO

Motivate your answer (both YES or NO)

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Did you feel comfortable with the presence of both teachers at both sessions?

YES  NO

If NO, explain why and what you would change

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Would you have liked more Language Support sessions?

YES  NO

If YES, which language topic would you require?

________________________________________________________________________

Please, add any other comment you find relevant

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Thank you for your time!
E. Corpus of Lectures Transcriptions

Corpus of Lectures Transcription
at the Faculty of Engineering - University of Naples Federico II

N stands for Naples
Tel stands for Telecommunication Engineering
Civ stands for Civil Engineering
nm stands for male known speaker
400 is the identification number for Naples
1 is the progressive number of the lecture

<table>
<thead>
<tr>
<th>Date</th>
<th>Title</th>
<th>Transcript number</th>
<th>Duration</th>
<th>Lecturer ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>16-11-09</td>
<td>Wireless Networks - Multicarrier modulation</td>
<td>NTelEng_001</td>
<td>1:12</td>
<td>&lt;nm4001&gt;</td>
</tr>
<tr>
<td>30-11-09</td>
<td>Wireless Networks - Network Planning Interference</td>
<td>NTelEng_002</td>
<td>1:00</td>
<td>&lt;nm4001&gt;</td>
</tr>
<tr>
<td>15-11-10</td>
<td>Fundamentals of Structural Dynamics II - Multidegree of Freedom Systems</td>
<td>NCivEng_001</td>
<td>1:35</td>
<td>&lt;nm4002&gt;</td>
</tr>
<tr>
<td>06-12-10</td>
<td>Earthquake Engineering and Structural Control - Basic Principles of Structural Control</td>
<td>NCivEng_002</td>
<td>1:46</td>
<td>&lt;nm4002&gt;</td>
</tr>
<tr>
<td>02-12-10</td>
<td>Non Linear Structural Analysis - Solution Algorithm</td>
<td>NCivEng_003</td>
<td>1:07</td>
<td>&lt;nm4003&gt;</td>
</tr>
<tr>
<td>16-12-10</td>
<td>Non Linear Structural Analysis - Ultimate limit state of reinforced concrete sections subject to axial force and biaxial bending (Tangent Approach)</td>
<td>NCivEng_004</td>
<td>0:43</td>
<td>&lt;nm4003&gt;</td>
</tr>
<tr>
<td>04-05-11</td>
<td>Advanced Engineering Mathematics - Seven-point Method</td>
<td>NCivEng_005</td>
<td>0:36</td>
<td>&lt;nm4004&gt;</td>
</tr>
<tr>
<td>12-05-11</td>
<td>Advanced Engineering Mathematics - Problems in Statics</td>
<td>NCivEng_006</td>
<td>1:22</td>
<td>&lt;nm4004&gt;</td>
</tr>
</tbody>
</table>
F. Informal Interviews to Master Around students

Informal interviews to Master Around students at the end of the semester abroad
27th Oct 2011
The interviews are conducted in group and the language used is Italian

Siete arrivati lì, qual è stato il primo impatto?
Il primo impatto è stato oh mio Dio!
Dal punto di vista linguistico siamo stati molto in difficoltà.
Già all’aeroporto abbiamo avuto le prime difficoltà con le guardie della dogana. Successivamente abbiamo avuto problemi anche con il tassista perché la nostra pronuncia non era comprensibile. All’inizio la pronuncia ci ha limitati nel rapporto con gli altri in quanto loro non capivano noi e noi non capivamo loro.

In aula cosa è accaduto?
Il numero dei partecipanti al corso variava.
Un vantaggio era l’uso delle diapositive in quanto potevamo rivedere le lezioni. Avevamo anche le registrazioni on line delle lezioni. Questo ci permetteva di riascoltare la lezione. Le diapositive dell’intero corso erano già disponibili ad inizio corso e questo permetteva di arrivare a lezioni già pronti. L’organizzazione era notevole.
Le maggiori difficoltà linguistiche sono state con il professore indiano.
Abbiamo avvertito differenze di pronuncia tra i vari stati.
Noi riuscivamo a capire bene il professore greco ma non quello americano e la stessa difficoltà l’avevano anche gli altri studenti non americani. Per esempio non abbiamo mai capito una battuta in aula.
Abbiamo l’impressione che gli stranieri capiscano e parlino l’inglese molto meglio di noi italiani. Noi abbiamo studiato il British english e non siamo in
grado di comprendere la lingua parlata.

**Avete mai interagito in aula?**

Si, avevamo bisogno di fare le presentazioni di fine progetto. Alla fine concludevamo sempre con l’espressione scusate l’inglese.

L’interazione sia in Italia che all’estero è stata molto condizionata dalla limitata conoscenza della lingua.

**Se avevate difficoltà come risolvevate i problemi?**

Chiedendo di ripetere. I professori erano molto gentili e ripetevano anche utilizzando altri strumenti. Se necessario scriveva di pugno anche l’intero concetto.

La comprensione delle slides e delle lezioni era agevolata dalla shared knowledge.

Le slides non erano sufficienti per la preparazione dei lavori, era perciò necessario attingere ai libri la cui comprensione non era sempre facile. Avevamo l’impressione che i libri americani fossero diversi dai testi ed articoli in L2 cui eravamo abituati.

Qualche problema di incomprensione, o di equivoci causati sia dalla lingua che dalla cultura.

**La diversità di cultura accademica è stata avvertita?**

Il modo di studiare è molto diverso. Gli americani sono molto veloci, mentre noi abbiamo tempi più lunghi per pensare. Gli americani vengono formati per fare più che per pensare. Sono molto bravi a risolvere i problemi ma non riescono ad andare oltre i problemi.

Gli studenti americani non hanno dimostrato molta disponibilità nei loro confronti. L’uso di carta e penna sembra archiviata per gli americani.

Non abbiamo avuto difficoltà relative alla materia.

**Le lezioni svolte in Italia vi hanno aiutato?**

Si, ci hanno preparato. Avevamo lasciato l’inglese molti anni fa ed è stato
utile sia il language support erogato al centro linguistico (CLA) che le lezioni disciplinari in aula. Nel modulo di language support abbiamo studiato General English e un po’ di ESP.

**Come strutturereste un corso in lingua inglese?**

Io mi avvicinerei al sistema americano evitando la teoria.

Io invece medierei tra l’approccio teorico e quello pragmatico.

Io farei differenza tra laurea e master e adatterei il corso agli scopi dei partecipanti.

Dal punto di vista linguistico lavorerei come nel corso *Innovative Building Material* che prevedeva un’introduzione di base alla nomenclatura fondamentale in lingua inglese.

**Il corso in Italia, dal punto di vista metodologico, è stato soddisfacente?**

Si, perché questo è il nostro sistema.

Inoltre, non avevamo difficoltà a capire i docenti italiani che parlavano inglese. La lingua era del tutto indifferente rispetto alla comprensione del contenuto. Non avevamo mai bisogno di chiedere una ripetizione. Questo è stato possibile perché avevamo una formazione di base.