UNIVERSIDAD DE EXTREMADURA

# TESIS DOCTORAL

# El Potencial del Enfoque AICLE para el Profesorado de Educación Superior en Portugal: un Análisis de Necesidades Lingüísticas en el Instituto Politécnico de Portalegre

**MARGARIDA MARIA BAGINA COELHO**

**PROGRAMA DE DOCTORADO EN LENGUAS Y CULTURAS**

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**Con la conformidad de los directores**

**Rafael Alejo González** **Ana María Piquer Píriz**

# The Potential of the CLIL Approach with Higher Education Teachers in Portugal: A Linguistic Needs Analysis Study at the Polytechnic Institute of Portalegre

“One child, one teacher, one book and one pen can change the world. Education is the only solution. Education first.”

Malala Yousafzai, UN Youth Assembly, 2012

## Dedication

To the memory of my parents, who could not live this moment with me.

To my daughter and my husband, who have lived with half of me for such a long time.

**Acknowledgments**

"3 For everything there is a season, and a time for every matter under heaven"

(Ecclesiastes 3:1-8).

And this is my time to accomplish this process.

It wouldn't have been possible to reach this stage without the care, support, and love of all the people who have accompanied me during this journey, and to whom I want to thank.

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I thank Irene, who was always present, night and day, not letting me go down and making me believe I could and would do it; I thank Teresa who was always, always there when I couldn´t be, in all occasions, with no 'buts'; I thank Carolina, Ana, Cristina, Lena and Piedade, who were always available, ready to clear a doubt or explain something once again; I thank Margarida, who motivated me to go on, and who has always been a source of inspiration in my life; I thank Lucinda, who respected my silences and never blamed me for them.

I would also like to thank my colleagues at IPP, who have collaborated in this research and made it possible.

I thank my friends and my family, who in so many different ways have told me they were there for me, even knowing I was not there with them.

Finally, I thank Rita, my daughter and António, my husband. For everything! Rita, António, I'm back!

## Abstract

The general purpose of this study is the investigation of the potential of the CLIL/ICLHE approach with higher education (HE) teachers in Portugal through a needs analysis study carried out at the Polytechnic Institute of Portalegre (IPP), in Portugal. More specifically, the aim of this research study is to examine IPP lecturers' perceptions towards the use of English (or any other foreign language) as a medium of instruction, and their perceived training needs in order to step up to a CLIL/ICLHE education model. A particular focus will be directed to lecturers' self-perception of both their current situation and their training needs on the following aspects: (1) linguistic competence in English/FL (their own and their students), (2) bilingual education policies, theories, and methodologies for bilingual education, (3) materials and resources for bilingual education and (4) professional development for bilingual teaching.

The investigation of these comprehensive issues rests on three thematically aligned pillars that give the study a broad contextual, conceptual and methodological framework. The contextual framework offers an extensive review of literature on internationalisation of HE, with a focus on some key issues related to it, namely globalisation, the scope and rationales behind internationalisation, the concepts of "internationalisation at home" and "internationalisation of the curriculum", future paths for internationalisation, European policies for the promotion of internationalisation in HE, including the role of English as a lingua franca, and English taught programmes in Europe and in the Portuguese context. The conceptual framework presents a review of the major models of bilingual teaching in HE and of some of the key theoretical tenets of the CLIL/ICLHE approach, followed by an overview of some research findings in English-taught programmes with a CLIL/ICLHE approach in HE, with a focus on CLIL teacher training in HE and the challenges it entails.

Informed by and aligned with the contextual and theoretical frames, follows the methodological framework designed for the study. It starts with a close-up view of the specific educational context in which the study was conducted, followed by the explanation of the research methodology used. The research design covered the collection of data through a questionnaire (Pérez Cañado, 2015, 2016b) addressed to all lecturers of IPP in the academic year 2016-17, a framed narrative inquiry (Barkhuizen et al., 2014), thematically linked to the questionnaire applied to lecturers, directed to all those lecturers at IPP who, in that same academic year, had the experience of teaching their subject through a FL (either teaching multilingual classes at the Institution, or abroad in ERASMUS teaching mobilities), and an extensive documental research on IPP institutional internationalisation and language policy documentation in force at the time. The triangulation of the different sources of information enabled us to develop a multi-layered framework of solid research and through an in-depth analysis of the data collected.

Results of the research undertaken indicate that globally, IPP lecturers have a weak and very critical image of their skills to engage in bilingual teaching. Although they seem to be quite confident about their linguistic skills, which they see as generally adequate, the perception of their knowledge of bilingual education policies, theories, and methodologies for bilingual education is not so solid, and barely reaches adequate level. They also have a generally negative perception about their knowledge of materials and resources for bilingual teaching, and an even lower - "insufficient"- self-perceived idea of their ongoing professional development for teaching in a FL/English. Some mismatches were found between lecturers self-perceived knowledge of their ongoing situation and training needs for bilingual teaching, and their reported teaching practice, collected through the framed narrative inquiries (FNI). Moreover, there is an across-the-board demand for increased training, with lecturers' self-perception that they need considerable training in all the areas of bilingual education.

These are relevant findings to consider for the general implications to be drawn for IPP internationalisation policy, future strategic positioning and planning of teachers training provision, exploring the CLIL/ICLHE approach.

Keywords: CLIL, EMI, ICLHE, teacher training, needs analysis, Higher Education

## Resumen

El propósito general de este estudio es la investigación sobre el potencial del enfoque AICLE/ICLES en profesores de educación superior (ES) en Portugal a través de un estudio de análisis de necesidades realizado en el Instituto Politécnico de Portalegre (IPP), en Portugal. Más específicamente, el objetivo de este estudio es examinar las percepciones de los profesores del IPP sobre el uso del inglés (o cualquier otro idioma extranjero) como medio de instrucción, y de sus necesidades formativas para avanzar hacia una educación AICLE/ICLES. Se prestará especial atención a la autopercepción de los profesores sobre su situación actual y sus necesidades de formación en los siguientes aspectos: (1) competencia lingüística en inglés/FL (propio y de sus alumnos), (2) políticas de educación bilingüe, teorías y metodologías para la educación bilingüe, (3) materiales y recursos para la educación bilingüe y (4) desarrollo profesional para la enseñanza bilingüe.

La investigación de estos temas se sustenta en tres pilares alineados temáticamente, dando al estudio un amplio marco contextual, conceptual y metodológico. El marco contextual ofrece una revisión extensa de la literatura sobre la internacionalización de la ES en relación a algunos temas clave, como son la globalización, el alcance y las razones detrás de la internacionalización, los conceptos de "internacionalización en casa" e "internacionalización del currículo", futuras líneas de actuación para la internacionalización, políticas europeas para la promoción de la internacionalización en la ES, incluido el papel del inglés como lengua franca, y programas de enseñanza de inglés en Europa y en el contexto portugués. El marco conceptual presenta una revisión de los principales modelos de enseñanza bilingüe en la ES y de algunos de los principios teóricos clave del enfoque AICLE/ ICLES, seguido de una descripción general de algunos de los principales resultados obtenidos en estudios de investigación realizados sobre el enfoque AICLE/ICLES en ES y centrados, principalmente, en la formación del profesorado AICLE en ES y los retos que conlleva.

Alineado con los marcos contextuales y teóricos, el marco metodológico comienza con una revisión del contexto educativo específico en el que se realizó el estudio, seguido de la explicación de la metodología de investigación utilizada. El diseño de investigación conllevó la recogida de datos a través de un cuestionario (Pérez Cañado, 2015, 2016) dirigido a todos los profesores del IPP en el curso académico 2016-17, así como una *indagación narrativa enmarcada* (Barkhuizen et al., 2014) vinculada temáticamente al cuestionario aplicado a los profesores, dirigido exclusivamente a los profesores del IPP que, en ese mismo curso académico, tuvieran la experiencia de impartir su asignatura a través de una lengua extranjera (ya sea impartiendo clases plurilingües en la Institución, o en el extranjero en movilidades docentes ERASMUS), y una amplia investigación documental sobre la internacionalización institucional del IPP y la documentación de la política lingüística vigente en ese momento. La triangulación de las diferentes fuentes de información ha permitido el desarrollo un marco de investigación sólido, con un análisis en profundidad de los datos recopilados.

Los resultados de la investigación realizada indican que, a nivel global, los profesores de IPP conceptualizan sus habilidades para participar en procesos de enseñanza bilingüe como insuficientes y de forma muy crítica. Aunque parecen tener bastante confianza en sus habilidades lingüísticas, que consideran generalmente adecuadas, la percepción de su conocimiento de las políticas, teorías y metodologías de educación bilingüe para la educación bilingüe no es tan sólida y apenas alcanza el nivel adecuado. También tienen una percepción generalmente negativa sobre su conocimiento de los materiales y recursos para la enseñanza bilingüe, y una idea no a la altura - "insuficiente" - de su desarrollo profesional continuo para enseñar en una lengua extranjera / inglés. Se encontraron algunos desajustes entre el conocimiento autopercibido de los profesores sobre su situación actual y sus necesidades de capacitación para la enseñanza bilingüe, y su práctica docente informada, recopilada a través de las *indagaciones narrativas enmarcadas*. Además, existe una demanda generalizada de una mayor formación en todas las áreas de la enseñanza bilingüe.

Estos resultados son relevantes debido a sus implicaciones para su aplicación, entre otros ámbitos, a la política de internacionalización del IPP, el posicionamiento estratégico future de la institución y la planificación de la provisión de formación docente dentro del enfoque AICLE / ICLES.

Palabras clave: AICLE, EMI, ICLES, formación docente, análisis de necesidades, Educación Superior

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@home – At Home
AL – Additional Language
BP – Bologna Process
CBI – Content-Based Learning
CBLT – Content-Based Language Teaching
CCISP – Conselho Coordenador dos Institutos Superiores Politécnicos
CEFRL – Common European Framework of References for Languages
CercleS – European Confederation of Language Centers in Higher Education
CLIC - Languages and Cultures Center at IPP
CLIL – Content and Language Integrated Learning
CPLP - Community of Portuguese Speaking Countries
CS – Current Situation
CTeSP – Cursos Técnicos Superiores Profissionais
CU – Curricular Unit
DGES - Direcção Geral do Ensino Superior
EAIE - European Association for International Education
EAL – English as na Additional Language
ELF – English as a Lingua Franca
EMI – English as a Medium of Instruction
EC – European Community
ECML – European Centre for Modern Languages
ECTS – European Credit Transfer System
EHEA – European Higher Education Area
EME – English-Medium Education
EMEMUS – English-Medium Education in Multilingual University Settings
ERASMUS – European Region Action Scheme for the Mobility of University Students
ESAE – School of Agrarian Studies at Elvas
ESECS – School of Education and Social Sciences
ESP – English for Specific Purposes
ESS – School of Health
ESTG – School of Technology and Management
ETPs – English-taught Programmes

EU – European Union

FNI@home – Framed Narrative Inquiries at home

FNI@broad – Framed narrative Inquiries abroad

FL – Foreign Language

FNI – Framed Narrative Inquiry

HE – Higher Education

HEI – Higher Education Institution

GDP – Gross Domestic Product

I@H – Internationalisation at Home

IaH – Internationalisation at Home

ICLHE – Integrating Content and Language in Higher Education

IoC – Internationalisation of the Curriculum

IPP – Polytechnic Institute of Portalegre

ISCAP – Instituto Superior de Contabilidade e Administração do Porto

IT – Information Technology

JSP – Joint Study Programmes

L. – Lecturer (responded to either the Framed Narrative Inquiry at home or abroad)

L1 – First Language

L2 – Second Language

LLP – Lifelong Learning Programmes

MEC – Ministério da Educação e Cultura

MOOCS – Massive Online Open Courses

NALTT – Needs Analysis of Language Teacher Training: A European Perspective

OECD – Organisation for Economic Co-operation and Development

OJEU – Official Journal of the European Union

PSA – Present Situation Analysis

ReCLes.pt – Network Association of Language Centres of Higher Education in Portugal

REC – External Relations and Cooperation Office

SAS – Social Action Services

SPSS – Statistical Package for the Social Sciences Software

TA – Teaching Assistant

TBL- Task-based Learning

TBLT – Task-Based Language Teaching

TN – Training Needs

TSA – Target Situation Analysis

QUAN. – Quantitative

QUAL. – Qualitative

USA – United States of America

UN – United Nations

UNESCO - United Nations Educational, Scientific and Cultural Organization

UK – United Kingdom

# CHAPTER ONE:
# INTRODUCTION

## 1. Background and Motivation

The idea for the research presented in this study matured in a two-fold but parallel ways: on one track, there was my involvement in the creation and launching of the ReCles.pt (2009), the Network Association of Language Centres of Higher Education in Portugal (ReCLes.pt, http://recles.pt), and particularly in the CLIL-ReCLes.pt research project that was developed within the Association between 2012 and 2015; on the other track, there was my own professional context as an English lecturer at the Polytechnic Institute of Portalegre (IPP) and the long felt desire to address very specific needs of my colleagues when teaching in English, to support them in a practical way and simultaneously to be able to contribute to the enhancement of the internationalisation potential of the higher education institution (HEI) where I have been teaching for more than 25 years.

From the natural intersection of these two vivid personal interests, resulted an initial general idea of designing a doctoral research project which broadly aimed at examining IPP lecturers' views and needs in terms of using English or any other foreign language (FL) as a medium of instruction in their classes.

The already comprehensive research on the potential of "Content and Language Integrated Learning" (CLIL) as an innovative educational approach in higher education (HE) and the reported benefits for the different stakeholders (HEIs, faculty members and students) was a decisive factor for the interest in exploring the potential of this approach in the particular context of IPP. CLIL can offer teachers an opportunity for professional development and students (and teachers) an additional opportunity to develop their linguistic competences, when so often they feel that they are not progressing in the FL use as much as they want and need for their future job and career. Moreover, CLIL can be instrumental to IPP development and the driving force behind a needed change in IPP internationalisation context.

## 2. Research Aims and Objectives

On 30 May 2017, the European Commission (EU) published the communication "A renewed EU agenda for Higher Education" as part of the EU broader strategy to support young people and strengthen European development. This renewed plan for the future reasserts higher education's "unique role" (p. 2) in a world where the "demand for highly skilled, socially engaged people is both increasing and changing" (p. 2). The impact of digital technology on the labour market and the need to counter "the growing polarisation of our societies and distrust of democratic institutions" (p. 2) are challenges HEIs are presently facing. For HE systems to work effectively, both education, research, society and innovation, the building blocks of "the knowledge helix" (p. 10), must be recognised and reinforced in the strategies of individual HEIs, in national and regional higher education policy and across the activities undertaken by the EU.

International cooperation and circulation within European HEIs and all over the world levered internationalisation to the role of driver of change in HEIs, bringing to the tertiary sector innovation and a new dynamic with international partners and broader vision and wider scope of action. Knight synthetises the signs of the time in this way:

> internationalization is changing the world of higher education, and globalization is changing the world of internationalization. Key drivers for this transformation are the development of advanced communication and technological services, the dominance of the knowledge society, increased international labor mobility, more emphasis on the market economy and the trade liberalization, increased levels of private investment and decreased public support for education, and lifelong learning.
>
> Knight, 2008, p. 1

HEIs international engagement is evidenced in the general high mobilities numbers, increasing staff mobility, dual taught programmes, international research cooperation projects or international branch campus (Wilkins & Huisman, 2012). HEIs are now based locally but available all over the world through MOOCS and joint programmes. One key piece of the puzzle of this change is language, and particularly the use of English as a lingua franca. As noted by Marsh (2018, p. 5), "the bedrock for enabling universities to respond to the challenges present, and the strategic opportunities in sight, includes the role of language. International engagement requires access to a lingua franca. Across the world at present this lingua franca is invariably English".

But the desire or need to communicate in a common language explains only partly the reason why HEIs in Europe have been so active in launching and implementing English taught programmes. Wächter and Maiworm (2014) list other key reasons for this outburst of courses taught in English, such as the provision of conditions for foreign students to attend courses; the support to non-mobile students

to improve their intercultural and international skills; the enhancement of the international profile of the institution; the attraction of the most talented students both from other countries and national ones; and the growth of external funds (more fees) entering the HEIs with the higher number of students entering the HEI.

As noted by Arco-Tirado et al. (2019, p. 64) "this rapidly emerging phenomenon, particularly in non Anglo-Saxon countries, has led to a new educational phenomenon under diverse terms like bilingual degree programs, bilingual or plurilingual learning, or bilingual MOOCs" and to the dissemination of English as a Medium of Instruction (EMI) practices or programmes, an approach which mainly consists in the delivery of instruction in English. Either called a "growing global phenomenon" (Dearden, 2015) or a "high-speed train" (Macaro, 2015), the EMI phenomenon is a complex process, whose current "implementation produces more challenges than opportunities' for HE teachers and students (Macaro et al., 2018, p. 68). The use of English or any other second language (L2) in academic contexts, either for research, for teaching specialized content, or for communicating with specialists, requires language skills and pedagogical knowledge which are usually not taught when learning the language in general English classes (Pérez & Ramiro, 2017). Díaz-Pérez and Marsh (2017, p. 11) underline that "when university staff use English for the purposes of realizing international engagement whether through teaching, research, publishing, stakeholder relations, or other forms of communication, special awareness and skills are a pre-requisite for success". Thus, the introduction and the use of a L2 as a medium of instruction at tertiary level raises complex problems for both content specialist lecturers and students, issues such as the cultural impact of offering subjects through a lingua franca, the lecturers' and the students' level of English, methodological skills involved in teaching in another language, teachers' training for teaching content in English, among others (O'Dowd, 2018).

Content and Language Integrated Learning (CLIL) or Integrating Content and Language in Higher Education (ICLHE), the preferred term used at university level, is defined as "a dual-focused educational approach in which an additional language is used for the learning and teaching of both content and language' (Coyle et al., 2010, p. 1). CLIL/ICLHE being "a potential lever for change and success in language learning" (Pérez Cañado, 2017b, p. 131) provided HEIs' different stakeholders and policy makers with a convenient instrument to foster plurilingualism, to better prepare students for the demands of the 21st century (Dafouz & Guerrini, 2009), a central element to provide employability to graduates and undergraduates (Aguilar & Rodríguez, 2012), and to enhance their language skills by allowing for an increased exposure to and engagement with the target language (Lyster, 2017).

Over the past two decades, the CLIL approach has been gaining momentum in Europe, and more recently it has been successfully experimented in south America and in Asian Countries (Banegas, 2012). Results of research carried out on different aspects of CLIL/ICLHE in practice point, for example, to lexical knowledge gains (Alejo-González & Piquer-Píriz, 2016; Castellano-Risco, 2018);

to CLIL as a useful construct for promoting FL learning (Dalton-Puffer, 2011; Pérez Cañado, 2012; Cenoz et al., 2014); positive effects on FL listening skills (Lasagabaster, 2011; Lorenzo et al., 2010) or cognitive gains and improved content learning (Van de Craen et al., 2007).

Despite CLIL/ICLHE credited successes reported by research, there are some more cautious voices that require further studies. For example, in a comprehensive analysis of CLIL research carried out in 2012 by Pérez-Cañado, one of the conclusions presented by the author underlines the fact that despite the "extensive theorizing on CLIL, its principles and models, recommendations for its implementation, or reviews of the research conducted on it [h]owever, solid empirical studies have been sparse" and, she continues, "few are robust accounts of outcome-oriented research where pertinent variables are factored in and controlled for" (p. 329). More recent updates of the same author to her review of the literature on CLIL identify similar deficiencies in CLIL research (2017b, p. 93; 2020a, p. 2), in line with other reviews on CLIL (Dearden & Macaro, 2016; Macaro et al., 2018 and San Isidro, 2019).

Vital for the success of CLIL/ICLHE implementation are lecturers, who, as pointed out by Piquer-Píriz and Castellano-Risco (2021) are the key stakeholders and promoters of the process and have a key role to play. Pérez Cañado (2018) criticizes the lack of support given to lecturers who, according to her, are "undoubtedly the actors who have been more deeply impacted by CLIL, have often been thrown out to teach according to this approach without sufficient or adequate training, because the demands placed on them by the implementation of this new approach have been largely overlooked" (Pérez Cañado. 2018, p. 213).

To counter this situation, it is necessary to invest in CLIL/ICLHE teacher training and make this issue a paramount endeavour of the present and future CLIL/ICLHE agenda (Pérez Cañado. 2018) as, according to Pérez Cañado (2016a), CLIL/ICLHE teacher training is "where CLIL will stand or fall in terms of sustainability" (2016a, p. 2). This need has already been stated in research (Lasagabaster & Ruiz de Zarobe, 2010; Doiz et al., 2013b; Ball & Lindsay, 2013), but the number of CLIL training programmes implemented is still considered scarce (Costales et al., 2014, p, 5). Recently, this "research gap" (Pérez Cañado, 2020a, p. 2), has been re-acknowledged by Pérez Cañado et al. (2021) in line with other voices like Macaro et al (2018), O'Dowd (2018), Rubio-Cuenca and Perea-Barberá (2021) who also pinpoint the scarcity of studies in this area. Perez Cañado et al. (2021) deem it as a priority measure, to continue "replicating studies in different contexts in order to base decisions regarding CLIL programs on real and pertinent needs. The one-size-fits-all model no longer fits the bill in CLIL scenarios […] and greater contextualization and situatedness are thus necessary in order to attune CLIL to context-specific realities" (p. 2).

Thus, set against a contextual background of an increasing need for internationalization in HEIs in Europe and throughout the world, the urgency of preparing HE lecturers to teach their specialized

subjects using a L2 (English), the conceptual background of a sound research on the advantages of the CLIL/ICLHE approach in programmes in HE, the sparse evidence-based research, grounded on solid diagnosed needs analysis aiming at providing for a more effective training of CLIL/ICLHE to university lecturers, and the importance of adjusting research to specific contexts, this dissertation aims, in general terms, at exploring the current perceptions of the lecturers of the Polytechnic Institute of Portalegre (IPP) concerning the use of English as a medium of instruction and their perceived needs for training in order to adapt to a CLIL/ICLHE education model. The research study examines lecturers' perceived current situation and perceived training needs on specific aspects of bilingual education, namely the competence level in the English language; the theoretical and methodological knowledge of bilingual education; the knowledge of materials and resources for bilingual education and their level of personal development in bilingual education.

## 3. Structure of the Thesis

This dissertation is organised into four main parts, the first three parts enacting as frameworks for the fourth part, where the results and discussion of the research study are presented.

Part one, the contextual framework (chapter two), provides an extensive review of literature on internationalisation of HE, with a focus on some key issues related to it, namely globalisation, the scope and rationales behind internationalisation, the concepts of "internationalisation at home" and "internationalisation of the curriculum", future paths for internationalisation, European policies for the promotion of internationalisation in HE, including the role of English as a lingua franca, and English taught programmes in Europe and in the Portuguese context.

Part two, the conceptual framework (chapter three), presents a review of the major models of bilingual teaching in HE and of some of the key theoretical tenets of the CLIL/ICLHE approach, followed by an overview of some experiments of English-taught programmes with a CLIL/ICLHE approach in HE, with a focus on CLIL teacher training in HE and the challenges it entails.

Part three, the methodological framework (chapter four), starts with a close-up view of IPP, the educational context in which the study was conducted, followed by the explanation of the research methodology and instruments used (questionnaire and framed narrative inquiries).

In part four of the dissertation are presented the study results (chapter five), the discussion of the findings (chapter six) and the conclusions (chapter seven), including implications of the research results, limitations encountered and perspectives for further investigations. Table 1.1 presents a detailed description of the dissertation structure, with the headings of the different parts, chapters and sections.

Table 1.1

*Phd dissertation structure*

| Part | Chapter | Section | Subsections |
|---|---|---|---|
| Introduction | Chapter One | | 1. Background and motivation.<br>2. Research aims and objectives<br>3. Structure of the thesis |
| **Part 1** Contextual Framework | Chapter Two | The Internationalisation of Higher Education | 1. Defining the concept of internationalisation within the context of HE<br>2. Internationalisation vs Globalization<br>3. The Scope and Rationales for the Internationalisation of HE<br>4. Questioning the future path(s) of internationalisation<br>5. European policies for the promotion of internationalisation in HE<br>6. Internationalisation and English-taught programmes in HE<br>7. Internationalisation of HE in Portugal |
| **Part 2** Conceptual Framework | Chapter Three | Models, Concepts, Empirical Findings and Teacher Training | 1. Some models of bilingual teaching in HE – EMI and CLIL/ICLHE<br>2. The CLIL/ICLHE conceptual approach and framework<br>3. Research studies within English-taught programmes in HE<br>4. CLIL teacher training/education in HE |
| **Part 3** Methodological Framework | Chapter Four | The Case Study Context, Research Methodology and Design | 1. The Polytechnic Institute of Portalegre<br>2. Research methodology and design |
| **Part 4** Study Results, Discussion and Implications | Chapter Five | Results | 1. The questionnaires<br>2. The framed narrative inquiries (FNI)<br>3. Limitations |
| | Chapter Six | Discussion | 1. IPP lecturers' self-perceived development for teaching their subjects in English<br>2. IPP lecturers' self-perceived training needs for teaching their subjects in English<br>3.Within-cohort compariso |
| | Chapter Seven | Conclusions and Implications of the Findings | 1. Conclusión<br>2. Conclusions<br>3. Implications<br>4. Limitations<br>5. Future Research |

# *Part One*

# *Contextual Framework*

# CHAPTER TWO:
# THE INTERNATIONALISATION OF HIGHER EDUCATION

Over the last two or three decades, HEIs have been actively committed, in different ways, to preparing their students to live and work in a globalized world. One of the lines of action that serves these objectives is the development of institutional internationalisation policies and strategies in HEIs, which generally set as overarching aims the promotion of international exchanges and learning opportunities for students, staff, and researchers (Maringe, 2010; Sandström & Hudson, 2018; Crăciun, 2018; Soliman et al, 2019; de Wit & Altbach, 2021). To engage in and bring into the classroom practice such an endeavour is not an easy task as, to quote Lauridsen's (2020) incisive title, "It does not happen by osmosis: Creating an internationalized learning opportunity for all students requires careful consideration and specific action" (p. 205).

Taking advantage of the increasingly widespread use of English as a lingua franca (ELF) and by promoting the use of English as the language of instruction (EMI – English as a Medium of Instruction) in non-English speaking contexts, either in individual classes or through whole English-taught programmes, HEIs have been able to foster the internationalisation of the institutions, the curricula, specialised subjects and research (Dearden, 2014; Wächter & Maiworm, 2014). In the area of intersection between internationalisation and EMI, such issues as language policy, internationalisation "at home" and of the curriculum, and methodological approaches to teaching and learning of disciplinary content through a FL, for example, have become key aspects that must be addressed by each HEI. The many advantages of internationalisation policies and measures in HE have been extensively documented in specialised literature (Maringe, 2010; Knight, 2013; Aguilar and Rodríguez, 2012; Park, 2007; Tatzl, 2011; Wong, 2010; Costa & Coleman, 2013), but some authors have identified a mismatch between the announced internationalisation policies (European, national, and institutional) and what happens in the day-to-day life of HE academic practices, when it comes to

offering an internationalisation experience to all students in an HEI (Hudzik 2011, 2015; Lauridsen, 2020; Bowles & Murphy, 2020).

Portuguese HEIs are in line with the trend towards globalization of HE and, especially in the last two decades, have achieved significant results in terms of international affiliations, number of "in" and "out" students, teaching and non-teaching staff mobility, joint programs and degrees and joint research projects (Nada & Araújo, 2017; Mourato et al, 2019; Lourenço et al, 2020).

The topics here briefly outlined are the key thematic axis of the reflection about the development of internationalisation of HE presented in chapter two of this dissertation. An insight into aspects of internationalisation of HE sets up the contextual framework and background that encompasses this research work on IPP lecturers' perception of their skills for bilingual teaching and their major training needs to engage in it.

Chapter two aims at giving a broad view of the internationalisation issue within the context of HE, first, by clarifying the definition of the concept (section 1.) distinguishing it from the notion of "globalisation" (section 2). The concept of internationalisation is further explored in section 3. with a closer look at its range and key rationales that lay behind its development, and particularly the growth of "internationalisation at home" (section 3.1) and "internationalisation of the curriculum" perspectives (section 3.2.) and a review of some of the challenges and opportunities for the future of internationalisation in HE (section 4). In section 5, the focus is mainly on European HE policies and internationalisation, including a review of the role of English in HE (section 5.1). Finally, we bring the topic of internationalisation in HE to the day-to-day practice of HEIs and relate internationalisation aspects with the increasing number of English-taught programmes in HEIs (section 6) and we close this contextual framework by focusing on national ground and discussing governmental policies and local institutional approaches of English-taught programmes in HE in Portugal (section 7).

## 1. Defining the concept of "internationalisation" within the context of HE

Historically, the term "internationalisation" applied to HE contexts became widely used in the 1990s (Knight, 2004; de Wit, 2002, 2013), when the international dimension of HE started emerging more consistently "as a process of strategic transformation of institutions" (Callan, 2000, p. 17). Previously, the term "international education" was commonly applied to describe any school-related activity developed abroad and it was generally associated either with mobility (studying abroad, exchanges, students or academic international mobility), or with the curriculum (multicultural education, international studies, peace education and specific area studies) (de Wit, 2002; de Wit, 2013; de Wit, 2014). Based on an analysis of the concept as used in American research literature for over 30 years, Arum and Van de Water (1992) came to a definition of "international education" mainly directed

to the institutional level and described as "the multiple activities, programs and services that fall within international studies, international educational exchange and technical cooperation" (p. 202).

There is not a precise time when the term "international education" gave place in literature to the concept of "internationalisation of (higher) education", as both expressions had been used interchangeably from the 1970s on (Jones & de Wit, 2012; de Wit, 2014). De Wit (2014) explains the transition from one to the other as "a reflection of the increasing importance of these international dimensions in higher education and of the related transfer from a marginal set of programmes and activities to a more comprehensive process" (p. 90). Internationalisation gained a wider focus, moving away from the exclusive emphasis on student mobility towards more comprehensive approaches and it became a central strategic topic at the institutional level and a key dimension in national higher education policy.

In the extensive literature on the internationalisation in HE, the concept has been variously defined. For example, in a study to give an overview of European national policies for internationalisation in HE over the previous ten years until the year 2000, van der Wende (1997) refers to internationalisation as "any systematic, sustained effort aimed at making higher education (more) responsive to the requirements and challenges related to the globalisation of societies, economy and labour markets" (p. 19). Emphasizing the relation between internationalisation and globalisation, this definition is too broad in scope and not contextually applied to educational settings. As Knight (2004) explains, this approach "only positions the international dimension in terms of the external environment, specifically globalization" (Knight, 2004, p. 10).

A narrower approach in scope is suggested by Soderqvist (2002), who defines internationalisation as "a change process from a national higher education institution to an international higher education institution leading to the inclusion of an international dimension in all aspects of its holistic management in order to enhance the quality of teaching and learning and to achieve the desired competencies" (Soderqvist, 2002, p. 29). Soderqvist's definition emphasizes mainly the academic rationale, which is limited in its applicability (Knight, 2003).

In 1993, Jane Knight, an influential contributor to this debate, introduced a definition of internationalisation which brings into play a different perspective of the term and calls for an evolutionary integration of internationalisation at institutional level, in a process-oriented approach. In the author's words, internationalisation is "the process of integrating an international/intercultural dimension into the teaching, research and service functions of the institution" (Knight, 1993, p. 21; 1994, p. 3). With this definition it becomes clear that internationalisation needs to be understood as a dynamic relationship at the national and sector level as well as at the institutional level.

Qiang shares Knight's notion of integration inherent in the definition of internationalisation and argues that "internationalization must be entrenched in the culture, policy, planning and organizational

process of the institution so that it can be both successful and sustainable" (2003, pp. 257-258). In line with van der Wende (1997) and Knight 1993), Qiang (2003) argues that any internationalisation policy will only succeed if it is fully embedded into all the activities and policies of the HEI and receives contributions and is actively enacted by all the stakeholders, such as policy makers, administrators, management, services.

Taylor (2004) looks at the motivation of four HEI in their pursue to implement a strategy for internationalisation and examines the activities and initiatives undertaken by these institutions for that purpose in the areas of teaching and learning, research, staffing arrangements, and institutional management. For Taylor "internationalization represents one of the most significant drivers of change facing the modern university. For this reason, the development of effective strategies for internationalization is now an essential element within university management" (2004, p. 168). He concludes that "the development of a strategy for internationalization is one of the strongest forces for change facing universities at the start of the 21st century thereby challenging many traditional approaches to higher education and questioning the structures in place" (pp. 167-168).

In 2004, in an attempt to overcome the existing misinterpretations and misuses of the term "internationalisation" and attending to the new complexity and developments surrounding the international dimension of HE, Knight would reformulate her own previous definition and suggested the following new working definition on internationalisation: "the process of integrating an international, intercultural, or global dimension into the purpose, functions or delivery of post-secondary education" (2004, p. 11). According to Knight, the advantages of this updated definition in relation to other definitions previously presented are its adequacy "for use in a broad range of contexts and for comparative purposes across countries and regions of the world" (Knight, 2004, p. 11). The intended neutral stance and comprehensiveness of the definition explains, thus, the omission of "rationales, benefits, outcomes, actors, activities, and stakeholders of internationalization, as they vary enormously across nations and also from institution to institution" (Knight, 2004, p. 11). In fact, by defining internationalisation with the more generic terms of "purpose", "function", and "delivery" rather than the corresponding specific functional terms of "teaching", "research", and "service", the author presents a more ample definition, which can fit very different sectors, institutions, and providers in the diverse domains of HE.

Knight's definition of internationalisation remains one of the prevalent in research literature, particularly because by characterizing internationalisation as a process of strategic transformation of institutions, the author opens a new dimension and clearly moves away from earlier, more fragmentary and limited concerns with the management of student mobility or other separated aspects. Taken as a process, internationalisation: 1) is placed at the same level as other processes already being accomplished by HEIs (Coelen, 2016, p. 36); 2) is reinforced in terms of its systemic characteristics

and gains, "an evolutionary or developmental quality" as Knight (2004, p. 11) states; and 3) displays an idea of an ongoing effort, which require constant monitoring and follow-up actions, in a continuous cycle of improvement (Qiang, 2003; Taylor, 2004). Being a dynamic process, the internationalisation of HE is continuously interplaying with the context in which it occurs.

The 2015 European Parliament study on the internationalisation of HE revisited Knight's broadly accepted definition of internationalisation, rephrasing it to "the **intentional** process of integrating an international, intercultural or global dimension into the purpose, functions and delivery of post-secondary education**, in order to enhance the quality of education and research for all students and staff, and to make a meaningful contribution to society**" (de Wit et al, 2015, p. 29, bold in the original). This reviewed definition broadens and refocuses again the scope of the former definition, by explicitly assigning to the process of internationalisation an intentionality and pre-planning quality not previously mentioned. Moreover, and as explained by the authors, the definition

> reflects the increased awareness that internationalisation has to become more inclusive and less elitist by not focusing predominantly on mobility but more on the curriculum and learning outcomes. The 'abroad' component (mobility) needs to become an integral part of the internationalised curriculum to ensure internationalisation for all, not only the mobile minority. It re-emphasises that internationalisation is not a goal in itself, but a means to enhance quality, and that it should not focus solely on economic rationales.
>
> de Wit et al., 2015, p. 283

Nevertheless, for current scholarly debate, a missing link in Knight's (2004) definition is the absence of the role of the learner, the teacher, and the learning process itself. Instead, global rankings are generally measured through mobility numbers and the existence (or not) of institutionalized mobility parameters (Coelen, 2016). Feeling the lack of a concrete reference to the learner in the definition of internationalisation, Yemini (2015) suggested a definition of internationalisation as "the process of encouraging integration of multicultural, multilingual and global dimensions within the education system, with the aim of instilling in learners a sense of global citizenship" (Yemini, 2015, p. 21). Besides assigning the learner a central position in the internationalisation process, the author explains that the definition she suggests is purposefully not neutral, and it explicitly mentions some values in detriment of other emerging values it confronts (economic efficiency, market forces, competition, deregulation, accountability and branding). Moreover, by openly refocusing the process on the learners and the learning, characterizing the latter as "multicultural, multilingual and global", this definition underlines "the goal towards which we should aspire and the abilities of the learners that should be developed" (Yemini, 2015, p. 21), together with a reinforcement and enhancement of the development

of and respect for the other, the fostering of global citizenship, intercultural competence and cosmopolitanism (Yemini, 2015, p. 21).

Aligned with the idea of highlighting the role of the learner in the internationalisation process, Coelen (2016, p. 40) puts forward another definition of the term in a learner-centered framework: "Internationalisation of higher education constitutes the provision of an environment containing such elements that a learner is given the opportunity to attain achieved learning outcomes associated with international awareness and intercultural competence." Coelen underlines that "the elements of this environment are not just parts of the curriculum" (2016, p. 40) and that "the quality of this environment relies on a whole-of-institute approach and must recognize the diversity of willingness to support internationalisation" (2016, p. 40). The author places the singularity of this definition on the centrality it assigns to the transformation of the individual, not on the activities of an organization, and on its focus on the learning outcomes related to international awareness and intercultural competence.

Still partly blurred in the equation is the role of lecturers in HEIs. This is particularly significant in view of the relevance of these stakeholders in the internationalisation process, considering that it is greatly upon them that falls, in practice, the responsibility of transferring into the micro-cosmos of the classroom that environment that will grant students the possibility of learning within a framework of international awareness and intercultural competence. Moreover, it calls upon lecturers to define the curriculum, to decide which content to teach, and to choose the teaching and learning methodologies to use. On this issue, Sanderson (2011), for example, expresses his concerns about the gap in the literature on internationalisation "as it applies to teachers in higher education settings, both in terms of their knowledge and skills when working with internationalised curricula and of their personal and professional attitudes" (p. 661). Beelen (2017) referred to the development of lecturers' skills as "the missing link in internationalisation" (p. 133) arguing for the integration of the "internationalisation of teaching and learning into existing professional development" (p. 146). To this matter, teacher training for bilingual education is certainly a key topic to consider.

Accompanying the trend towards a broader embracing concept of internationalisation, Hudzik's (2011) paradigm of "comprehensive internationalization" must also be considered. Hudzik's concept extends Knight's wide-ranging definition and is identified as "an organizing paradigm to think holistically about higher education internationalisation" (Hudzik, 2011, p. 5) and defined as an institutional imperative to be embraced by all the governing bodies of the HEI as a proactive commitment "to infuse international and comparative perspectives throughout the teaching, research, and service missions of higher education" (Hudzig, 2011, p. 6) Overall, "comprehensive internationalisation" will shape the ethos and values of the whole HEI in consistency with its own path, missions, target audience, syllabus, resources, and values, it will impact both on the campus and on the HEI's external frames of reference and relations (Hudzik, 2011).

Whitsed and Green (2014), reflecting on the significant debate among scholars on what is actually meant by "internationalisation" in HE and on the new terms being used to label it - "mainstreaming, comprehensive, holistic, integrated, and deep internationalization" (Whitsed & Green, 2014, p. 106) -, diverge from de Wit's approach, who, according to them, favours the need to explore the concept of internationalisation further, but is sceptical about these new labelling, which, except for the words used, have brought no other changes. Whitsed and Green understand that the "current efforts to rename "internationalization" are not necessarily tautological; rather, they could be integral to systematic changes in understandings, activities, dispositions, and rationales across the higher education sector" (2014, p. 105) and they give evidence of the growing interest and ongoing debate on the topic.

Two decades after the turn of the century the discussion to redefine and rethink internationalisation of HE continues. According to the 5th Global Survey Report (Marinoni, 2019) internationalisation of HE seems to be entering a new phase and "a more holistic approach to internationalization seems to be emerging with internationalization of research (at HEIs conducting research) and internationalization of the curriculum/at home being considered as important areas of internationalization (pp. 35- 36). For de Wit and Deca (2020) internationalisation of higher education is also at the threshold of new times. They argue that, among the challenges and opportunities open to internationalisation of HEIs in the next decade "the shift from internationalization abroad with a strong focus on a small elite of mobile students, faculty, administrators and programs towards internationalization at home for all students, faculty and administrators is even more urgent than ever." (p. 7) And to this new phase, a new definition of internationalisation of HE will be required.

## 2. Internationalisation vs Globalization

The relationship between internationalisation in HE and globalization is "complex and unpredictable, rather than simple and formulaic" (Leask & Bridge, 2013, p. 80), mostly because the rapid changes taking place in our globalized society, economy and labour market are challenging HEIs to answer and even anticipate their requirements.

Within the context of HE, the terms "internationalisation" and "globalization" are often related and used interchangeably, being also used as a synonym for international, global, intercultural and multicultural education (Knight, 1997, p. 5; Altbach et al, 2009, p. 23).

Knight characterizes globalization and internationalisation as two dynamically linked concepts, but she considers "globalization" to be the "catalyst" of internationalisation, whereas internationalisation is a pro-active response to globalization, being itself an agent of change (Knight, 1997, 2008, 2012). The author clearly distinguishes the focus of the two concepts:

> Globalization focuses on the worldwide flow of ideas, resources, people, economy, values, culture, knowledge, goods, services, and technology. Internationalization emphasizes the relationship between and among nations, people, cultures, institutions, and systems. The difference between the concept of worldwide flow and the notion of relationships among nations is both striking and profound. Internationalization of higher education has been positively and negatively influenced by globalization, and that the two processes, while fundamentally different, are closely connected.
>
> Knight, 2012, p. 4

Van Vught et al. (2002) contrast globalization and internationalisation in terms of the values they are associated with, namely "quality and excellence" for the former and "competition" and the association to a tradable commodity for the latter. Altbach (2006) distinguishes "globalization" and "internationalisation" considering their scope and aims, stating that globalization refers to "the broad economic, technological, and scientific trends that directly affect higher education and are largely inevitable in the contemporary world" (p. 123), whereas internationalisation "refers to specific policies and programs undertaken by governments, academic systems and institutions, and even individual departments to support student or faculty exchanges, encourage collaborative research overseas, set up joint teaching programs in other countries, or a myriad of initiatives" (Altbach, 2006, p. 123). De Wit and Hunter (2016) continue this same line of thought and characterize globalisation as "a social, economic and political process to which higher education responds and in which it is also an actor [whereas] internationalisation is the way in which higher education responds and acts" (de Wit & Hunter, 2016, p. 343).

In the report prepared for the UNESCO 2009 World Conference on Higher Education, Altbach et al. (2009) view globalization as a key reality in the 21st century and they define it as "the reality shaped by an increasingly integrated world economy, new information and communications technology, the emergence of an international knowledge network, the role of the English language, and other forces beyond the control of academic institutions" (Altbach et al., 2009, p. 7). Internationalisation is defined as "the variety of policies and programs that universities and governments implement to respond to globalization" (Altbach et al., 2009, p. 7). The authors also remark that one of the key distinctions between the concepts of internationalisation and globalization is the notion of "control". They clarify that whereas globalization and its effects are beyond the control of any one actor, internationalisation, can be a strategy used by societies and institutions to address the challenges of globalization and as an opportunity for HEIs to prepare their students to engage in an increasingly globalized world. The authors of the report argue that although the impact of globalization on higher education allows for the expansion of new opportunities for study and research beyond

national boundaries, it may also represent a threat to national culture and autonomy. They consider that "perhaps the "healthier" consequence of economic globalization and the subsequent pressure on higher education to function internationally has been the necessity for effective (and more transparent) systems of accountability, shared benchmarks, and standards for ethics and quality" (Altbach et al., 2009, p. 29).

Knight's (2008, p. 1) statement that "internationalization is changing the world of higher education, and globalization is changing the world of internationalization" is endorsed and further developed by Hudzig (2013), who concludes that "globalization is forcing higher education to consider more comprehensive approaches to internationalisation, a widening of institutional cross-border involvements, and a widening of student and faculty participation" (p. 48). The potential to explore the "globalization of internationalization" (Jones & de Wit, 2012) and the wide range of possibilities open by the dynamic interplay between "global" and "international" dimensions are key features of the twenty first century HE context(s), which require commitment and responsibility from all those involved.

A closely related perspective is presented in a study requested by the European Parliament's Committee on Culture and Education on "Internationalisation of Higher Education" (2015), in which the authors present a snapshot of the reality of internationalisation in Europe in the past 30 years and highlight the fact that the HE internationalisation has been greatly influenced by the globalisation of our economies and societies and by the growingly large importance of knowledge. They envisage the future of internationalisation of HE as "a continually evolving response to globalisation driven by a dynamic range of rationales and a growing number of stakeholders" (de Wit et al., 2015, p. 28) and on the assumption that mobility and cross-border delivery will continue to grow, they conclude that a stronger focus on the curriculum and learning outcomes must guarantee internationalisation is for all students. Furthermore, their conclusions point out partnerships and alliances as key elements in education and research and acknowledge the key role of the European Commission in supporting the development of internationalisation in HE.

## 3. The scope and rationales for internationalisation in HE contexts

The presently acknowledged strategic importance of internationalisation in the agenda of HEIs across the world (Wihlborg et al, 2018, p. 8) is not a novel historical circumstance. Throughout the centuries, the international dimension of universities' life was considered one of its important features (de Wit, 2010; Engwall, 2016). Medieval universities and Arab universities even earlier, for example, were quite international in their nature, with scholars communicating (in), studying and teaching at several universities in different countries, in search for knowledge and an understanding of other cultures (de Wit, 1999, p. 2; Altbach & Teichler, 2001; Guri-Rosenblit, 2015, p. 13; Coelen, 2016, p. 36).

The change in the universities' approach to internationalisation is pinpointed at the beginning of the 1990s, and characterized as a focus change, a movement from a departmental or individual level, to "the adoption of more proactive modes of policy formation and institutionalization of these policies" (Davies, 1992, p. 187). Over more recent decades, the attitude towards internationalisation in tertiary contexts has again been described as moving "from a reactive to a pro-active strategic issue, from added value to mainstream" (de Wit et al., 2015, p. 5). Internationalisation became a recurrent term in the rhetoric of politicians and supranational organizations and a mandatory item in tertiary Education agenda in general and in individual HEIs' plans (Brandenburg et al., 2009). Considered as one of the pillars for the sustainability of HEIs success within the new global educational and economic context, internationalisation is placed at the forefront of strategic planning by both stakeholders and policymakers in HE (Wadhwa, 2016), reported to be the second most important development after quality assurance and "rising in strategic importance" in a "trend [which] is expected to continue" (Sursock, 2015, p. 30).

The 2003, 2005, 2010, & 2014 Survey Reports from the International Association of Universities (IAU) consistently testify that internationalisation became a high priority issue in the institutions surveyed (Egron-Polak & Hudson, 2014). In the same line, *Trends 2015: Learning and Teaching in European Universities* (Sursock, 2015), the seventh large scale survey report in the series begun in 1999 by the European University Association (EUA), also identified internationalisation as highly important with 69% respondent institutions rate (in relation to 23 other developments), which constitutes an increase of 8% over the 2010 survey.

The 2015 European Commission/Council of Europe report on the internationalisation of HE (de Wit et al., 2015) also accounts for a clear global trend towards a growth of the internationalisation of HE, with a strategic approach and comprising a significant broader range of activities. The report presents the requirements for an overall strategy for internationalisation, one of which is the careful positioning of HEIs, students, researchers and staff, along with their national systems, to enable participation in relevant research and innovation activities across the globe. Also recognized as fundamental is the need to understand how to match up individual profiles with the needs of the job market and economic strategies of each country.

2016 OECD indicators ( pp. 328-345) present data evidencing that the development of the knowledge economy and knowledge communities have brought about an increase in the internationalisation of research and top professional services, with a growing number of students now looking for opportunities to study abroad at bachelor's, master's or doctoral levels. Students' interest is welcomed and sought after by HEIs, both for the economic wealth they immediately create (fees, living expenses), but also for the future social, business and research networks they can potentially establish between their home and host countries. For the students, studying abroad contributes to an increased

cultural and personal experience, to the expansion of their knowledge of other societies and languages, and offers them the possibility of improving their employability in the globalized labour market. In addition, it is also the opportunity for them to learn in an international environment, to access specific areas of research not available or incipient in their home countries, and to participate in international research activities.

The trend for a consistent expansion of international student mobility with more students opting for undertaking at least part of their studies abroad has been further confirmed by OECD reports up to the most recent one, in 2020, with evidence that over the past four decades the number of foreign students enrolled in tertiary education programmes worldwide has risen from 0.8 million in the late 1970s, to 5.6 million in 2018 (see Figure 2.1).

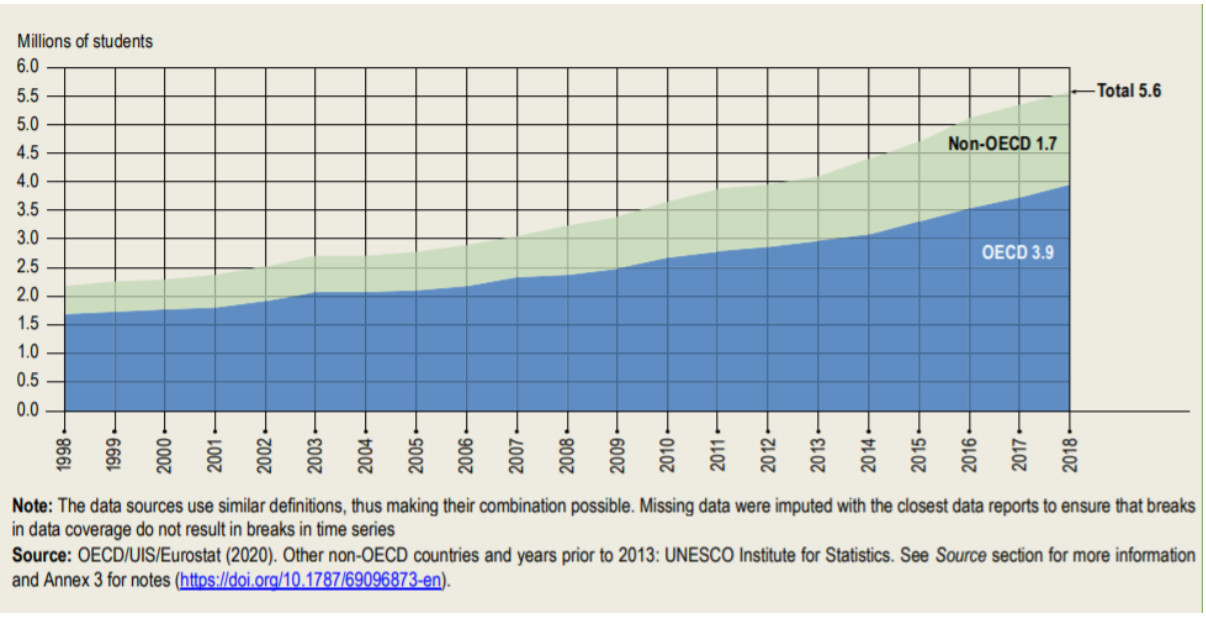
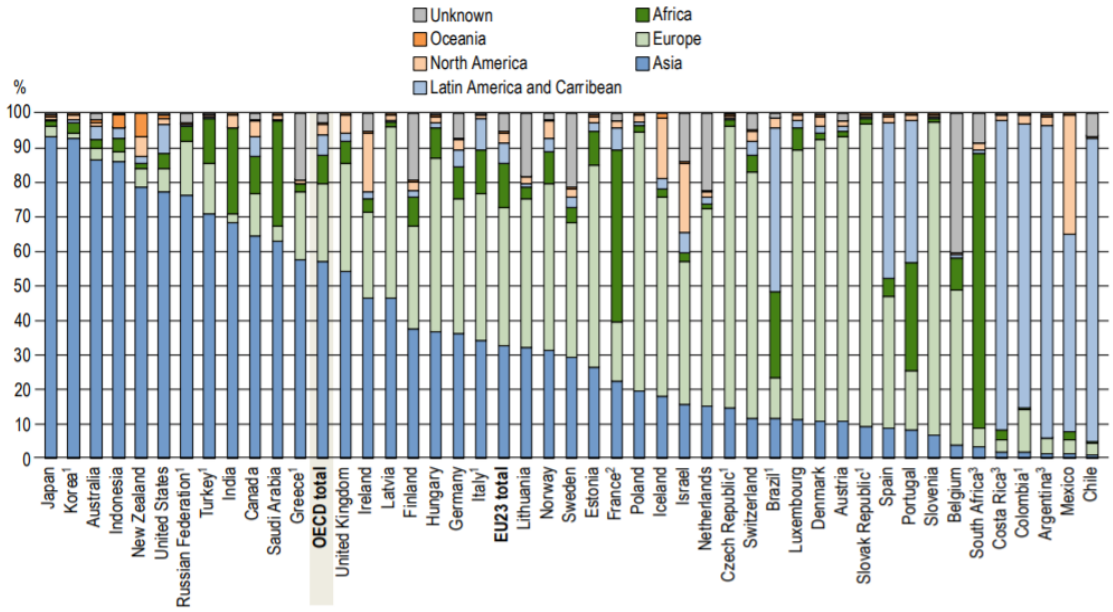



*Figure 2.1.* Growth in the number of international or foreign students enrolled in OCDE and non/OCDE countries in tertiary education worldwide (1998 to 2018). *Source: OCDE, 2020, p.226.*

Between 1998 and 2018 the number of international and foreign tertiary students grew on average by 4.8% per year and in 2018 there were three international or foreign students for each national student studying abroad across OECD countries, with this ratio exceeding 10:1 in Australia, New Zealand, the United Kingdom, and the United States. Despite the increase, on average, in the total number of international and foreign students worldwide, across OECD countries, the numbers of their relative concentration have remained comparatively stable: in 2014 they accounted for 5% of total enrolment in HE, and the number increased to 6% of total tertiary population in 2018, with the numbers varying from country to country (OCDE Report, 2020, p. 228). In tertiary programmes, international enrolment increases gradually with education level: below 5% enrolments in bachelor's or equivalent programmes; 13% enrolment at master's or equivalent level and a significant percentage of 22% of all enrolments at doctoral level (OCDE 2020, p. 232).

Although OECD countries continue to be a top choice for most international and foreign students (4.3% growth per year on average), the number of foreign students enrolled in non-OECD countries has been rising very fast (6.2% per year on average) (OECD report 2020, p. 228). The European Union geographical region is also an attractive area for inward mobility, with 1.7 million mobile students enrolled in the 23 OECD countries that are also members of the EU (Figure 2.2).




1. Share of foreign rather than international students.
2. The share of students by country of origin is based on citizenship criteria, while their total number is based on the country of upper secondary education.
3. Year of reference 2017.

*Countries are ranked in descending order of the percentage of international or foreign students from Asia.*

**Source**: OECD/UIS/Eurostat (2020). See *Source* section for more information and Annex 3 for notes (https://doi.org/10.1787/69096873-en).

*Figure 2.2.* Distribution of international and foreign students by region of origin.

Projections for the future contend a very promising expansion of international student mobility, with a prediction of eight million students studying abroad by 2025 (International Trends in Higher Education 2016-17, 2017, p. 18).

The European Higher Education Area (EHEA), with the authority of the political will of its 48 constituent countries at the time, has set for 2020 a collective target of 20 % of HE students completing a study or training period abroad (Leuven/Louvain-la-Neuve Communiqué, 2009, 28-29 April, p. 4) and the European Commission's vision for a European Education Area by 2025 (Communication from the European Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions, 22.5.2018) clearly foresee the free movement of learners:

> A vision for 2025 would be a Europe in which learning, studying and doing research would not be hampered by borders. A continent, where spending time in another Member State – to study, to learn, or to work – has become the standard and where, in addition to one's mother tongue, speaking two other languages has

> become the norm. A continent in which people have a strong sense of their identity as Europeans, of Europe's cultural heritage and its diversity
>
> European Commission, 2018,, p. 5.

The increase in the number of foreign students enrolled at tertiary level fosters and encompasses an extensive diversification of international activities and internationalisation strategies, with "more and more institutions […] creating off-shore satellite campuses or double degrees, changing admission rules for foreign students, revising curricula to encourage teaching in foreign languages, or offering Internet courses and international internships" (OECD, 2017, p. 298). Such issues as mobility expenses and network effects, education costs and tuition fees, quality of programmes and institutional prestige, language of instruction, accreditation, multilateral agreements and quality assurance frameworks and immigration policy are now perceived as inter-related factors that influence international students' mobility and the design of an HEI's internationalisation strategy (OECD, 2017, pp. 286-302). And despite these yet limited forms of cross-border or international tertiary education, OCDE- Education GPS already perceives them to constitute "an innovation that may mark the beginning of an in-depth transformation of tertiary education in the long term" (OECD, s.d.).

Despite its high impact worldwide, all these different forms of cross border educational activities, or 'internationalization abroad" (Beelen & Jones, 2015a) are only accessible to a small number of students and lecturers, compared to the large amount of HE students and lecturers who receive their education at home. In order not to leave anyone behind, "internationalisation at home" will need to provide for the 'purposeful integration of international and intercultural dimensions into the formal and informal curriculum for all students within domestic learning environments' (Beelen and Jones, 2015a, p. 76). De Wit et al. (2015) quote the European Commissioner for Education, Culture, Multilingualism and Youth, Androulla Vassiliou "agenda" for the future in this matter:

> Universities need to have comprehensive strategies that go beyond mobility and encompass many other types of academic cooperation such as joint degrees, support for capacity-building, joint research projects and distance learning programmes. And they need to prepare for "internationalisation at home", for those 80-90 % of students who will not be mobile.
>
> European Commission, 2013b, in de Wit et al., 2015, p. 79

Thus, to meet the pressure building for internationalisation policies in HE in the 21st century, and to assign HEIs with a distinctive competitive advantage, a robust and more comprehensive internationalisation policy is now emerging at the hub of HEIs' activities, empowered as a major item in the different stakeholders' agendas (Hudzik, 2011; Hudzik & McCarthy, 2012; Hudzik, 2015). Emergent concepts focusing on ways to develop internationalisation at home (I@H) and to foster the "internationalisation of the curriculum" (IoC) (Beelen & Jones, 2015a) are trends that are now directing

the spotlight onto internationalisation policies within the campus premises (de Wit, Hunter, & Coelen, 2015). Moreover, the exploitation of recent developments in the digital world and distance education are also facilitating the progress of virtual forms of internationalisation, which are said to expand "the possibilities of internationalizing higher education in many ways" (Bruhn, 2017, p. 2) and can include a variety of on-campus practices, both at classroom or curriculum level, such as "virtual mobility, globally networked learning, virtual exchange, telecollaboration, and collaborative online international learning (COIL)" (Bruhn, 2017, p. 2). Bruhn even reformulated Knight's widely accepted definition of internationalisation (Knight, 2003, p. 2) and coined "virtual internationalization […] as the process of introducing an international, intercultural, or global dimension into the delivery, purpose or functions of higher education *with the help of information and communications technology (ICT)"* (Bruhn, 2017, p. 2) italics in the text).

The new possibilities opened up as a consequence of the impact of internationalisation policies within HEIs are challenging each HEI's capacity of questioning their own inner structures and *modus operandi*, pushing them further to reinvent themselves. Taylor (2010) points out that, "internationalization has become too important to be left to the keen enthusiastic "amateur"" (p. 100), and new forms of organization in terms of the status, size, management and scope of international offices and officers are emerging. Brandenburg and de Wit (2011) refer to this question as "the shared feeling that international education no longer can be seen as a fragmented list of activities executed by international offices and a small group of motivated internationalists among staff and students" (p. 1), and defend a model of internationalisation which is integrated, broad and part of the HEI's core mission.

Whether linked to political, economic, cultural or academic rationales (Knight, 2004; de Wit, 2010; Hudzik, 2011), internationalisation is no longer seen as a goal in itself but rather as a multidimensional process to achieve different goals (Gao, 2014). The rationales that lay at the foreground of the internationalisation policy of an HEI can depend on such factors as the institution's needs and characteristics, its location, strategic positioning, local and regional framework, physical resources, type of students, human resources, i.e. lecturers, administrative staff, researchers, which explains the importance of understanding the unique context of each institution.

The decision for a HEI to embrace internationalisation as an institutional strategy is founded on wide-ranging rationales and approaches, such as the attraction of talented, wealthy foreign students, the wish to cater for top-quality faculty research staff, or a quest for institutional prestige and reputation (Van der Wende, 1996; Altbach, et al., 2009; de Wit, 2011).

De Wit (1999, p. 2; 2002) identifies four kinds of reasons for HEIs to be involved in international activities, namely, academic (to enhance the quality of teaching and research), social/cultural (developing wider and more diverse personal connections), political (pursuing more influence), and economic (aiming at generating more money) rationales.

Knight admits that in most HEI's policy statements, the central rationales driving internationalisation "are becoming more explicit and are changing" (2004, p. 19) and she proposes an updates of de Wit's (2002) four categories of rationales (Table 2.1.) on the ground that, despite their relevance, there is some overlapping ("blurring" in Knight's words (2004, p. 22) of the categories and an important piece missing, as the de Wit's categorization does not distinguish between national- and institutional-level rationales, which have gained increasing importance.

Table 2.1

*De Wit's (2002) categories of rationales driving internationalisation.*

| Rationales | Existing—National and Institutional Levels Combined |
|---|---|
| Social/cultural | National cultural identity |
| | Intercultural understanding |
| | Citizenship development |
| | Social and community development |
| Political | Foreign policy |
| | National security |
| | Technical assistance |
| | Peace and mutual understanding |
| | National identity |
| | Regional identity |
| Economic | Economic growth and competitiveness |
| | Labour market |
| | Financial incentives |
| Academic | International dimension to research and teaching |
| | Extension of academic horizon |
| | Institution building |
| | Profile and status |
| | Enhancement of quality |
| | International academic standards |

Source: Knight (2004, p. 23)

For Knight (2004) the emerging issues to consider in the new phase of internationalisation, include "human resources development", "strategic alliances", "commercial trade", "nation building" and "social/cultural development factors, at national level, and at institutional level, determinants as "international branding and profile", "income generation", "student and staff development", "strategic alliances" and "knowledge production" (Table 2.2).

Table 2.2

*Categories of emerging rationales driving internationalisation Knight (2004).*

| Level | Of Emerging Importance— National and Institutional Levels Separated |
|---|---|
| National | Human resources development |
| | Strategic alliances |
| | Commercial trade |
| | Nation building |
| | Social/cultural development |
| Institutional | International branding and profile |
| | Income generation |
| | Student and staff development |
| | Strategic alliances |
| | Knowledge production |

Source: Knight (2004, p. 23)

Closely related with and quite relevant for the topic of this dissertation are the emerging rationales of "human resources development", at national level, and "student and staff development", at institutional level in terms of the "brain power" factor ("human resources development") Knight argues that:

> there is more attention being paid to enhancing the international dimension of teaching and research so that domestic students and academics can be better equipped to contribute to their country's effectiveness and competitiveness on the international stage [and] there is increasing recognition being given to the need for further development of intercultural understanding and skills for personal, professional, and citizenship development.
>
> Knight, 2004, p. 22

At institutional level, Knight (2004) highlights the growing importance of internationalisation so as to provide students and lecturers with improved international and intercultural understanding and skills, because, among other factors, "the mobility of the labour market and the increase in cultural diversity of communities and the workplace require that both students and academics have an increased understanding and demonstrated skills to work and live in a culturally diverse or different environment" (p. 27).

Another analysis comes from Maringe et al (2013) who draw on a wide range of literature and research on the subject of internationalisation in HE and present an overview of how HEIs are engaging with the processes and rationales of internationalisation. The authors explore a range of theoretical constructs associated with internationalisation (theoretical models of globalisation; existing approaches and rationales to internationalisation in higher education and perceived benefits and consequences of internationalisation), and present six different types of rationales for internationalisation in HEIs, which are adapted in Table 2.3.

Table 2.3

*Maringe et al.'s mapping of rationales of internationalisation (2013, pp. 14-15).*

| Rationale | Meaning and focus | Key strategies |
|---|---|---|
| Economic | Based on ambitions of becoming economically competitive, independent, and increasing institutional financial revenue streams. | Overseas student recruitment bringing foreign exchange and student labor. |
| Political | Based on the idea of creating world understanding, eminence and leadership, peace, and development. | Development of global problem focused curricula and research and teaching centers for poverty reduction, climate change, world conflict/peace studies and global terrorism, world religions, global financial markets, human trafficking.<br>World-class talent identification and recruitment. |
| Sociocultural | Based on the ambition to forge greater understanding between nations and cultures and enriching the learning experience. | Student and staff academic exchange programmes.<br>Second language learning and teaching.<br>Cultural exchange programmes. |
| Technological | Development of a heightened responsiveness to current technological developments and becoming leaders in this field.<br>Exploitation of technology to create access, social justice and equity in the sector. | Huge investment in state-of-the-art technologies at various levels of the institution.<br>Use of technology to create and widen access to education through distance/e-learning. |
| Educational | Internationalisation as an educational quality marker.<br>Motives around the creation of learning and scholarship communities.<br>Development of partnerships for interrogating institutional and cross-institutional issues and forging progress and development links. | Developing internationalisation audit frameworks.<br>Partnerships for research, teaching (joint degree programmes) and the commercialisation of education. |
| Pedagogical | Based on the idea of internationalising the university curriculum, in terms of content, teaching principles and approaches, assessment, support for learning and the student experience. | Development of guidelines for preparing international curricula.<br>Workshops for enhancing the pedagogical preparedness of staff to deal with aspects of international curricula. |

Source: Own elaboration, adapted from Maringe et al, 2013, pp. 14-15.

The synthesis of the model by Maringe et al. guide us to understand the reasons why and how HEIs may engage in the processes of internationalisation in specific times of their development.

Other authors focus on internationalisation at a micro level perspective (Willis & Taylor, 2014, p. 155) and conclude that despite the more global dominant institutional economic rationale, the local level of individual staff interests and institutional drivers are key issues for the support or constrain of internationalisation in a HEI. The study conducted by Willis et al. has shown the variety of individual staff's own rationales and expectations within a HEI "to enrich their teaching, to extend their research, reflecting personal interests and with an eye to career development" (Willis et al., 2014, p. 164), which "will help to shape and refine internationalization in practice [and the need] for evolving institutional strategy to be sensitive to such local differences" (Willis et al, 2014, p. 164).

De Wit and Hunter (2016) map out the international dimension of HE through the centuries and consider that during the 1980s, with the ERASMUS programme and other EC initiatives, the rationales for internationalisation were mainly the competitiveness with the USA and Japan and the consolidation of a European identity. In the 1990s, a move towards more economic driven rationales for internationalisation in HE has started, including a period, around the 11 September 2001, more politically oriented. The economic drive of internationalisation in the past decade took, according to the authors, such forms as "income generation through recruitment of international students, global competition for talented students and scholars for the knowledge economy, increasing global professional competencies and employability of graduates, national demand for higher education through mobility and cross-border delivery of education, and capacity building through higher education" (de Wit & Hunter, 2016, p. 343).

Seeber et al. (2016) state that the rationale behind the internationalisation policy in a particular HEI results from factors at multiple levels. The authors concluded that:

> being embedded in a globally competitive arena for status spurs a conception of internationalization as instrumental to prestige. It appears that national contexts do not affect HEIs' rationales much, and that the amount of resources is less important than the resources competition for the selection of rationales. The immediate organizational context, both in terms of organizational goals and internal actors' interests, emerge as particularly relevant.
>
> Seeber et al., 2016, p. 698

Over the years, internationalisation priorities and strategies have changed in response to the context they take place in and the wider, global context they relate to in "a process of change that is at the same time reactive, proactive and strategic to local and global environments" (Knight, 2014, p. 86). The new forms and shapes of 21st century internationalisation of HE confirm internationalisation as

"mainstream and a comprehensive part of higher education" (Wit & Hunter, 2016, p. 355). Reaching beyond economic or brand-enhancing rationales of international engagement, internationalisation is emerging as a powerful force for change. The idea that internationalisation must be seen as a means rather than an end in itself, and that in each HEI "the particular approach to internationalization chosen is dependent on the ends being pursued" (Hudzik, 2011, p. 8) is also widely accepted. As suggestion for the future, there is a strong appeal in Wit & Hunter's vision (2016) of an "inclusive internationalisation" model "where abroad and at home, cooperation and competition, virtual and physical, North and South, global citizenship and professional competence become intertwined and interpreted according to local context (…)" (p. 355).

### 3.1. "Internationalisation at home"

Considered as one of the pillars for the sustainability of HEIs success within the new global educational and economic context, internationalisation policies are now being explored both abroad and more recently, also "at home", and placed at the forefront of strategic planning by stakeholders and policymakers in HE (Wadhwa, 2016).

The denomination of the term "internationalisation at Home" (I@H) is traced back by different authors (Beelen & Leask, 2011; Knight, 2013) to 1999, in an article written by Bengt Nilsson in the EAIE (European Association for International Education) *Forum*, with the title "Internationalisation at home – theory and praxis". In this article, Nilsson expresses his concern for the kind of intercultural support being given to the vast majority of internationally non-mobile students, who thus miss the benefits of the contact with people from other countries and a more global and multicultural perspective of the world (Crowther et al., 2000, p. 1; Beelen et al., 2013, p. 123). The interest aroused by the topic led to the foundation of a "Special Interest Group" within the EAIE to discuss the issue further, and, among other initiatives (publications, conferences and workshops) there was a publication, in 2000, of a *Position Paper on Internationalization at Home*, where Wächter takes "internationalisation at home" to mean "any internationally related activity with the exception of outbound student and staff mobility" (Crowther et al., 2000, p. 6), and clarifies that the concept reports to "not simply the sum of all international activity in a given institution, but also a coherent relationship between these activities, brought about by some form of institution-wide coordination and central steering" (Crowther et al., 2000, p. 6).

Knight (2004, p. 16) also distinguishes between two different streams of internationalisation components that occur at institutional level, namely those that are "home-based" and the ones that occur across borders. In subsequent publications, the author would elaborate on this idea (Knight, 2008; 2012; 2013) and further describe each of these two emerging streams or pillars of internationalisation, representing them as closely linked, interdependent, with mutual implications between each other in the

internationalisation process. We reproduce in Figure 2.3 the author's graphic representation of the "two pillars of internationalisation" (Knight, 2012, p. 34).

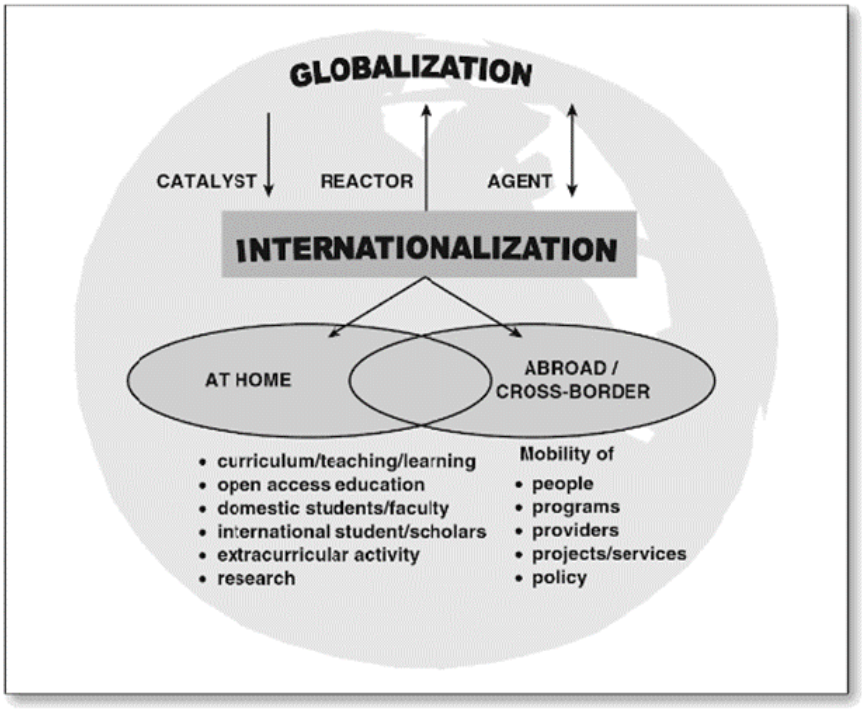



*Figure 2.3.* Two Pillars of internationalisation: at home and cross-border (Knight, 2012, p. 34)

This move of attention beyond in- and outbound mobility in a time when cross-border education was at the centre of European policy and practice constitutes "a significant development in the conceptualisation of internationalization" (Knight, 2013, p. 85) and contributes to the reinforcement of the two "pillars of internationalization" (Knight, 2014, p. 77; de Wit, 2011). The home-based dimension approach of internationalisation allocates HEIs with the increased responsibility for guaranteeing to all their students and staff, i.e., those abroad in mobility and the ones staying in campus, the integration in an intercultural and international academic environment. It also commits each HEIs to new challenging roles in order to embed systemic internationalisation policies into their campus based teaching/learning, research and service activities, which include the "development of intercultural understanding and skills, language training, comparative studies, integrating an international and intercultural dimension into curricular and extra-curricular activities, as well as relationships with local cultural community groups" (Knight, 2013, p. 85; Knight, 2012, p. 35). The I@H approach, by singling out those activities promoted at the HEI towards the integration of an international dimension locally, broadens the scope of internationalisation in HE further and offers students and staff more opportunities to engage in and develop international and intercultural knowledge, skills and attitudes that had been previously measured primarily through mobility (Morgado et al., 2015).

I@H as a means to internationalize the skills and competences of the non-mobile students has also been pointed out as a key component of the European Commission's education policy - European

Higher Education in the World and the Europe 2020 Growth Strategy. The 2013 European Commission report on *European higher education in the world* sets the promotion of "internationalisation at home and digital learning" (2013) as one of the three priorities for HEIs and member states towards comprehensive internationalisation strategies. Considering that international mobility will always be restricted to only a few, the report advocates for an increasing focus "on the integration of a global dimension in the design and content of all curricula and teaching/learning processes (sometimes called "internationalisation at home"), to ensure that the large majority of learners, the 80-90% who are not internationally mobile for either degree or credit mobility, are nonetheless able to acquire the international skills required in a globalised world" (2013, p. 6). They sum up by listing the following three key priorities on internationalisation at home and digital learning for HEIs and Member States:

> – Capitalise on the international experiences and competences of the staff of HEIs, aiming to develop international curricula for the benefit of both non-mobile and mobile learners;
>
> – Increase the opportunities offered to students, researchers and staff to develop their language skills, particularly local language tuition for individuals following courses in English, to maximise the benefits of European linguistic diversity;
>
> – Develop opportunities for international collaboration via online learning and expand the use of ICTs and Open Education Resources for new delivery modes to widen access, internationalise curricula and pave the way for new forms of partnerships.
>
> European Commission, 2013 COM(2013) 499 final, p. 9

Beelen and Jones (2015a) allege that the inclusion of I@H in the 2013 European Commission report represents a turning point for the debate around the concept and they consider that from then on "IaH has gained momentum, and has moved into the centre of the debate on the internationalization of higher education. It has made its way into the policy agendas of many universities, and is also on the way to becoming part of the educational policies of some member states" (2015, p. 67), whereas de Wit et al. (2015, p. 3) are more cautious and see it as a positive initiative, which will only succeed if effective measures at different levels - European, national, and institutional – are undertaken.

More recently, *The EAIE Barometer: Internationalisation in Europe* (Engel, 2015)concluded that 56% of European Universities contemplate I@H activities in their policies, and *Trends 2015: Learning and Teaching in European Universities* (2015) states that 64% of European universities claim that they undertake activities for I@H. The numbers confirm the uprising trend and point to the vitality of I@H.

On "the assumption that not all students will have mobility opportunities and that, while mobility can bring additional benefits for the mobile few, this should not be at the expense of internationalization for all" (Beelen & Jones, 2015a, p. 69), Beelen and Jones have presented an updated definition of I@H as "the purposeful integration of international and intercultural dimensions into the formal and informal curriculum for all students within domestic learning environments" ( 2015, p. 70). To be highlighted as core ideas in this new definition, the notion that I@H is to be a benefit for all students of the HEI, that the inclusion of international and intercultural aspects into the curricula should be intentional and not a random list of activities or elective subjects, and that neither "home" is restricted to the campus, nor the "learning situations" are limited to the formal teaching within the academic context. According to the authors the "domestic learning environments" "may include working with local cultural, ethnic, or religious groups; using a tandem learning system or other means to engage domestic with international students; or exploiting diversity within the classroom. It also includes technology-enabled or virtual mobility, such as through Collaborative Online International Learning" (Beelen & Jones 2015b, p. 13). Articulated within the specific context of a discipline, the internationalized learning outcomes will endorse a meaningful international and intercultural learning to such environments.

In line with Beelen and Jones' (2015a, 2015b) arguments, Robson et al. (2018) present a reflection on the future developments of I@H and identify the relevant factors at play in I@H practices in HEIs. In a conceptual map (reproduced in Figure 2.4) the authors present a flexible framework for I@H assuming that both internationalisation of HE in general and I@H should address and review three interrelated aspects – *Organization*, *curriculum*, and *people*.

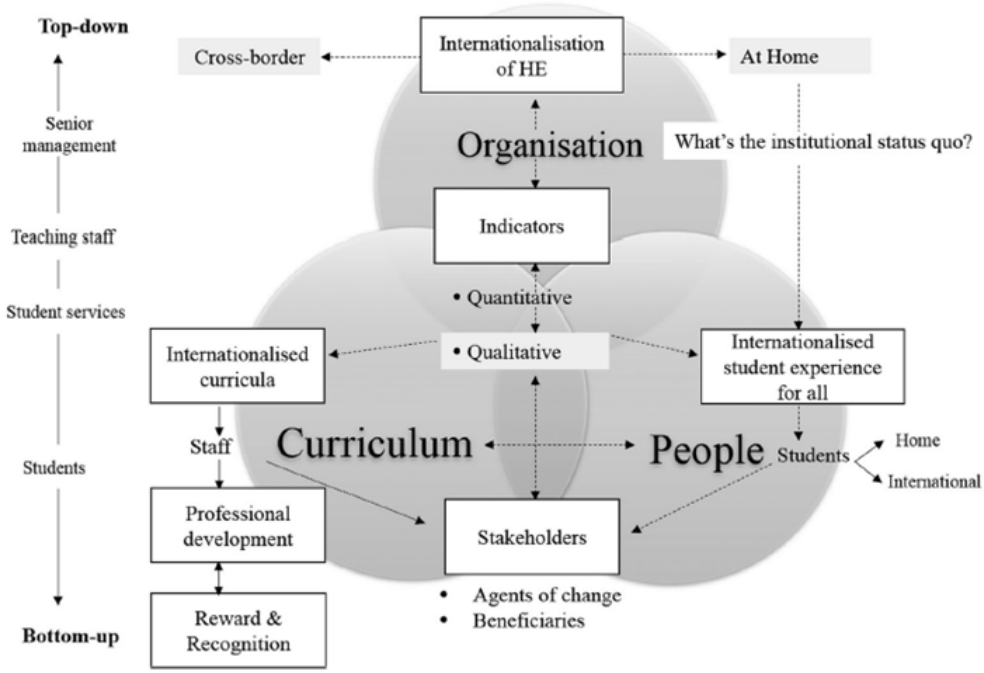



*Figure 2.4*. Conceptual map of internationalisation at home. Source: Robson et al., 2018, p. 30.

According to the authors, the successful implementation of an I@H programmes relies on a qualitative process addressed to all students, requires an internationalized curriculum, guarantees professional development opportunities and motivational measures in order to assure the quality of the process, and involves a wide range of stakeholders who need to be actively involved in top-down and bottom-up processes. They argue:

> People will always be the key drivers effecting changes in their range of social contexts. Opportunities for the academic community to develop an international outlook need to be driven from the bottom-up and supported top-down, offering opportunities for personal and academic development to students and staff alike.
>
> Robson et al., 2018, p. 30

I@H entails a more comprehensive approach of the internationalisation of the curriculum (IoC) and raises specific issues on subject content, language of instruction, materials to use, learning outcomes, assessment tasks, and teaching methods, which HEIs are challenged to *transfer* and *transform* into new practices to replace the long-standing notions attributed exclusively to mobility. Moreover, to be able to accomplish all these purposes, I@H curricula needs to be supported and endorsed by engaged teaching staff (Bedenlier & Zawacki-Richter, 2015), whose training and development has been identified by Beelen et al. (2015, p. 69) and Robson (2017, p. 372) as a critical factor for the successful implementation of I@H, at tertiary level.

A complementary benefit of I@H or, as stated by Beelen et al (2015, p. 68), "one of the key, and as yet unrealized, contributions of Internationalization at Home", lies in the provision of a context for the development of an international and intercultural experiences with the subsequent development

of those transferable employability skills required by the globalized workplace, highly requested by employers and needed for surviving in the twenty-first century. Robson et al. (2018, p. 31) corroborate these advantages of I@H and add the relevance of these policies and practices as "enablers of democratic and socially responsible participation in culturally diverse societies". These authors also consider that the importance of these issues makes the present time particularly appropriate for a review and development of I@H policies (Robson et al., 2018, p. 31). The two institutional case studies they conducted on I@H implementation policies concluded that an "internationalised university experience for all" (particularly for the non-mobile) are not systemically prioritized in institutional agendas for internationalization" (Robson et al., 2018, p. 31), "internationalization strategies remain broad and vague […] leading to uneven engagement with rationales, approaches and strategies" (Robson et al., 2018, p. 31), and "more comprehensive I@H strategies are necessary to address any financial, structural or communication blockages to progress; to build on the views of stakeholders on how I@H unfolds in practice; and to deploy expertise to embed explicit intercultural and international dimensions into the university experience" (Robson et al., 2018, p. 31).

Exploring the possibilities of I@H and embracing a comprehensive internationalisation approach are key strategies available to HEIs, large and small, that can broaden their scope of action and enhance the benefits of the integration of international and intercultural practices and activities into the daily practices and into the curriculum of the Institution. Exploring the CLIL approach, as well as other innovative educational approaches (TBL, Flipped Learning), preparing lecturers and students to face the challenges of working in an international environment at the home institutions, can be key instrument in supporting HEIs to gain the momentum and capitalise on this internationalisation trend in HE.

The movement towards globalisation generally focus on similarities of practices in the HE systems and it often tends to overlook the importance of local factors and stakeholders, which often explain differences in policy design, implementation processes and national outcomes.

Internationalisation became an economic necessity particularly for small sized HEIs, for which all sources of income are relevant. However, discrepancy between the push of HEI institutional policies for the use of English as the language of instruction in HE and the in practice little guidance offered to doing it or how to do it is a reality. That is why some researchers have argued that the internationalisation of HE "should be viewed as an attempt by universities to strengthen their position at home. Such a strategy relies more on the university being associated with an international approach than participating in a tug-of-war over the best incoming students" (Airey, et al., 2015, p. 567)

The growing phenomena of internationalisation of HE worldwide has led to different dynamics in educational policies at the national, regional and institutional levels and the introduction of English Medium Instruction in HEIs curricula has been one of the strategies explored.

### 3.2. Internationalisation of the Curriculum

The internationalisation of HE is having an impact on all areas of academic life and it has introduced new approaches to the core of the curriculum itself. The internationalisation of the curriculum (IoC) at HEIs "is a complex concept that reflects the intricate relationships between historical context, political orientations, dominant epistemologies, and perceptions on the use of knowledge, as well as conceptions of teaching and learning" (van Gyn, et al., 2009, p. 26) and it involves what van Gyn et al. name as "educating for world-mindedness" (van Gyn, et al., 2009, p. 26).

To prepare students to live and work in a globalized environment and to think "locally, nationally and globally" (Rizvi & Lingard 2010, p. 201), HEIs have been investing in the internationalisation of their curricula, aiming at providing students with the possibility of exploring and developing skills to interconnect their local practices to a wider reality. The idea of preparing students for the new professional global market is a common rationale for internationalisation and now an objective generally included in HEIs' corporate statements and policies. By acting at the curriculum level, HEIs have the opportunity to embed their internationalisation institutional agenda within the actual learning of their students and thus better put their own internationalisation policies further into action (Leask, 2016, p. 49). Moreover, given its strategic powerful positioning "at the intersection of policy and practice in universities" (Leask, 2015, p. 3), curriculum plays a key role in the success or failure of the internationalisation agenda of a HEI.

This increasing interest in the internationalisation of the curriculum is transferred into practice as a growing concern about the teaching and learning, about what exactly is taught and how it is taught, bringing into question such issues as strategies for teaching, learning and assessment, and question how these impact on programmes (Clifford & Montgomery, 2017; Jones et al., 2013; Leask, 2009, 2013, 2015). The more recent focus on "comprehensive internationalization" (Hudzig, 2011) and related concepts as "inclusive internationalization" (de Wit & Hunter, 2016, p. 255) and I@H (Beelen & Jones.?, 2015) have also assigned a new meaning to the IoC in the daily academic routine of teachers, students and HE administrators.

However, concerns have been expressed about the way the concept is interpreted by the different stakeholders, and the various forms in which it is enacted (Beelen & Leask, 2011, p. 13). Critical voices have reported a gap between the institutional rhetoric and the academic practice (Green & Whitsed, 2014) or the adoption of random strategies, such as the introduction of, for example, brief case studies from other countries to curricula, which is doing "little to enhance students' world perspectives or cross cultural knowledge" (Clifford & Montgomery, 2017, p. 2). Leask expresses need for more research on the subject as "we are still largely operating on the basis of beliefs and values, hope and assertion in connecting IoC with student learning" (2013, p. 101).

Leask (2015, p. 3) also raises the question of academic staff training and their preparation for internationalizing the curriculum at the disciplines level:

> If we are to internationalize learning, we must do that within the context of the different cultures and practices of knowing, doing, and being in the disciplines. But if academic staff do not have the experience, skills, or knowledge required to internationalize the curriculum they are likely not to engage with the concept or to adopt a narrow focus. This has serious consequences for the international strategy of the university and for what students learn.
>
> Leask, 2015, p. 3

Besides the training and the collaboration of the teaching staff in IoC, the kind of support they receive is also essential to the process, with administration playing a key role in guaranteeing adequate staff continuous professional development (Childress, 2010, p. 28; Egron-Polak & Hudson, 2014, p. 149). Beelen and Jones see this aspect as a critical success factor for the process of IoC at home and one of the challenges in HE internationalisation policy and implementation (2015, p. 69). This is a long-term process and there is no pre-established model to adopt, as each educational context has its own specificity and each teacher has a personal understanding of internationalisation of the curriculum. De Wit and Hunter (2015, p. 2) refer that "there is no one model that fits all. Regional and national differences are varied and constantly evolving, and the same is true within the institutions themselves".

By the beginning of the 1990s, Harari (1992) was already championing for the "internationalisation of the curriculum" claiming that it was necessary "to conceptualize the internationalization of undergraduate education as a "multi-faceted package" and not as a series of strands that are dealt with in isolation of each other if dealt with at all" (Harari, 1992, p. 53). He argues that "ideally an institution should develop an overall commitment and curricular program implementation which transcend disciplines and create a distinct international ethos on campus" (Harari, 1992, p- 58). A way to internationalize an existing curriculum is, according to the author, "to examine it in various segments as well as a whole to see in what way the overall can be made more cohesive and holistic" (Harari, 1992, p. 58).

In 1993, the growing relevance of internationalisation policies in HE led the Centre for Educational Research and Innovation (CERI) of the Organization for Economic Co-operation and Development (OECD) to launch the project "Higher Education in a New International Setting". One of the strands covered by the project focused on curricula internationalisation, a choice "mainly related to the notion of a need for international education for non-mobile students, a group representing at least 90 per cent of higher education enrolment in OECD countries" (van de Wende, 1996, p. 186). This OECD study defines "internationalized curricula" as "curricula with an international orientation in content, aimed at preparing students for performing (professionally/socially) in an international and

multicultural context, and designed for domestic students and/or foreign students" (van de Wende, 1996, p. 186). Nilsson (2000, p. 22) found this definition "a little too passive" and he proposed a new one, that enlarges the scope of the OECD definition and sets the students" attitudinal and cognitive change towards an increasing intercultural and international competence, as the aim of IoC. For Nilsson, an internationalized curriculum is one that "gives international and intercultural knowledge and abilities, aimed at preparing students for performing (professionally, socially, and emotionally) in an international and multicultural context" (Nilsson, 2000, p. 22).

Clifford (2009, p. 135) approaches the IoC by setting a broader agenda with very precise learning outcomes. She defines IoC as "curricula, pedagogies and assessments that foster understanding of global perspectives and how these intersect and interact with the local and the personal; inter-cultural capabilities in terms of actively engaging with other cultures; and responsible citizenship in terms of addressing differing value systems and subsequent actions".

Leask, a renowned researcher on IoC in HE for over 25 years, defines the process of IoC as "the incorporation of an international and intercultural dimension into the content of the curriculum as well as the teaching and learning processes and support services of a program of study" (Leask, 2009, p. 209) and explain that the product or end of this process, is an *internationalised curriculum*, which "will engage students with internationally informed research and cultural and linguistic diversity. It will purposefully develop their international and intercultural perspectives as global professionals and citizens" (Leask, 2009, p. 209). In 2015 she would reformulate her 2009 definition of IoC to "the incorporation of international, intercultural, *and/or global* dimensions into the content of the curriculum as well as the *learning outcomes, assessment tasks, teaching methods*, and support services of a program of study" (Leask, 2015, p. 9, emphasis mine).

Leask's definition of IoC relies on the concepts of the formal, informal and hidden elements of the curriculum, which the author represents graphically as three related, intersecting, partially overlapping areas, with a common area in the center, where all three elements interplay (Leask, 2015, p. 9, reproduced in Figure 2.5). Leask describes these three elements of the curriculum as "connected and interactive, rather than discrete -experienced by students as a dynamic interplay of teaching and learning processes, content, and activities in and out of the classroom" (Leask, 2015, p. 9). It is the dynamic interplay of these 3 elements that will "define students' present learning and develop the skills, knowledge, and attitudes needed to create future opportunities for them and others within an increasingly connected and globalized society. Together they make up the total student experience" (Leask, 2015, p. 9).

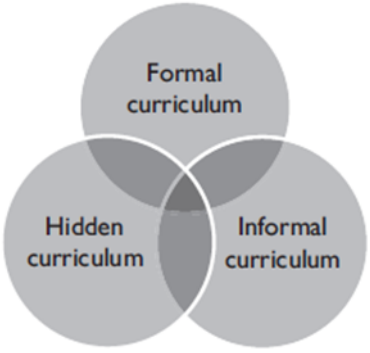



*Figure 2.5.* Three interactive elements of the curriculum (Leask, 2015, p. 9).

For the author, the *formal curriculum* is "the sequenced programme of teaching and learning activities and experiences organized around defined content areas, topics, and resources, the objectives of which are assessed in various ways including examinations and various types of assignments, laboratory sessions, and other practical activities" (Leask, 2009, p. 207) or, in a more synthetic form, "the syllabus as well as the orderly, planned schedule of experiences and activities that students must undertake as part of their degree program" (Leask, 2015, p. 8). The *informal curriculum* is described as "various support services and additional activities and options organized by the university that are not assessed and do not form part of the formal curriculum, although they may support learning within it. It includes formal mentoring programs, peer assisted study sessions, and organized social activities" (Leask, 2015, p. 8). The *hidden curriculum,* which can take place at both the formal and/or informal curriculum, comprises "those incidental lessons that are learned about power and authority, what and whose knowledge is valued and what and whose knowledge is not valued, from such things as which textbook and references are used and the way that in-class and out-of-class activities are organized" (Leask, 2009, p. 207), i.e., "the various unintended, implicit and hidden messages sent to students – messages we may not even be aware we are sending" (Leask, 2015, p. 8).

Both individually and through research developed with other scholars (e.g., Leask, 2009, 2015; Leask & Carroll, 2011; Leask & Bridge, 2013), Leask has extensively argued that an internationalized curriculum should be purposefully planned, designed and developed so as to provide relevant and diverse international dimensions to all students. In *Internationalizing the Curriculum* (2015) the author refers to "the need to plan and scaffold opportunities for all students to develop deep knowledge and advanced skills and hence to move beyond approaches to internationalisation of the curriculum based on isolated, optional experiences and activities for a few students" (Leask 2015, p. 210). Moreover, Leask (2009) defends the relevance of adopting a holistic approach to IoC, arguing that internationalising content would not be enough: "An internationalised curriculum will therefore need to utilise a wide variety of teaching and learning strategies which have been carefully selected and constructed. It will focus on both "what is taught and learned" (that is, on both content and outcomes)

and "how it is taught and learned" (that is, on what both teachers and learners do)" (Leask, 2008, p. 61). These structuring concepts are some of the ideas reflected in Leask and Bridge's conceptual framework (Figure 2.6), which broadly acknowledges the "possibilities and complexities" (Leask & Bridge, 2013, p. 98) involved in the IoC and represents the contexts influencing decisions on IoC.

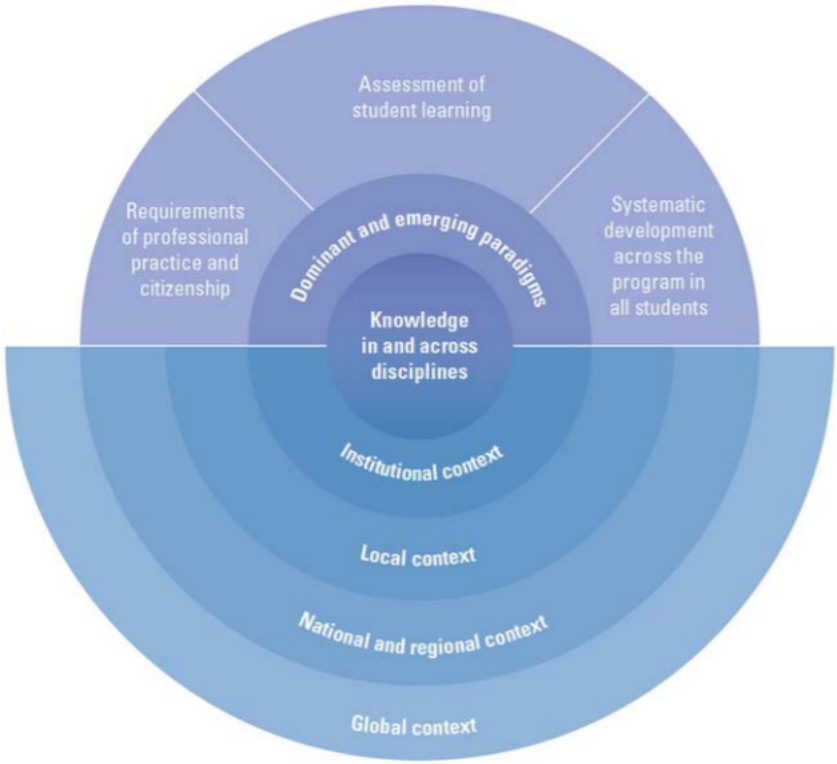



*Figure 2.6.* Leask & Bridge's conceptual framework of internationalisation of the curriculum (Leask & Bridge, 2013, p. 84)

Leask and Bridge built this framework based on an iterative development process that confronted reference literature on internationalisation and three case studies which involved more than 1700 participants/academic staff in 15 different HEIs across Australia, exploring the meaning of internationalisation of the curriculum and providing an indication of their different understandings of internationalisation across disciplines and programmes (Leask & Bridge, 2013, pp. 82-83). As explained by the authors "the top half of the framework is concerned with curriculum design. The bottom half of the framework is concerned with the layers of context, which have a variable influence on the decisions academic staff make in relation to internationalisation of the curriculum" (Leask & Bridge, 2013, p. 85). At the core of the framework and of the IoC process are the disciplines and the knowledge production *within* and *across* them. The disciplines are connected to and are influenced by both the different layers of context (global, national & regional, local and institutional) and the key elements of designing an internationalized curriculum, namely, the requirements of professional practice and citizenship, assessment of student learning and systematic development of knowledge and the skills and attitudes across a programme. These three curriculum design components relate to the

disciplines in a particular way, as each one is seen through the lens of dominant and/or emerging paradigms. The complex interplay established among the various components and layers will determine the design of the curriculum and account for the uniqueness of pattern adopted in each HEI. This conceptual framework of IoC not only explains the many different interpretations of IoC within and across disciplines, but it also points out the importance of challenging existing interpretations and reconsidering established meaning. As seen by Leask and Bridge, an array of possibilities opens up to HEIs through the IoC as "interpretations and enactments of internationalisation of the curriculum in context require critical reflection, imagination and careful nurturing" (Leask & Bridge, 2013, pp. 97-98).

For the future of the IoC, Clifford & Montgomery, envision some challenges to traditional views and assumptions, and argue that

> a transformative curricula, a holistic redesign of curricula to develop global citizens, requires more than individual, enthusiastic, creative teachers. It requires a change in orientation of the purpose of our higher education institutions from a corporate to a civic discourse, which replaces striving for individual advantage with consideration of the needs of society locally, nationally and globally. This requires changes to mission statements, strategic plans and policies with resources available for staff development and curriculum redesign and development.
>
> Clifford & Montgomery, 2017, p. 12

IoC entails organisational changes, but it also requires that lecturers understand and reflect upon the IoC concept to be able to adapt their approaches when designing the curriculum and planning and teaching their classes.

## 4. Questioning the future path(s) of internationalisation

The changing dynamics of HE and the shifting world settings have more recently led some authors to ponder on the future of internationalisation in HE (Brandenburg et al., 2011; de Wit, 2014: 92; Knight, 2014; Altbach et al., 2018), seeing it placed now at the crossroad between such values as "cooperation, mutual benefits, partnerships and capacity building" and those other forces that emphasize "competitiveness, commercialisation, self-interest and status building" (Knight, 2014, p. 86). This debate had already started earlier, with the reporting of some "myths" (Knight, 2012) and "misconceptions" (de Wit, 2011) related to the internationalisation of HE. Egron-Polak (2012, p. 16) highlighted some of the risks of internationalisation, specifically "brain-drain, cultural homogenization, competition among higher education institutions as well as increased commercialization" (Egron-Polak,

2012, p. 16)". This discussion found higher expression in Brandenburg et al.'s 2011 essay with the provocative title *The end of internationalization*, which expressed concerns on internationalisation as an increasingly massified phenomenon, that despite its high moral weight (leading to world peace, mutual understanding, justice and equity) has "lost substance" and its essential nature, namely, being "an instrument to improve the quality of education or research" (Brandenburg et al., 2011, p. 16). The "post internationalization age" the authors claim for (Brandenburg et al., 2011, p. 17) requires a fresh paradigm which reaffirms "the core role of universities: to help understand this world and to improve our dealing with it […] a common commitment at the institutional and personal level of how we and our students will be prepared to live and work in a global community" (Brandenburg et al., 2011, p. 17). Or, as simply stated by Knight "keeping academic purposes and benefits front and centre" (Knight, 2014, p. 86). Altbach et al. (2018) also see internationalisation in HE over the past 25 years (1990–2015) either finished or, at least, "on life support" (Altbach et al., 2018, p. 2). For the authors, "the unlimited growth of internationalization of all kinds—including massive global student mobility, the expansion of branch campuses, franchised and joint degrees, the use of English as a language for teaching and research worldwide, and many other elements—appears to have come to a rather abrupt end, especially in Europe and North America" (Altbach et al., 2018, p. 2). The authors root this rather pessimistic pre-announced death of internationalisation in HE in very precise circumstances. On the one hand, Trump's election in the USA, the Brexit, and the rise of nationalist and antiimmigrant politics in Europe are seen as causes of decline in international student numbers in the UK and the USA; on the other hand, the rising negative comments on the growth of international students and the spread of English taught programmes and the threat these might represent to the quality of academic teaching. Moreover, they refer that there are transnational campuses now closing because of academic freedom limitations in some countries, reports on ethics issues concerning the academic certification of students and an increase in the fees paid by international students worldwide.

Despite the mounting critique of the rationales and approaches to internationalisation (2017, Wihlborg) and the recent voices that deconstruct myths (Knight, 2011, de Wit, 2011) and pre-announce the end of internationalisation (van der Wende, 2017), these readings of the signs of the times are chiefly an alert against the rise of nationalist–populist arguments, an exhortation for the rethinking and reconceptualization of the international project of universities worldwide, a claim for the quality approach over the quantity one and a "re-orientation towards outcomes and impacts away from a purely input and output approach" (Bradenburg & de Wit, 2011) in the internationalisation of HE.

"Internationalisation is never a neutral process" (Haapakoski, 2017, p. 375). Whether the rationale is political, economic, socio-cultural, pedagogical, technological, or academic/educational (Knight, 1997, 1999; 2004; de Wit, 1998, 2010; Qiang, 2003; Hudzik, 2011; Maringe & Woodfield, 2013), internationalisation is now more globally viewed as a multidimensional process to achieve different goals (Gao, 2014), including competitivity in the 21st century knowledge-based economy. For

that to happen, HEI's approach to internationalisation needs to be more intentional and strategic, and target at more than international partnerships and mobility. Values-based approaches to HE internationalisation, which recover the core endeavor of internationalisation to contribute to a better world for everyone (more culturally tolerant, more global, more democratic, more secure) are now increasingly considered as the approach that may develop global citizenship skills and intercultural understanding (Leask & de Wit, 2016). Wihlborg and Robson. (2018, p. 10) see the future of Internationalisation in HE as a "multifaceted palette of opportunities" and they argue that to

> focus primarily on economic imperatives is to lose the unique opportunities internationalisation can offer, to enrich the educational and research experiences of students and staff and catalyse meaningful contributions of HE to global society. Importantly, there is also a need to readjust our research approaches to address new types of challenges, and their implications for internationalisation strategies. To bring about systemic change in the internationalisation of HE, the ways we conceptualise knowledge, research and teaching need to be reconsidered through a more holistic, cross-disciplinary and transversal approach
>
> Wihlborg and Robson., 2018, p. 10

The fact is, as pointed out by Knight, that "internationalization has come of age. No longer is it an ad hoc or marginalized part of the higher education landscape. […] As it has transformed higher education, internationalization has itself experienced dramatic change (…)" (Knight, 2012, pp. 40-41). The many phases and different practices that the process of internationalisation of HEIs has gone through in the last decades has brought it to a turning point with the emergence of new approaches that explore internationalisation "not a goal in itself, but a means to enhance the quality of education, research and service function of the university" (Pérez-Encinas, 2018, p. 113). The opportunities of this global momentum – cheaper travels, expanding IT, increasing online learning, more joint-degree programmes, among others - cannot be missed in terms of the international engagement of HE. The challenge for HEIs is to set meaningful and economically sustainable internationalisation programmes taught through a common language (generally English) in such a way that the national language/identity is not threatened and that international opportunities are available to all equitably (Altbach et al., 2009, p. 33). As stated by Altbach et al. "internationalization presents many new and exciting opportunities for cooperation within the academic enterprise and can be a powerful tool for the enhancement of quality and the insertion of innovation across many dimensions" (Altbach et al., 2009, p. 35) and "the need to understand and harness the benefits of internationalization, while minimizing the risks and costs, is of central importance in moving forward" (Altbach et al., 2009, p. 35).

## 5. European policies for the promotion of internationalisation in HE

The European Union's views and recommendations on internationalisation in HE have been extensively documented in a number of strategic documents, covering the modernization of higher education (OJEU, 2011/C372/09), language competences to enhance mobility (OJEU, 2011/C 372/08) supporting growth and jobs (OJEU, 2011/0567) and investing in skills for better socio-economic outcomes (OJEU, 2012/0669), among others. In 2013, the Communication "European Higher Education in the World" of the European Commission defined the key areas to develop a comprehensive internationalization strategy, namely, (1) international student and staff mobility; (2) the internationalization and improvement of curricula and digital learning (the aforementioned "internationalization at home"); and (3) strategic cooperation, partnerships, and capacity building (European Commission COM, 2013, p. 499).

The construction of the European Higher Education Area (EHEA) set forth by the 1999 Bologna Declaration represented a challenge to national governments and particularly to HEIs, at last seen as key partners in the implementation of the European Union's strategy to enhance economic growth. Stimulus for internationalisation in Europe (Taylor, 2010; de Wit et al., 2015a) has been notable through the European Commission's ERASMUS Program (an acronym for the European Region Action Scheme for the Mobility of University Students), launched in 1987, into the Socrates action program, specific for HE, in 1995. In 2007 another new phase began, when ERASMUS was integrated into the Lifelong Learning Program (2007-2013). The new ERASMUS+ Program (2014- 2020) focuses on the support and promotion of transnational cooperation programs aiming at bridging the gap between academia and the world of work. Early reactive versions of these programs, based on successful Swedish and German initiatives, can now be described as pro-active and mainstream, with substantially greater "focus, scope and content", although the reality may not coincide with the discourse or intention (de Wit et al., 2015a, p. 5). The exchanges and partnerships of previous decades have found greater value in the HE context of increasing needs to be competitive, commercial and involved in the international delivery of HE.

In a detailed historical and theoretical analysis of the international dimension of European and American HE, de Wit (2002) argues that up to the 60s "a European policy for internationalization did not exist" (p. 45). This same idea is further developed in another paper by the author (de Wit & Merkx, 2012), who claims that following the tragic consequences of the Second World War, European countries' major efforts were mainly directed towards reconstruction and "what little international dimension existed was primarily the movement of elite degree-seeking students in developing countries to the colonial and imperialist powers with which they were linked (…)" (p. 51). For de Wit (2002), in Europe, the period between World War II and the end of the Cold War corresponds to the time when the international aspects of higher education were starting to get organized.

The emergence of internationalisation as a strategic issue in higher education gained momentum following the consolidation of the economic and political integration of European countries within the European Community (EC). It was in the 1970s that HE emerged as an explicit concern in the European agenda, with the publication of a Resolution of the ministers of education within the Council of the EC, of February 1976 (1976). This Resolution comprised the first action programme from the EC in the field of education and it mentioned specifically the promotion of cooperation in the field of higher education, presenting a set of implementation guidelines to serve this purpose. The measures approved by this Resolution would establish the foundations on which European cooperation concerning education in general, and HE in particular, is founded to this day. The Council's 1976 Resolution guaranteed member states' rights and the independence of HEIs, and it designed a set of actions to be undertaken at Community level which would increase cooperation between HEIs; promote the free movement and mobility of teaching staff, students and researchers; consider, for the calculation of seniority, the periods of service in teaching or research spent in other Member States; and increase the possibilities for the academic recognition of diplomas and study periods carried out in another HEI/country. Within the framework of this Community's Action Programme, financial support was provided to "Joint Study Programmes" (JSP) and "Short Study Visits" (SSV) to prepare or enable university cooperation in the Community. And, as noted by Beerkens (2008), although the European Action Programme proved to be a significant step in European education, it "was not so much because of its real effects, but more because it marked the beginning of education as an area for policy interest for the European Community and made it a joint responsibility of the Community and the Member States." (p.411). Wächter (2012) refers to these programmes as a "test-run for the ERASMUS Programme. It developed the latter's basic functioning principle, the networks of universities (or parts of them), which became the structural backbone for the exchange of students and staff and, in an advanced stage, for common curricula." (p. 167).

The experience with these pilot-projects also paved the way to Bologna, where, on the 19th June 1999, the ministers of HE of 29 European countries, both members and non-members of the EU, signed a joint Declaration aiming at harmonizing policies to reach, within ten years, common objectives of primary relevance to establish the European Higher Education Area (EHEA) and to promote the European system of HE worldwide. To be noted, however, that the convergent measures defined in the Bologna Declaration and the whole process thus initiated, commonly known as Bologna Process (BP), "was not conceived as an EU initiative (…). The process was launched under the auspices of the Council of Europe, with organizational support from the United Nations Educational, Scientific and Cultural Organization (UNESCO), to foster harmonisation among different national HESs in Europe" (Damro & Friedman, 2018, p. 1399).

In general terms, this new European framework for HE cooperation aimed at harmonizing the various systems of HE, better positioning the European system of HE on a worldwide scale, and to

increase its international competitiveness and students' employability. The action lines set out by the Bologna Declaration marked a turning point in the development of European HE and called for the introduction of structural reforms in the individual HE system of the participating EC countries (Teichler, 2009; Bergan, 2019). The convergent measures defined in the Bologna Declaration pushed HEIs in Europe to cooperate and adapt their structures to conform to a system of compatible and comparable degrees, based on two cycles, organised into a credit transfer system (ECTS), aimed at promoting students and teachers' mobility, the advancement of European cooperation in terms of quality assurance; the promotion of a European dimension of HE and the increase of the international competitiveness of HE in the European region (Sin et al., 2016).

In an overview of major progresses in the BP so far and of some major challenges to the EHEA as it now enters its third decade, Bergan (2019) maintains that the EHEA has developed through several stages, marked by the ministerial conferences held regularly to follow up the process. Bergan (2019) identifies a first phase centred on the Sorbonne (1998), Bologna (1999) and Praha (2001) conferences, which flags the launching of the BP and is characterized by "a feeling of optimism, of being part of an important European movement, and of higher education policy moving from the periphery of political concerns to a place closer to the center." (Bergan, 2019, p. 26) The second phase (Berlin conference, in 2003, and Bergen, in 2005), now with a growing community of participating member states (40, in Berlin, and 45 in Bergen), is seen as a time of dynamic development, maturity consolidation and implementation of stocktaking measures. In the third phase (London 2007, Leuven/Louvain-la-Neuve 2009, Budapest and Wien 2010), the EHEA geographic area stretches its eastern limits up to Kazakhstan and in 2010 signals the transition from a process (Bologna) to the formal establishment of the European Higher Education Area, which "was no small achievement" (Bergan, 2019, p. 27). The fourth phase (Bucureşti 2012) was the first stage of the newly established EHEA and, according to Bergan (2019), pinpoints a downward trend of the political relevance of the EHEA. With 13 of the then 47 member states represented by high senior servants rather than Ministers or Deputy Ministers, the 2012 Conference moved beyond the Bologna key topics and shifted its focus to debate the social dimension of HE, student-centered learning, and student support. The fifth (Yerevan Conference, 2015) and sixth (Paris, 2018) phases are marked, according to Bergen, by concerns over the future of EHEA and the challenges to be faced. In fact, the communiqué of Yerevan Conference identifies challenges and policy measures to be undertaken, rather than the achievements reached, evidencing the work that is still required and the long way some countries still have to go.

Similar apprehensions with the future of EHEA are expressed by other scholars, such as Harmsen (2015) that voices the idea that there is a growing sense that the BP "had, to a significant extent, "exhausted" itself after a little more than a decade of existence" (p. 785), or Veiga and Amaral (2008) who think that "the difficulty in the further development of the EHEA lies in the process of how changes brought about by Bologna can contribute to produce stability and hold cultural patterns" (p.

261). Gallagher (2018) also contends that EHEA's "inward gaze which has largely, and probably appropriately, characterized its work to date" (p. 339) may be coming to an end, giving room to "a deeper and wider engagement with society as a whole" (p. 339).

The results of a survey undertaken by me about the frequency of occurrence of the word "international" and its variants (adjective, verb, adverb) in all the nine Council ministerial declarations/communiqués following the EHEA Ministerial Conferences, from 1998 to 2018, (all available at http://ehea.info/page-ministerial-declarations-and-communiques) point to its scarce use, with only 1 to 6 occurrences per communiqué (v. appendices). It is interesting to note that, for example, twenty years after the Declaration of Sorborne, the Paris Communiqué (2018) uses the word "international" only once, and with minor significance, as it refers to the mandate given to the Bologna follow-up group to improve regular cooperation with *international* organisations. Considering the texts of all the conferences communiqués, we observe that the verb "internationalise" is only used once, whereas the noun "internationalisation" is employed 5 times and the adjective ("international") has the highest occurrence. These data point to the fact that "internationalization" is here not often taken as a key subject or a mover of the action, but rather used in a dependent or complementary relation with other topics, in a growing multidimensional frame. "International" qualifies or is an attribute of such nouns as "recognition", "comparison" of study cycles, "competitiveness" of HE systems, "attractiveness" of Europe, "academic cooperation and exchanges", "participation", "curriculum development", "partner", "organizations", "networks", "context", "reference points", "recruitment", "openness", "development" or "mobility".

The 2020 Rome Ministerial Communiqué, not included in the above survey, uses the word "internationalisation" only once, too. However, and particularly relevant for the context of this research, the ministers recover the 2009 Communiqué' target established for 2020, that 20% of those graduating in the EHEA should have experienced a study or training period abroad, and go further than that and explain the need, for students, to acquire international and intercultural competences through internationalisation of the curricula or participation in innovative international environments in their home institutions**:**

> **Cooperation and mobility** connect our systems and foster the development of intercultural and linguistic competences, broader knowledge and understanding of our world. Direct contacts and synergies among our diverse cultures and higher education systems through mobility of staff and students contribute to the excellence and relevance of higher education in the EHEA, making it attractive and competitive on the global scale. We acknowledge the importance and the benefits of physical mobility for students, doctoral candidates and staff. Notwithstanding the current difficulties related to the COVID-19 pandemic, we

> reaffirm our target that at least **20% of those graduating in the EHEA** should have experienced a study or training period abroad, and **further commit to enabling all learners** to **acquire international and intercultural competences through internationalisation of the curricula** or participation in **innovative international environments** in their home institutions, **and to experience some form of mobility**, whether in physical, digitally enhanced (virtual) or blended formats.
>
> Rome Ministerial Communiqué, 2020, p. 6 (highlight in the original)

The influential ERASMUS mobility programme, launched in 1987 as an independently run European Union programme for research and education, has also been the driver for a broad and strategic approach to internationalisation in HE in Europe. The Socrates/ERASMUS programme was introduced with the aim of supporting students and teachers' mobility, and it intensely enlarged the Commission's involvement in European HE, particularly in terms of credit transference and university networking. In the first year of operation the programme involved 11 countries, with 3 244 students travelling abroad for study stays. Since these early beginnings the programme has undergone a series of major changes. In 1995, ERASMUS became part of the framework education programme Socrates, and the spectrum of its activities was gradually broadened to include teacher mobility and international cooperation among universities. However, student mobility still remains at the heart of the programme, making it the best-known and most popular of the EU's educational programmes. The Socrates/ERASMUS programme ended in 2006, having given over one million students the chance to study abroad. After it, the EU "Lifelong Learning Programme (LLP)", replaced the Socrates programme in 2007. The Lifelong Learning Programme (LLP) was designed to enable people, at any stage of their life, to take part in stimulating learning experiences, as well as developing education and training across Europe. With a budget of nearly €7 billion, the programme, which ran from 2007-2013, funded a range of exchanges, study visits, and networking activities. The activities of LLP continue under the new ERASMUS+ programme from 2014-2020.

Among the results presented in the 2019 *ERASMUS+ higher education impact study* (Souto-Otero et al., 2019), the data on the impact of mobility exchanges on HEIs staff indicate that participants in the ERASMUS+ programme "use innovative teaching methods substantially more often than non-mobile teaching staff" (p. 124). The study also provides results on the internationalisation of HEIs, and the findings indicate that around 90% of the HEIs internationalisation strategies are centred on the students; that almost 90% of HEIs reported to have an internationalisation strategy, and 95% reported that the recognition of student mobility as part of study programmes was an important or very important part of their strategy (Souto-Otero et al., 2019, p. 164). These findings were intentionally selected from the data available in the *2019 ERASMUS+ higher education impact study*, because they constitute relevant indicators of the high impact internationalisation policies can have on a HEI. Particularly if the

multiplier effect of the experiences of Mobility abroad of both students and staff is intentionally capitalised on and transferred to teaching practices and the environment of the home HEI and the many non-mobile students and staff can benefit from them.

### 5.1. The role of English in HE – English as a *lingua franca*

In the European post-Bologna, multicultural and multilingual HE context, where "internationalisation", "mobility" and "employability" are keywords, it became of utmost relevance that both university students and lecturers should have effective language skills in foreign languages, and especially in English as a *lingua franca* in the academia (Coleman, 2006; Doiz et al., 2013). Moreover, considering that the effort of internationalisation of HEIs in countries where English is not the national language has been equated with the use of English as the medium of instruction, the English language, being globally "the most common language in multilingual repertoires" (Jenkins, 2015b, p. 72), has gained force as a *lingua franca* and as the main communication tool in HE contexts.

The proliferation of English in HE has been seen by some "as a fact of life that can become an opportunity for individuals and societies to obtain manifold benefits" (Lasagabaster, 2015, p. 26), but for many it was a source of concern, because of the homogenising effect it may cause and the menace it represented to the survival of local languages and cultures (Wilkinson, 2004; Phillipson, 2003; Fernández-Costales & González-Riaño, 2015). Dimova, et al. (2015) also express their concern about EMI and the exclusive use of English language, which may lead to a monolithic approach and thus fail the concept and the practice of an open, plurilingual internationalisation of HE.

Lasagabaster and Doiz (2021, p. 1) recall Swaan's (2001) model of language hierarchy and the position of English as the *hypercentral language* at the top of the pyramid, to claim that a similar hierarchization process has taken place at university context where it is an "undeniable fact that English represents the main lingua franca in academia" (p.1). The authors consider that the increasing spread of EMI programs available at tertiary level is evidence of the importance of the English language at tertiary level, but they alert to the fact that "despite the irrefutable and evident surge of EMI, a review of literature in the field ineluctably unearths the fact that language learning objectives are overlooked in most higher education institutions, and this irrespective of the context" (p.1). They find three reasons for this abandonment, namely, the fact that EMI is still a relatively new phenomenon and many HEIs have not placed it in their priorities yet, the common idea that "language learning will in any case take place implicitly just by being exposed to English during content teaching" (p. 1) and no further actions are necessary, and finally, the most important reason, according to the authors, the fact that "content teachers are reluctant to teach language in their classes" (p.2).

Another problem raised because of the English hegemony as a *lingua franca* in HE comes from Nordic countries, and it is cantered on the themes of domain loss, diglossia and language protectionism.

In Sweden, for example, the high extent to which English is already used in HE has led to a debate about the best way to guarantee the use of Swedish in academic contexts. Airy (2012) describes the situation:

> worries were weighed against the benefits of English language use for international competitiveness and as the *de facto* language of research. The debate led to a general consensus that *both* English and Swedish were needed in higher education, and the concept of *parallel language use* […] was adopted. This concept was not without its critics.
>
> Airy, 2012, p. 65 (italics in the original text)

This idea of *parallel language* use was transferred to HEIs through a recommendation, in 2008, by the Swedish National Agency for Higher Education, that all Swedish HEIs should produce their own language policy documents (Airey, 2012). Fortanet-Gómez (2012) identifies other measure taken by some universities to balance the influence of English such as "to limit the number of courses taught in this language (cf. Unterberger) and to introduce mother tongue communication skills courses for students in order to enhance and improve the use of their L1 in academic contexts" (p.50).

In a different perspective, Valcke and Wilkinson (2017) play down the concerns about a hegemonic "Englishinisation" of HE and approach the issue from the point of view that English may work a catalyst for other languages to emerge in the role as *lingua franca*. They value the diversity of all the languages used within the academic setting and view the practice of integrating content and language in HE as "a form of code-meshing" (Valcke & Wilkinson, 2017, p.18), a practice to be considered (and valued) in the internationalisation of the curriculum. For the authors4:

> If combined with the appropriate methodological implications of best practices such as ELF, CLIL/ICLHE and intercultural competence, teaching content subjects through code-meshing English and other languages may very well be the transformative change that will foster new teaching and learning approaches fit for the twenty-first century"
>
> Valcke & Wilkinson, 2017, p.18

## 6. Internationalisation and English-taught programmes in HE

Over the last two-decade, HEIs in non-English-speaking European countries have developed a growing number of English-taught programmes (ETPs), i.e., study programmes offered by HEIs which use the English language as the language of instruction.

Europe-wide surveys that account for the development of ETPs in Europe (Ammon & McConnell, 2002; Marsh et al., 2013; Maiworm, & Wächter, 2002, 2014; Brenn-White & Faethe, 2013)

testify and quantify the exponential growth of these programmes at Bachelor and Master's degrees levels. Wächter & Maiworm (2014) large scale survey was conducted in 28 European countries, in 2,637 HEIs that held an 'ERASMUS Charter' in the academic year 2012/13. Results of identified ETPs went up from 725 programmes in 2001, to 2,389 in 2007 and to 8,089 in 2014, which means that the number has more than trebled in seven years. Brenn-White & Faethe (2013), in a detailed, data-driven examination of the growth of English-taught master's programs in Europe present results for 2013 that indicate a total number of 6,609 master's ETPs in Europe, which represents a 42% increase from 2011 data. The top host countries for English-taught Master's programs are the Netherlands, Germany, Sweden, France, and Spain.

Attitudes towards ETPs can differ significantly and, according to Pagèze and Lasagabaster (2017), they tend to embrace contrasting stances between, on the one hand, "a "maximalist" position where English is presented as the unique inevitable tool for the international spread of knowledge and, on the other hand, a more nuanced language ecology position where greater attention is given to the way English coexists with national languages in university programmes and settings" (p. 290). Whereas the "maximalist" stance presents English as a vehicle for globalisation, devoid from traces of cultural or political identity, the opposite position sees the use of English in a more pragmatic way, in terms of the disciplinary and academic cultures, closer to a certain European idea of multilingualism. This latter perspective is shared by countries with a consolidated experience of EMI and already well-established language policies in HE (Northern European countries), and by some Southern European contexts where ETPs have emerged more recently. Pagèze and Lasagabaster transfer the concept of "glocalisation" to education and call the attention to all the possibilities that may be explored with the emergence of EMI locally, a topic that resonates in this dissertation, which aims to study the potential of the CLIL approach at IPP:

> In all these respects, the emergence of EMI in national higher education contexts provides a fertile terrain for exploring glocalisation in education, that is, a negotiation between local identities and practices and a necessary adaptation to the forces of globalisation.
>
> Pagèze and Lasagabaster, 2017, p. 291

Another topic dealt with by several authors concerns the drives that push HEIs to offer ETPs. For Marsh et al. (2013), the major drive for HEIs to offer ETPs moved from "internationalization of the domestic environment" (p. 9), in the late 1990s, to the enhancement of "the domestic environment through attracting high calibre international students, and to source funding" (p. 9), in 2013. They argue that "competitiveness, national and international, and pressure to attract funding is driving universities to not only undergo change, but also be marketed internationally" (p. 9). Marsh, Pavón-Vázquez and Frigols-Martín also present what they identify as the 26 "key levers", or the "key actions and processes

that are required to successfully launch and operate higher education degree programmes provided in English" (p. 9) and which "are instrumental in ensuring quality outcomes." (p. 9). The authors account for and explain each of the 26 levers listed in Table 2.4, which constitute a guidance set for quality improvement in HEIs when introducing ETPs.

Table 2.4.

*Marsh et al.'s (2013) list of levers that need to be considered for achieving quality teaching and learning outcomes in English-taught degree programmes*

| | | |
|---|---|---|
| Governance & Strategy | Lever 1 | University Language Policy |
| | Lever 2 | Programme Objectives |
| | Lever 3 | Programme Language Plan |
| | Lever 4 | English Language Fluency |
| | Lever 5 | Staff Incentives |
| | Lever 6 | Role of Language Specialists |
| | Lever 7 | Linking Programme to Research |
| | Lever 8 | Technologies for Learning |
| Programme Management | Lever 9 | Student Intake |
| | Lever 10 | Voluntary Involvement of Teaching Staff |
| | Lever 11 | Coordinated Staff Dialogue |
| | Lever 12 | English language communication objectives |
| | Lever 13 | Learning Success Benchmarking |
| | Lever 14 | Concept Formation |
| | Lever 15 | English Language Programme Input |
| | Lever 16 | Plagiarism Management |
| Professional Integration | Lever 17 | Programme Support Staff |
| | Lever 18 | International Networking, Cooperation & Publishing |
| | Lever 19 | Cooperative Ventures |
| | Lever 20 | Communities of Practice |
| | Lever 21 | Interactional Methodologies |
| | Lever 22 | Conceptual Scaffolding |
| | Lever 23 | Quality Assurance & Accreditation |
| Participatory Learning in Media-rich Environments | Lever 24 | Digitized Learning Environments |
| | Lever 25 | Social Media |
| | Lever 26 | Studio and Virtual Environments |

Wächter and Maiworm (2014) also surveyed over 1,000 Institutional Coordinators and Programme Directors at schools that had established ETPs, in order to understand the reasons for the increase in these types of study programmes. The reasons presented by these stakeholders for the implementation of ITPs are here transcribed, ordered by level of importance, from the most to the least frequent reason presented:

– Abolition of language obstacles for the enrolment of foreign students, i.e. to attract foreign students who would not enrol in a programme taught in the domestic language.

– Improvement of international competences of domestic students by fostering the intercultural understanding and competences of domestic students, by enriching

> learning through study together with students from different national/cultural backgrounds and by making domestic students 'fit' for global/international labour markets.
>
> – Sharpening of the international profile of the institution, e.g. in comparison to other institutions in their own country or as a driver to foster partnerships with institutions from other countries, e.g. by setting up double degree or exchange programmes.
>
> – Brain gain, i.e. recruitment of international academic staff and top talents, e.g. PhD students, and attraction of foreign students as a future work force for their own country/region.
>
> – Altruistic motive, i.e. to contribute to the development of the 'Third World' by providing high level education for students from respective countries.
>
> – Compensation of shortages of the institution, e.g. to counterbalance a lack of enrolment of domestic students or to improve the income base of the institution through revenue from tuition fees paid by foreign students.
>
> Wächter & Maiworm, 2014, pp. 52-53

Currently, there are no date comparable to the comprehensive study by Wächter and Maiworm in 2014, but recent research point to a confident report of the growing of the EMI phenomenon at all levels of education, and particularly in HE settings (Macaro et al., 2018; Dearden, 2015; Lasagabaster, Doiz & Sierra, 2014). In a systematic review of research in English medium instruction in HE, Macaro et al. (2018) synthetise the various, context-dependent reasons for HEIs to offer undergraduate and postgraduate programmes through the medium of English, which include

> a perceived need to internationalise the university […] in order to render it more prestigious; needing to attract foreign students because of falling enrolment numbers of home students through changing demographics, national cuts in HE investment; the need of the state sector to compete with the private sector; and the status of English as an international language, particularly in the domain of research publications.
>
> Macaro et al., 2018, p.37

In a research study on the design of the BA in Language Management for International Business and the MA in Intercultural Studies for Business, taught at ISCAP, Portugal, both courses being ETPs, Pascoal et al. (2019) "glocalise" their analysis and, among other issues, reflect upon the opportunities and challenges of presenting a pioneer study programme "fully taught in English, a strength worth

noting" (Pascoal et al., 2019, p. 13).The arguments presented by the authors about the advantages of adopting the ETP format include the fact that it can promote internationalization of the HEI and open the door to multiple opportunities (mobilities, networks); it opens employment opportunities in English language-related business areas and it facilitates networking due to the possible multinational origin of the students, which could later benefit them professionally. The challenges to overcome are the fact that being a degree that is taught exclusively in English, it may restrain national access; there might be heterogeneity in terms of the use of English by the students in the classroom; for foreign students, possible insufficient proficiency in Portuguese language is an issue that needs to be addressed by the administrative board of the institution and the possible lack of bilingual scientific literacy of teachers and students alike may face (Pascoal et al., 2019).

## 7. Internationalisation of HE in Portugal

With the 25th of April 1974 in Portugal and the end of dictatorship, the tides of profound change in education were launched (Neave & Amaral, 2012): the democratization of access to education and a new network of HEIs (universities and polytechnic institutes) led to a significant increase in the number of students in Portuguese HEIs and, in just over four decades, the number of students more than quadrupled, rising from 81,582 in 1978 to 349,658 in 2015 (Pordata, 2017).

After 25 years as a free country, at the turn of the 21st century, the country still "did not have a consistent policy for internationalizing higher education" (Sin et al., 2016, p. 177) and was faced with the need to implement the harmonizing orientations of the Bologna Declaration of 1999. Until then, internationalisation strategies in Portuguese HEIs had almost exclusively involved student and teacher exchanges within the pre-set, imposed format of already existing European mobility programmes (Sin et al., 2015) and a small number of students from countries where Portuguese is or was an official language (in Portuguese, CPLP). International exchange was even discouraged, considering such governmental measures as the non-recognition of Portuguese degrees awarded cross-borders, for example.

Under the economic crisis of the first decade of the century and the slowdown in growth HEIs, with less money and fewer students, "created a new interest in the recruitment of foreign students […] and the government came under increasing pressure to create more attractive conditions for the internationalization of educational activities" (Sin et al., 2016, p. 179). In a study conducted in 2004 to identify which factors foster and which factors impede the development of international activities at the organisational level in the Portuguese higher education system, Veiga et al. (2006) concluded that the hindering factors for the internationalisation of the Portuguese higher education system were (1) the confusion created by the lack of adequate national legislation and the recurrent changes of Ministers, (2) financial difficulties and lack of effective financial incentives from the government (3) legal barriers

preventing Portuguese HEIs from offering Portuguese degrees abroad the consequence of an unfavourable attitude towards the development of education activities by Portuguese institutions abroad, (4) an ambivalent attitude towards the use of foreign languages, with a general preference for the use of Portuguese as teaching language and many professors not being able to teach in English and many students not being able to understand classes taught in English (Veiga et al., 2006, pp. 126-127). Although some HEIs were trying to implement, at least partially, some components of the Bologna process, "the only effective lever for internationalisation that Portuguese HEIs [could] use [were] the EU programmes, which explains why the attitude of the HEIs is far more reactive than pro-active to internationalisation challenges" (Veiga et al., 2006, p. 126).

The needed support would come only in 2014, almost 10 years later and four years after the election of the XIX Portuguese Constitutional Government, with the publication of the Strategy for the Internationalisation of Portuguese Higher Education (Ministry of Education and Science, 2014). The final report of the study group that prepared the document characterized the Internationalisation system in Portuguese HE as "diffuse and fragmented" with only "modest results" (MEC, 2014, pp. 17-18) and it concluded with a strategy proposal. The new Strategy for the Internationalisation of Portuguese Higher Education is presented as a list of 40 recommendations across four key dimensions, namely institutional collaboration, mobility, institutional strategic partnerships, and the development of more digital education resources. Institutional collaboration involves not only consortia and joint curricula but also co-operation between researchers and the design and implementation of projects built with other HEIs. Collaboration also covers international mobility of students, teachers and researchers, the development of International Student Law and an improved welcoming process for international students. Simultaneously, mobility aims to double the current number of visiting international students by 2020 bolstered by institutional strategic partnerships and the development of digital education, which include MOOCs and distance learning courses in Portuguese.

The year 2014 is also a landmark in Portuguese HE internationalisation policies because of the publication of the Decree Law 36/2014, which defines an International Student Status (ISS). ISS students, who must finance the full real costs of their education, have become a potential target group for the further financing of HEIs.

Language issues are addressed in the 2014 Internationalization Strategy report, where Portuguese is acknowledged as an attractive feature for students from CPLP countries and for those interested in developing their communicative competence in a fast-expanding language that is currently spoken by 250 million worldwide (MEC, 2014). Foreign language proficiency is also recognized as an asset, such that "an increase in the number of courses offered in English is, therefore, highly recommended. The multilingual skills of Portuguese higher education students should also be significantly improved" (MEC, 2014, pp. 17-18). The ERASMUS/ERASMUS+ Programme, as well as

the formal recognition of the statute of the International Student (Decree Law 36/2014) and the implementation of strong internationalisation policies (Ministerial Resolution 78/2016) made the specific need of a language policy in HEIs even more evident and placed proficiency in the use of English by both teaching staff and students as a pivotal concern and a challenge for these institutions.

The consolidation of the policy of internationalisation of HEIs in Portugal gained additional momentum in 2016 with the Resolution of the Portuguese Council of Ministers (78/2016), defining the guidelines for the internationalisation of higher education, science and technology to promote public policies that value the development of knowledge and skills. This Resolution establishes a few principles to build on the Decree Law 36/2014 policy, including an emphasis on action and policy evaluation (recommended at four-year intervals), and a new theoretical framework which is expected to be expanded. The Portuguese government has also acknowledged the fundamental role of HEIs and research centres and their relevant participation in international networks, while simultaneously enhances their ability to innovate and contribute to social, cultural and economic development. While recognizing the essential symbiosis of internationalization with the threefold mission of the university – from research to education and world citizenship – the financing of these strategies continues to be a concern. A recent outcome of the government commitment with this resolution was the launching in January 2017 of the Study & Research in Portugal platform (https://www.study-research.pt/), dedicated to students and researchers, companies and foreign institutes of Science and Technology in Portugal.

The results of a documental survey carried out in 2017 (Arau Ribeiro & Coelho, 2019; Coelho & Arau Ribeiro, 2018), which examines the official Strategic Plans of the 16 public polytechnic institutes and 14 public universities across Portugal confirm that the international dimension is an explicit concern present in all strategic plans of the HEIs surveyed. The relevance of the international dimension in the overall strategy of the HEI varies considerably across institutions, ranging from an explicit structural strategic priority in some institutions, to an "operational objective", a "line of action", or a "guideline" for a strategic area in other institutions. There seems to be a clear divide between the polytechnics and universities' approach to internationalisation, with most polytechnic HEIs acknowledging internationalisation as one of the strategic areas of the HEI, whereas the universities tend to identify it as an "objective" or a "strategy" supporting the structural priorities set for the institution. The study also shows that, whereas some HEIs identify "internationalisation" as an individualised strategic area, others associate it with other strategic dimensions such as the investment in "the HEI's network and in internationalisation", "internationalisation and mobility", or "society, internationalisation and cooperation". As for the action to enhance the internationalisation policies defined for these Portuguese HEIs, there is considerable variety although a few common trends are identified, such as partnerships, increasing or consolidating staff and student ERASMUS+ mobility, attracting international students, and courses taught in English or other languages are among the actions often presented by HEIs to enhance internationalisation and strategic development. Another finding of

the report is that the reinforcement of the institutional and operational relations between Portuguese and foreign HEIs is clearly defined, pointing the way to future geo-political partnerships to be established with Portuguese-speaking African countries, the Community of Portuguese Language Countries, South America, Asia, Spain and India. These protocols and partnerships are presented as opportunities to internationalise the training offer, to create short courses as partner HEIs or implement (additional) jointly offered degrees. There are references to other actions aimed at IaH, including the reinforcement of student and staff language proficiency by offering foreign language courses, improving the international dimension in students' training, and offering more blended learning (b-learning) courses.

Nowadays Portuguese HEIs must compete in highly diversified contexts, both nationally and abroad. The singularity of each context, whether economic, political, cultural, social or academic, requires the adoption of tailored, innovative measures and approaches for each HEI and ongoing efforts to transform the top-down policies into national and local action and transferring the agency of IaH from abroad to local sources. Given the centrality of internationalisation policies, strategies and measures in HE priorities, some researchers point out that it is high time that HEIs make a concerted organizational effort to train professionals able to work in international settings, to guarantee participation in transnational projects and benefit from and contribute to the desired transfer of knowledge.

# *Part Two*

# *Conceptual Framework*

# CHAPTER THREE:
# THE CLIL/ICLHE APPROACH IN HIGHER EDUCATION - MODELS, CONCEPTS, EMPIRICAL FINDINGS AND TEACHER TRAINING

Over the last two decades, within the broad, globalised European context, the European Commission has been advocating the potential of bilingual education as a means to improve second language learning across all education levels (Coyle, 2007). In an important publication on language policy - *Promoting language learning and linguistic diversity: An action plan 2004–2006* -, the European Commission (2004) set out the three main policy objectives to be pursued in order to promote language learning and diversity, namely (1) to promote language learning as a lifelong activity, (2) to improve the quality of its teaching at all levels, and (3) to create a language-friendly environment in Europe by promoting linguistic diversity, building language-friendly communities and facilitating language learning. To encourage lifelong language learning, the Commission proposes the learning of two languages in addition to the mother tongue and argues that Content and Language Integrated Learning (CLIL), which refers to the situation "in which pupils learn a subject through the medium of a foreign language, has a major contribution to make to the Union's language learning goals" (European Commission, 2004, p. 19).

In the Commission's view, the adoption of a CLIL approach gives learners effective opportunities to

> use their new language skills now, rather than learn them now for use later. It opens doors on languages for a broader range of learners, nurturing self-confidence in young learners and those who have not responded well to formal language instruction in general education. It provides exposure to the language without

> requiring extra time in the curriculum, which can be of particular interest in vocational settings.
>
> European Commission, 2004, p. 19

Rooted in the project of a united Europe plurilingual and multicultural, CLIL is viewed as an attempt to find a solution to the increasing need of preparing young adults for the challenges of a globalized world (Pavón & Ellison, 2013; Dafouz & Guerrini, 2009) and as an answer to the imperative to provide students and teachers with effective foreign language skills (Coyle et al., 2010; Pérez Cañado, 2012). As observed by Marsh (2002), CLIL "emerged as a pragmatic European solution to a European need" (p. 11) and it consistently developed from then on (Dalton-Puffer & Nikula, 2006).

For HEIs, in need of upgrading students and lecturers' FL proficiency to achieve sustainable learning outcomes and attracted by the idea of being able to provide, in an innovative way, for the FL learning needs of a larger number of students (including the immigrant population in the classrooms all over Europe) without adding extra class contact teaching time, the new perspectives opened by the potential of the CLIL approach were received with interest (Coyle et al., 2010; Ball et al., 2015). And this was even more so, when research and good practices confirmed the added value of the CLIL learning model, not just as an additional educational tool, but as an integrated approach with implications for course design, teacher training, teaching methodologies used and materials produced.

Over the past two decades CLIL has visibly gained an exponential interest in Europe, with research testifying "the rapid and widespread adoption of CLIL in the European arena" (Pérez-Cañado, 2012, p. 316) and the research focus being directed to such topics as the effects of its implementation, to the attitudes it is generating in stakeholders (Pérez-Cañado, 2012; Piquer-Píriz & Castellano-Risco, 2021) and to the heterogeneity of CLIL requirements and types of programmes (Alejo & Piquer Píriz, 2010; Lasagabaster & Zarobe, 2010, among others).

This general overview of the emergence of CLIL in Europe is intended to provide the background for the analysis of some more specific aspects of CLIL in HE and then, with the broader understanding of this conceptual framework, to be able to gain a deeper insight into the analysis of the potential of the CLIL approach with HE teachers of IPP, in Portugal.

The chapter begins by distinguishing different models of bilingual teaching approaches in HE (section 1). Aware of the complexity of attempting to draw a historical overview of "bilingual teaching" and trying to avoid an oversimplification that would certainly not give credit to the richness of each different approach, this section will mainly focus on two of these models that have been particularly relevant in HE, namely, EMI and CLIL/ICLHE, providing an overview of the key principles associated with them and highlighting how they relate to each other. Section 2 examines specific aspects of the CLIL/ICLHE approach (models, key principles, the role of language in this dual-focus approach, teachers' competences and the reasons for some criticism received. Sections 3 and 4 account for some

studies carried out within English-taught programmes (ETPs) and CLIL/ICLHE training in HE, which can relate or be pertinent to the objectives set for this dissertation.

## 1. Some models of bilingual teaching in HE – EMI and CLIL/ICLHE

The idea of using a second language to teach non-linguistic content is common to different educational approaches, such as EMI (English as a Medium of Instruction), Content and Language Integrated Learning (CLIL), Content-Based-Instruction (CBI), Content-Based Language Teaching (CBLT)**,** English as an Additional Language (EAL), Bilingual Teaching, Dual Language Program or English Across the Curriculum, all relying on particular theoretical background or set in particular historical and cultural/national contexts where they made particular sense in view of the national languages, the preferred language for education or the aim and scope of the content to be taught, among other issues (Morgado & Coelho, 2014).

In recent decades, with globalisation, internationalisation, and on account of the active promotion of multilingualism by the European Community, the number of research studies within content-oriented approaches to teach content through a foreign language has expanded and, as pointed out by Dalton-Puffer at al. (2014) "classrooms the world over are full of people who, for different reasons, are learning additional languages and/or are studying through languages that are not their first", which, brings the "problem of accounting for a myriad of contextual variables in a way that furthers insight for scholars and practitioners alike" (p. 213).

The debate about practices that integrate content and language is not a new issue in education research. Gabillon (2020) stresses that combining content teaching with the teaching of an additional language was the practice of the immersion programmes in Canada, where they have been "using content-based instruction (CBI) successfully, and they had already accumulated positive research results to support the benefits of integrating content teaching with AL [additional language] teaching" (Gabillon, 2020, p. 4). Earlier, at the turn of the twenty century, Met (1998) had already stated that "in recent decades there has been a number of approaches to integrating language and content" (p. 40), taking place at all levels of education and all around the globe.

According to Met (1998) "the varied approaches to integrating language and content reflect a continuum that allows for a range of models for integrating language and content" (p. 41). The author clarifies the role of language in bilingual education by presenting content and language falling along a continuum that goes from language-driven to content-driven orientations and approaches (Figure 3.1). Met (1998) explains that "although all programmes on the content based continuum integrate the teaching of language and content, the role that content plays in relation to language development and the amount of explicit language instruction students receive may vary substantially" (p. 41).

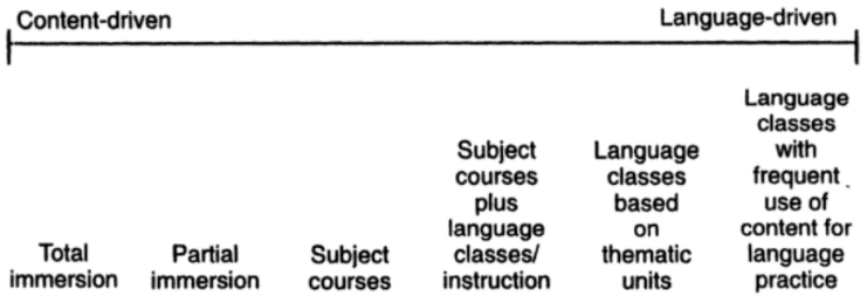



*Figure 3.1.* Met's (1998, p. 41) representation of content-based language teaching: a continuum of language and content integration.

Recently, Genesee (2018) corroborated Met's views on the variety of programme models when he states that the most striking fact about the growth of "dual language programs, aside from their growing number, is the diversity of program models that have evolved as well as the diversity of community and national contexts in which they have evolved" (p. 135).

In the present-day European HE context the debate continues, and as concluded by Macaro et al. (2018) in a state-of-the-art article with a systematic review of English medium instruction in HE "there is a lack of consensus in the research field as to what label should be attributed to the phenomenon under observation and there is a lack of definition and specification as to what that label actually represents" (p. 64). There is now a growing amount of research studies on bilingual teaching practices and models that report on teaching approaches such as English-medium Instruction (EMI) and Content and Language Integrated Learning (CLIL)/Integrating Content and Language in Higher Education (ICLHE). In common, these reported practices use an additional language for teaching and learning, but there is much that also sets them apart. In the following sub-sections, the focus will be on providing an overview of the key principles associated with each of these approaches, highlighting how they relate to each other.

### 1.1. English as a Medium of Instruction (EMI)

There has been a general growth trend of English as a Medium Instruction (EMI) over the last 20 years, with a growing number of EMI programmes implemented at European universities and a significant increase in research on the EMI approach, particularly in Europe (Pecorari & Malmström, 2018; Dafouz 2018; Dafouz & Smit, 2020; Briggs, et al., 2018; Fortanet, 2013; Macaro 2018; Macaro et al. 2019; Pérez-Cañado 2018; Wilkinson, 2017, Piquer-Píriz & Castellano-Risco, 2021; Macaro, 2021, among others).

Among different definitions of EMI (Hellekjaer, 2010, p. 11; Dearden, 2015, p. 2; Aguilar, 2017, p. 726), Dearden and Macaro (2016) define English medium instruction (EMI) as "the use of English language to teach academic subjects in countries or jurisdictions where the first language (L1)

of the majority of the population is not English" (p. 456). The definition associates EMI with HE contexts and establishes its focus on content learning outcomes. It does not suggest any language support or established purpose for improving students' English. A most salient feature is the explicit reference to the use of the English language as the vehicular medium of instruction (Dearden & Macaro, 2016; Woźniak & Crean, 2021).

In the analysis of five selected definitions of EMI, Pecorari and Malstrom (2018) found four distinctive features that, according to the authors, summarize the received understanding of EMI, namely, "1. English is the language used for instructional purposes; 2. English is not itself the subject being taught; 3. Language development is not a primary intended outcome, and 4. For most participants in the setting, English is a second language (L2)" (p. 499). The authors used these findings and contrasted them with a thorough analysis of the characteristics identified in research studies in the area of EMI, to conclude that "the research community interprets EMI broadly" (p. 507). Supported by the analysis to the applied studies Pecorari and Malstrom, concluded that, in practice, EMI "occurs in a broad range of settings, at various educational levels, in contexts in which English is a dominant language and in which English language development is supported and actively worked for" (Pecorari & Malstrom, 2018, p. 507).

The adoption of EMI is usually associated with the HEI's internationalisation policies and justified by communication needs between lecturers or students who speak different languages. In a state-of-the-art article on English-medium teaching in European HE, Coleman (2006) lists seven categories of reasons, namely "CLIL, internationalization, student exchanges, teaching and research materials, staff mobility, graduate employability and the market in international students" (p. 4) and he states that" Foreign language learning in itself is NOT the reason why institutions adopt English medium teaching" (Coleman, 2006, p. 4).

In Macaro's (2021) identification of the drivers for the introduction and growth of EMI, the rationales presented are also manifolded and highlighting other types of motives. First there is "the desire to increase the international profile of the institution" (p.510) with "internationalisation" being an important part of most HEIs' strategies and the skill to attract international students and lecturers a key "way of increasing a university's income, especially in countries where there is falling domestic enrolment, perhaps through a diminution in the birth rate" (Macaro, 2021, p. 511). Another driver is the benefit that being enrolled in an EMI programme may bring to home students, as it can improve their English proficiency because of the increasing exposure time to the English language, and consequently enhance their employability opportunities. Financial globalisation is also presented as a driver of EMI, considering that nations increasingly see a need to operate at the supranational level. The 'vertical and horizontal forces', i.e., the pressure from secondary education that wants to see their bilingual trained students continuing that path at university level, and the pressure put on the state sector by private

schools, whose bilingual programmes in English can be a threat and need to be confronted. Concurrent with these drivers of EMI is, according to Macaro (2021, p. 512), a growing offer of professional development courses for EMI teachers. Both internal and external to the HEI, the number and format (face to face and online) of these teacher training providers is increasing. The commodification of the EMI phenomenon is growing and "the very existence of these providers potentially acts as a further driver for increasing EMI courses" (Macaro, 2021, p. 512). The final reason listed by the author is, in his own view, a debatable point, and it is related to the exponential increase of research on EMI in the last decade, which eventually will force stakeholders to notice the effective growth of EMI.

Although the adoption of EMI is usually associated with the HEI's internationalisation policies and often justified by communication needs between lecturers or students who speak different languages, recently it seems that more attention is being given to the role that language plays in EMI. Moncada-Comas and Block (2019), following Arnó-Macià and Mancho-Barés (2015) and Dafouz (2018), explain that

> progressively EMI is being positioned as an opportunity for students to improve their English academic skills (Arnó-Macià and Mancho-Barés 2015), even if, as Dafouz (2018) notes, this objective is not made explicit by those responsible for course curricula and therefore exists with no content or pedagogical forethought.
>
> Moncada-Comas and Block, 2019, p. 688

Moncada-Comas and Block remind Airey's (2016) argument that 'it is a fallacy to think that content and language can be separated' (Moncada-Comas & Block, 2019, p. 687) and they use "the term CLIL*ised* EMI to capture this notion, that EMI is a site for both content and language learning" (p. 688). In Moncada-Comas and Block's view (2019), "this shift to the inclusion of language learning as an aim of EMI means that EMI becomes CLIL*ised*" (p. 687) and it becomes partly close to Coyle's definition of CLIL as a dual-focused approach. The trend towards "the 'clil-ization' of EMI in general and towards 'clil-ization' of EMI programmes at universities" (Piquer-Píriz & Castellano-Risco, 2021, p. 86) has been recently emerging in research (Alejo-González, 2018; Moncada-Comas & Block, 2019, Pérez-Cañado 2020; Piquer-Píriz & Castellano-Risco, 2021) but, in fact, as implied by Piquer-Píriz & Castellano-Risco, (2021), its presence was already found in practical approaches of applied EMI programmes. Only it had not yet been given a label.

More recently, Pérez Cañado (2021) also argues that "EMI should be CLIL-ised, so that a stronger language focus runs through it both for teachers and for students" (p. 188). The same author also highlights some of the advantages of the process: "many of the lessons gleaned from research on CLIL can be productively applied to EMI: the convergence between CLIL and EMI research needs to be built upon in order to continue pushing the research agenda forward" (p. 173). Considering, as an example, Strotmann et al.'s (2014) still recent distinction between EMI and CLIL, according to which

EMI focuses on content learning, the learning of English being implicit, whereas CLIL emphasises "the integrative nature of multilingual education" (p. 93), in a dual approach: the learning of content and language, it is possible to anticipate some debate coming ahead.

### 1.2. Content and Language Integrated Learning (CLIL)/Integrating Content and Language in Higher Education (ICLHE)

Marsh (2002) refers back to mid-1990s the first use of the acronym CLIL by the *European Network of Administrators, Researchers and Practitioners*, supported by the European Commission, who decided to adopt the term Content and Language Integrated Learning (CLIL) "as a generic umbrella term which would encompass any activity in which a foreign language is used as a tool in the learning of a non-language subject in which both language and the subject have a joint curricular role" (p. 58). The 1995 Resolution of the Council constitutes a landmark for CLIL, as it included an explicit mention to it as an innovative teaching practice, in particular, to 'the teaching of classes in a foreign language for disciplines other than languages, providing bilingual teaching' (Eurydice report, 2006, p. 8). In the same year, the European Commission publishes *Teaching and Learning – Towards the Learning Society* and stated that 'it could even be argued that secondary school pupils should study certain subjects in the first foreign language learned, as is the case in the European schools' (Eurydice report, 2006, p. 8).

In 2001, for the celebration of the European Year of Languages, attention was drawn to the promotion of language learning and linguistic diversity, stating that it may be achieved through a wide variety of approaches, including CLIL type provision. In 2003 the Commission initiated its Action Plan 2004-2006 in which CLIL provision is cited as having 'a major contribution to make to the Union's language learning goals' (Eurydice report, 2006, p. 9). In 2006, the Eurydice European Unit set another important date for CLIL with the publication of the document *Content and Language Integrated Learning (CLIL) at School in Europe* (Eurydice report, 2006), which described the efforts of implementation of CLIL in 30 states of Europe, and CLIL is defined as

> the acronym CLIL is used as a generic term to describe all types of provision in which a second language (a foreign, regional or minority language and/or another official state language) is used to teach certain subjects in the curriculum other than languages lessons themselves.
>
> Eurydice report, 2006, p. 8

Coyle et al. (2010, p. 1) define CLIL as a "dual focused educational approach in which an additional language is used for the learning and teaching of both content and language". The plurilingual dimension of the definition does not limit it exclusively to English language, although in practice, English is the language most frequently used (Coleman, 2006). The explicit aim of improving students"

language proficiency immediately sets CLIL apart from EMI. Moreover, being an "educational approach", enforces the existence of a teaching method, or teaching pedagogy (Morton 2010, p. 97; Ball, Kelly, & Clegg, 2015; Dalton-Puffer & Smit, 2007). Coyle's conceptual framework for CLIL (1999), commonly called the "4C's model", is a fundamental tenet of the CLIL educational approach and a sound guideline for planning CLIL lessons or units. The 4Cs refer to *content* (the subject matter), *cognition* (the way you process information and engage with it to construct meaning), *communication* (using language *of*, *for* and *through* learning) and *culture* ("developing intercultural understanding and global citizenship" (Coyle *et al*., 2010, p. 41), which are the components that constitute the four guiding principles or building blocks that interrelatedly build the base of any CLIL program (Coyle, 1999, 2005, 2006).

The 4Cs conceptual framework is a sound theoretical and methodological support for teachers to plan CLIL lessons, establish learning aims, devise tasks and design materials (Meyer, 2010). Although each of the four components can be outlined individually, the fact is that they do not exist as separate elements and it is their interconnection that can lead to effective CLIL teaching. As highlighted by Hemmi & Banegas (2021, p. 8) "The 4Cs framework places equal emphasis on each of the four C's advocating an approach to learning where content is considered inter-twinned with and inseparable from communication, culture and cognition."

More recently, Meyer *et al*. (2015) have revisited the 4Cs conceptual framework and started exploring new developments in the understanding of the interface between language and learning. They propose a new "pluriliteracies" approach, which further develops current thinking in CLIL (Meyer et al., 2015; Meyer & Coyle, 2017; Coyle & Meyer, 2021). In a presentation on behalf of the Graz Group ECML, Coyle (2015) re-centered the relevance of the 4Cs framework as an awareness "reminder", for teachers, of the components of CLIL and she highlights its contribution to support teachers in their CLIL planning. Coyle (2015) underlines that the "4Cs Framework is based on the principle that strengthening and deepening a learner's conceptual understanding requires social, cultural, linguistic and cognitive processes" (p. 2). Thus, "the need for teachers to not only focus on content and language, but also on the dynamic aspects of integrated learning without which neither language progression nor knowledge construction can happen effectively" (p. 2).

CLIL refers to more than just using a FL as a medium of instruction to teach subject-specific content. In CLIL programmes and classes, the foreign language and the non-language content have a joint curricular role and are developed without the precedence of one over another. As Marsh (2002, p. 58) puts it, CLIL "does not give emphasis to either language teaching or learning but sees both as integral part of the whole".

The distinction between CLIL and other forms of bilingual education has also been extensively dealt with by research. Dalton-Puffer (2011) distinguishes CLIL from immersion education

and content-based instruction on the ground that in CLIL the FL or lingua franca is generally not regularly used outside of the classroom; students must have acquired literacy skills in their mother tongue before being exposed to CLIL teaching; CLIL teachers are generally subject specialists and non-native speakers of the target language; and CLIL lessons are usually timetabled as regular lessons within the school curriculum.

Cenoz et al. (2013) argue that CLIL and immersion share the same motivations, objectives and drives (content driven), and CLIL can be described, broadly speaking, as an umbrella term, similar to CBLT (Content-Based Language Teaching), that can accommodate a variety of content-based bilingual/multilingual programmes.

Dearden (2015) focuses on the distinctive features of CLIL and EMI, namely, the contextual origin of CLIL, the reference to a specific language of reference, and the programmatic principle mentioned in the CLIL approach:

> Whereas CLIL is contextually situated (with its origins in the European ideal of plurilingual competence for EU citizens), EMI has no specific contextual origin. Whereas CLIL does not mention which second, additional or foreign language (L2) academic subjects are to be studied in, EMI makes it quite clear that the language of education is English, with all the geopolitical and sociocultural implications that this may entail. Whereas CLIL has a clear objective of furthering both content and language as declared in its title, EMI does not (necessarily) have that objective.
>
> Dearden, 2015, p. 4

Although the term CLIL is commonly applied to primary/secondary education, "in recent years, there has been a tendency to extrapolate some of the main postulates of CLIL to Higher Education" (Piquer-Píriz & Castellano-Risco, 2021, p. 85) where its use is now often reported (Aguilar & Rodríguez, 2012; Fortanet-Gómez 2012; Airey 2016; Macaro, 2018), and commonly referred to as "Integrating Content and Language in Higher Education (ICLHE). The term has been specifically coined for Higher Education (Wilkinson, 2018, 2004) and it is another approach focusing on the integration of content and language, but specific to higher education (Costa 2016; Woźniak, & Crean, 2021, p. 34).

The distinction between EMI, CLIL and ICLHE in HE has been dealt with by research (Aguilar, 2017, Morgado & Coelho; 2013; Piquer-Píriz & Castellano-Risco, 2021, among others) and on this issue, Woźniak, & Crean, (2021), from literature reviewed, concluded that

> the reality seems to be that these three terms are often used interchangeably in tertiary contexts and that there is confusion as regards what ICLHE and

> EMI really entail as it is possible to see evidence of language support in tertiary CLIL, ICLHE and EMI assessment initiatives
>
> Woźniak, & Crean, 2021, p. 34

This view might be seen as another argument for the CLIL-isation of EMI, but mostly it evidences the increasingly blurred distinction between the different concepts and the need to find some common ground in these matters "in order to continue pushing the research agenda forward" (Pérez-Cañado, 2021, p. 173).

Broadly, the general idea is that CLIL makes provision for learners' language needs, whereas EMI refers to the delivery of a lesson or course *in English*. It is a fact that, in theory, HE students' English language skills should be sufficient for fully participating in class discussions and activities in classes taught in English. The same should be said for lecturers in HE. However, practice does not fully corroborate such assumptions, as extensively presented in research and content lecturers do not feel they are in the position of being language teachers (Aguilar, 2017; Airey, 2012; Pecorari et al., 2011) when they are in their content teaching role.

Recently, Dafouz and Smit (2014, 2016, 2020) have coined the term EME (English-Medium Education) and EMEMUS (English-Medium Education in Multilingual University Settings). The authors propose this acronym that is "semantically wider, as it does not specify any particular pedagogical approach or research agenda" (Dafouz & Smit, 2014, p. 399). This term does define the language to be used, that is English, and Dafouz and Smit give a reason for this: English plays an important role as academic language of teaching and learning and, possibly even more importantly, it is the "means of international communication across professions and trade".

## 2. The CLIL/ICLHE conceptual approach and framework

### 2.1 CLIL/ICLHE fundamentals

Dalton-Puffer (2007), Mehisto (2008) and Coyle (2007, 2010) emphasise the dual focus of the CLIL approach and the fact that both language and content knowledge are promoted simultaneously without preference for one or the other. Although English is the most used language, the CLIL approach does not value one language over another (Coleman, 2006), but rather promotes a favourable environment for the development of plurilingual competences and offers students the possibility of continuing gaining skills in different languages and cultures.

Framed within a constructivist learning philosophy and principles of communicative and holistic education, the underlying idea of the CLIL approach is the integration of content and language, which enables students to learn in an environment where communication is intended to convey content in a specific area and language is seen as 'a means' rather than 'an end in itself'. Dalton-Puffer et. al.

(2007) suggest that this may explain CLIL students' higher motivation to communicate in L2, as the anxiety over the correct language form of traditional language teaching is substantially reduced in this approach. Vilkancienė (2011, p. 113) refers "more tolerance to language usage", with eventual use of the mother tongue ('code-switching strategies') and "more support for language production" (p. 113) as two distinctive principles of CLIL approach, as opposed to traditional language teaching methodologies.

In *Uncovering CLIL: Content and Language Integrated Learning in Bilingual and Multilingual Education*, Mehisto et al. (2008) list the six "essential elements of good practice in CLIL and in education in general" (p. 27), namely *multiple focus* (language learning and content learning are both supported); *safe and enriching learning environment* (building students' confidence to experiment with language and content); *authenticity* (using current materials and accommodating students' interests and their experiences); *active learning* (learner-centred teaching, negotiation of meaning; teacher as facilitator of learning); *scaffolding* (building on students' prior knowledge, repackaging information and fostering students' creative and critical thinking while responding to their different learning styles); and *co-operation* (collaboration with other teachers and involvement in the community) (Mehisto et al., 2008, pp. 29-30). CLIL principles enhance learner autonomy and promote the active role of the learner during the lessons, preferably relying on task-, process- and case-based strategies.

Coyle's conceptual framework for CLIL (1999), commonly called the "4C's model", is a fundamental tenet of the CLIL educational approach. The 4Cs refer to *content* (the subject matter), *cognition* (the way you process information and engage with it to construct meaning), *communication* (using language *of*, *for* and *through* learning) and *culture* ("developing intercultural understanding and global citizenship" (Coyle *et al*., 2010, p. 41)), which are the components that constitute the four guiding principles or building blocks that interrelatedly build the base of any CLIL program (Coyle, 1999, 2005, 2006). In an integrative and multicultural approach, the interrelationship among the four elements operationalises the model and language, as a learning tool, operates in 3 directions: from - to – through ("the language triptych" Coyle, 2007).

The 4Cs conceptual framework is a sound theoretical and methodological support for teachers to plan CLIL lessons, establish learning aims, devise tasks and design materials (Meyer, 2010). Although each of the four components can be outlined individually, the fact is that they do not exist as separate elements and it is their interconnection that can lead to effective CLIL teaching. As highlighted by Hemmi & Banegas (2021, p. 8) "The 4Cs framework places equal emphasis on each of the four C's advocating an approach to learning where content is considered inter-twinned with and inseparable from communication, culture and cognition."

In CLIL programmes and classes, foreign language and content (teaching and learning) play a joint, equally relevant curricular role, both being "integral parts of the whole" (Marsh 2002: 59). This

dual integrative and multicultural approach to language and subject teaching and learning is characterised by Coyle (1999) through four dimensions – content, communication, cognition and culture –, the 4Cs, which build CLIL basic pedagogic framework and it is characterized by Mehisto et al. (2008, p. 29) by six core methodological features, namely, the multiple focus, the promotion of a safe and rich learning environment, authenticity in class, the promotion of active learning, the enhancement of cooperation among different participants and the use of scaffolding as one of its strategies.

To make sure that learners successfully deal with the challenges of coping with both content and language learning through using a foreign language as a medium of instruction, it is essential that the CLIL teachers clearly identify language demands and consistently adopt strategies to assist and support students. These *scaffolding strategies*, or "temporary supporting structures that will assist learners to develop new understandings, new concepts and new abilities" (Hammond, 2001, p. 12), "[…] designed to help the learner independently to complete the same or similar tasks later in new contexts" (Hammond & Gibbons, 2005, p. 5), will both help learners' development of content, language and learning skills and effectively support and lead them towards a path of enhanced confidence, motivation and autonomy in learning (Coelho, 2017). Scaffolding is a fundamental element in CLIL teaching and the continuous use of different scaffolding strategies in CLIL classes and a broader application of such strategies will effectively promote the learners' autonomy and to foster their confidence in dealing with content when using a FL. Moreover, and considering that the use of these scaffolding strategies in CLIL contexts will foster the development of both language skills and professional competences, we infer that the CLIL learner will be able to face the ever increasing competitiveness of the labour market with new, innovative competences, which will increase his/her employability possibilities (Coelho, 2017).

CLIL's basic conceptual framework (the 4Cs) interconnects Content, Cognition, Communication and Culture (Coyle, 2007; Coyle et al., 2010) and supports teachers when designing and implementing CLIL lessons. The CLIL basic tenet is that while you learn about a specific content you are reinforcing your linguistic skills in the foreign language, which entails the advantage of allocating more time to practicing a foreign language (FL) and thus contributes to the improvement of students' competence in the second language, while rendering the linguistic learning more authentic and therefore more motivating. Moreover, by highly stimulating the students' cognitive development, it can be a plus in preparing for a very demanding knowledge society where flexibility and adaptability to a number of linguistic and cultural environments is crucial for economic and social survival. Additionally, the improvement of students' multilingual competences will also enable them to better participate in social interactions in international contexts (Pavón Vázquez, 2013; Lasagabaster, 2008; Marsh et al., 2009).

Thus, CLIL is not simply about teaching content through a foreign language, or developing cognitive skills in a second language. A course organised in a CLIL approach should help students to broaden their language competence and content-specific knowledge, should provide them with communicative activities that are relevant and cognitively motivating, should interrelate learning with a broad cultural awareness of the subject area (Pavón Vázquez, 2013; Lasagabaster, 2008; Marsh et al., 2009). Language development and cognitive development go hand in hand and students "learn to use language properly, at the same time as they use language to learn properly" (Coyle, 2006, p. 6).

Based on the paradigm of the *language user*, rather than the *language learner* (Morgado & Coelho, 2013; Arau Ribeiro, 2015), strategies are applied to base teaching on prior knowledge and needs of the language user. This interdisciplinary and collaborative emphasis on FL use for communication and learning through specific subject content requires that skills be acquired to foster the communication and cultural discourses needed by students, lecturers and researchers in particular academic, professional and scientific contexts.

Gabillon sums up CLIL key principles, and what distinguishes this educational approach from other practices:

> it is important to note that CLIL is an approach whose well-defined key principles distinguish it from other practices. CLIL aims to (a) respect plurilingual teaching philosophies, (b) consider language, content, communication, context and cognition as an inseparable unified entity, (c) create naturalistic learning environments, (d) provide tasks that promote cognitive engagement and creativity, (e) allow collaborative knowledge building, (f) promote dialogical interaction, and (g) develop awareness of self and others
>
> Gabillon, 2020, p. 18

### 2.2. The role of language vs the role of content in the CLIL/ICLHE approach

One of CLIL's identifying tenets is the integration of content and language, following Coyle et al. (2010) definition of CLIL as "a dual focused educational approach in which an additional language is used for the learning and teaching of both content and language" (p. 1). The relationship between language and content that is or should be at the core of all CLIL classes, but whose implementation is not easily achieved (Llinares et al., 2012; Nikula et al., 2016).

In 2007, Coyle called for a reconceptualisation of the role of language in CLIL settings, underlying the need to explore more options to achieve this goal and to support those teachers now starting using the CLIL approach:

> CLIL demands a reconceptualisation of the role of language in CLIL settings from language learning per se (based on grammatical progression) towards an approach which combines learning to use language and using language to learn. […]. CLIL includes the learning of the target language as a subject in parallel to it being used as a vehicle for content learning. However, there is now an identified need to explore alternative approaches beyond those embedded in grammatical progression which are commonplace in foreign language classrooms. Such approaches to CLIL have to take into account teaching and learning scenarios led by the content teachers, who may not be familiar with second language acquisition theories and those led by language teachers, who may resort to an overemphasis on linguistic form.
>
> Coyle, 2007, p. 552

Dalton-Puffer and Smit. (2013) bring a new light into this problem when they argue that research interest on these questions is already changing and moving "beyond the idea of balancing language and content pedagogies, […] into investigating the processes of how language and content are best taught, learnt, and assessed in *integration*" (p. 2016. Italics in the original).

In a recent state-of-the-art article reviews of literature on CLIL, Gabillon (2020) supports that current research in sociolinguistics, sociology and anthropology has enabled CLIL to have a new insight about language, and particularly about its use and its role in the classroom and in society. According to Galillon (2020, p. 19) "from this new perspective, language is no longer seen as a standardised entity with well-defined national borders, but as a multimodal tool, a resource for social practice".

Content teachers' dual responsibility in a CLIL class to enhance the learning of both content and language is often perceive as a challenge. Dearden (2018), focusing on HE, argues that "many academics in HE do not consider themselves to be teaching both content and language. They consider their role as teaching their academic content while speaking English, but they do not feel responsible for their students' language learning" (p. 325). This resonates many other reported situations as, for example, Airey's "I don't teach language", a sentence which, he concluded, was the statement that better "expressed the essence of the respondents' [physics lecturers] thinking about their use of English" (Airey, 2012, p. 75). This belief, according to the author "can be seen to stem from the expectation that disciplinary knowledge does not change when the language used to describe it changes" (p. 76). And echoes of this opinion still resonate in this research, too.

### 2.3. CLIL/ICLHE implementation formats in Higher Education

CLIL/ICLHE practices can take different implementations formats (Coyle et al., 2009), depending on such factors as, for example, institutional targets, curriculum choices, teachers' methodological options or students' age and language levels.

In Europe, a substantial number of countries have introduced some form of CLIL provision, and it is in primary and secondary education that CLIL has been most widely and successfully implemented and reported on. The 2006 Eurydice report on Content and Language Integrated Learning (CLIL) at school in Europe (p. 56) concluded that in certain countries, around 3% of pupils or students are enrolled at primary and/or secondary levels, while in others the proportions stand at between 10 and 15%.

Over the past two decades CLIL has visibly gained an exponential interest in Europe, with research testifying "the rapid and widespread adoption of CLIL in the European arena" (Pérez-Cañado, 2012, p. 316) and the body of literature on the field increasing "significantly, both adapting to a cross-contextual array of aspects —such as the impact of this approach on language learning, content learning, motivations, translanguaging, code-switching, or pluriliteracies— and considering previously identified deficiencies" (San Isidro, 2019, p. 34). The research focusses in HE has been directed to different aspects such as the effects of CLIL implementation and the attitudes it is generating in stakeholders (Pérez-Cañado, 2014, 2016, 2021), and the heterogeneity of CLIL's requirements, intensity, and types of programmes at HE (Alejo-González & Piquer, 2010; Lasagabaster & Zarobe: 2010, among others).

Within the European context, Spain "is rapidly becoming one of the European leaders in CLIL practice and research" (Coyle, 2010b, p. viii).

In Portugal, although there are a few experiments reported on CLIL experiments in pre- primary and primary education, the CLIL approach is still scarcely used. In fact, it is still "rather challenging or daunting for parents of primary and secondary school children or teachers for those years, who would prefer children to learn their mother tongue solidly before progressing into the learning of a FL and who might consider the linguistic input to hamper the learning of content" (Morgado & Coelho, 2014, p. 157). The Eurydice national report on CLIL states that no official provision is made for CLIL in the Portuguese national curriculum and it is up to the schools to decide whether or not to introduce it. It should be highlighted, however, that there is a pilot project in a couple of primary schools underway in collaboration with the British Council. The uncommon use of CLIL-type provision in Portugal is attributed more to geographical or historical factors than to some kind of theoretical opposition to its use. In contrast to Spain, for example, where CLIL has been an educational strategy for bilingualism, there seems to be little immediate motivation for the progressive learning of language and content in two or more languages in Portugal.

In an overview of the process of CLIL implementation in Europe, Pérez Cañado (2016a) pinpoints that "a veritable plethora of models can be identified within CLIL" (p. 267). Doiz, A. & Lasagabaster (2017) complement this opinion referring that "there is no fixed model available and CLIL programmes vary enormously, not only from country to country, but also between schools in the same city or region" (p. 94).

In practice, CLIL encompasses many variants, depending on the context in which it is provided. However, as argued by Gabillon's (2020), these variants are not models, nor necessarily programmes, and are not to be considered different types of CLIL. These examples let us "infer that CLIL can be implemented in different situations and programmes, for different purposes, with different expectations, with different age groups, or with learners with different needs" (Gabillon, 2020, p.8). The theoretical underpinnings of the CLIL approach are not influenced by these contextual differences.

The variety of models of practice is, however, according to Coyle (2007), both a strength and a potential weakness:

> The strength of CLIL focuses on integrating content and language learning in varied, dynamic and relevant learning environments built on 'bottom-up' initiatives as well as 'top-down' policy". Its potential weakness lies in the interpretation of this "flexibility" unless it is embedded in a robust contextualised framework with clear aims and projected outcomes. In order for CLIL to earn its rightful place in the pedagogic arena of contemporary and future curricula, it has to demonstrate rigorous theoretical underpinning, substantiated by evidence in terms of learning outcomes and capacity building.
>
> Coyle, 2007, p. 546

So, although on the one hand, the many faces of CLIL enhance its possibilities of transferability to various educational contexts and different levels of education (Coyle, 2007; Pérez Cañado, 2012), on the other hand the warning against those pitfalls of its flexibility have to be taken into account in any glocation process of its implementation.

### 2.4. CLIL/ICLHE teachers' competences

Much of the focus of the CLIL approach is, then, on the CLIL teacher and on the skills he/she masters to engage not in teaching using a FL/English as a medium of instruction but teaching in a FL using a CLIL approach. Which competences should a CLIL teacher have? What do they need to know? At tertiary level, initial teaching qualifications are rarely required and, as pointed out by Ball et al. (2015), most teachers using CLIL "are unlikely to have received any initial CLIL-focused training whatsoever, but rather have taken up practice after they have been teachers for some years" (p. 268).

Pavón Vázquez and Ellison (2013, p. 69) emphasise that "CLIL is no easy undertaking for the teachers involved" and Pavón Vázquez (2014a) refers that "content teachers must be prepared to juggle three distinct competences: knowledge of the discipline; a competent use of the foreign language; and the utilisation of appropriate methodological strategies" (p. 118).

In *The European Framework for CLIL Teacher Education*, a conceptual tool for guiding the professional development of CLIL, it is suggested that "teachers undertaking CLIL will need to be prepared to develop multiple types of expertise among others in the content subject; in a language; in best practice in teaching and learning; in the integration of the previous three; and, in the integration of CLIL within an educational institution" (Marsh et al., 2010, p. 5).

Pérez Cañado (2018) after an in-depth revision of previous studies on the situation of CLIL teaching in Spain, presented a proposal that defines the ideal CLIL teacher profile by identifying the seven CLIL teacher competence, required by any CLIL teacher today. The list is summarised in the Table 3.1.

Table 3.1

Seven core CLIL teacher competences (adapted from Pérez Cañado, 2018)

| **Seven core CLIL teacher competences (adapted from Pérez Cañado, 2018)** | |
|---|---|
| Linguistic competence | - initial pivotal competence<br>- encompasses intercultural aspects<br>- centers on both BICS and CALPS (Cummins, 1999) |
| Pedagogical competence | - student-centered methodologies,<br>- diversified learning environments and<br>- diversified resources<br>- support of Information and Communication Technologies<br>- transparent, holistic, and formative type of evaluation. |
| Scientific knowledge | - mastery of the contents they teach<br>- theoretical underpinnings of CLIL |
| Organizational competence | - groupings and learning modalities that now flourish within CLIL<br>- classroom management and control strategies. |
| Interpersonal and collaborative competencies | - capacity to create an adequate classroom atmosphere where students receive personalized attention and feel safe and unthreatened to participate and take risks, as well as<br>- the capacity to liaise with colleagues to a greater extent, stepping up collaboration and teamwork with them. |
| Reflective and developmental competence | - lifelong learning (up-to-speed with the latest information and research on CLIL developments) |

The list of competences suggested by Pérez Cañado covers the linguistic, pedagogical, scientific knowledge, organizational, interpersonal, collaborative, and reflective and developmental

competences to be developed by the CLIL teacher and it can constitute the basis for the planning of a CLIL teacher training programme.

## 3. Research studies within the context of English-taught programmes in HE

English-Taught Programs (ETPs), that is, degree courses taught in English in HEIs in non-English speaking countries, can follow different approaches: EMI or CLIL oriented. In EMI contexts, there is limited FL instructional support, whereas in CLIL oriented HEIs the support given to the FL is planned and a part of the teaching (Doiz et al., 2013).

Doiz et al. (2019) refer to the "EMI tsunami" because of the increasing number of HEIs offering English Taught programs at University (Doiz, Lasagabaster & Sierra, 2013; Wächter & Maiworm, 2014; Valcke & Wilkinson, 2017). However, this movement does not seem to be accompanied by a structured, official policy or language requirements for that matter (Lasagabaster, 2019; Weimberg & Symon, 2017) except for a few cases as Spain (with the publication of the Framework Document of Language Policy for the internationalisation of Universities by the Board of Rectors of Spanish Universities, which puts forward some recommendations for the area), and the Netherlands, where CLIL provisions are highly institutionalized at the national level (van Kampen et al 2018a).

Despite European Commission empowerment of CLIL to contribute to the Union's language learning goals of at least two foreign languages in addition to their mother tongue for every EU citizen (European Commission 2009), "in practice, few EU countries have actually made substantial investments into CLIL implementation, teacher education or research, so that explicit goals and precise curricular objectives are largely missing and CLIL continues to be carried forward in most cases through the practices of grassroots stakeholders (cf. Eurydice 2006 in Hüttner, Dalton-Puffer, & Smit, 2013, p. 271)" van Kampen et al, 2018a, p. 856).

Pérez-Vidal (2015, p. 44) particularly highlights the contribution of English Taught programmes as innovative approaches to the promotion of internationalisation: "Indeed, at all educational levels curricular programmes taught through the medium of English, French, German, Spanish or any other language different from the learners' language(s) may place learners in an international mindset. On the other, they may also serve the practical purpose of accommodating incoming students on mobility programmes, thus allowing for a 'share' of the existing HE market."

Moreover, the benefits of ETPs have been extensively reported (Lasagabaster 2008; Coyle et al., 2007; Wilkinson, 2004; Lorenzo, 2008; Coleman, 2006; Dafouz et al., 2007; Dafouz & Núñez, 2009; Doiz et al., 2013; Pérez Cañado, 2013; Fortanet Gómez, 2013; Smit & Dafouz, 2012).

In Europe, a substantial number of countries have introduced some form of CLIL provision and it is in primary and secondary education that CLIL has been most widely and successfully implemented

and reported on. The 2006 Eurydice report on Content and Language Integrated Learning (CLIL) at school in Europe (p. 56) concluded that in certain countries, around 3% of pupils or students are enrolled at primary and/or secondary levels, while in others the proportions stand at between 10 and 15%.

CLIL has been a source of increasing research activity in HE focusing on various aspects (Coleman, 2006; Dafouz, 2009; Fortanet-Gómez, 2013; Arnó-Macià, Mancho-Barés 2015; Aguilar, Rodriguez 2012; Airey 2012).

Research literature on CLIL has pointed out its potential (Coyle 2005, Dalton-Puffer 2007, Lasagabaster & Sierra, 2010).

Learners benefit from higher quality teaching and from input that is meaningful and understandable.

- CLIL may strengthen learners' ability to process input, which prepares them for higher level thinking skills, and enhances cognitive development.
- In CLIL the learners' affective filter may be lower than in other situations, for learning takes place in a relatively anxiety-free environment
- Learners' motivation to learn content through the FL may foster and sustain motivation towards learning the FL itself (Lasagabaster & Sierra 2009, p.14).

Studies on CLIL practices report linguistic and academic competencies benefits, as well as various cognitive and motivational advantages (Coyle et al.,2010).

Students' perceptions on the effectiveness of CLIL in HE have also been reported (Chostelidoua, & Griva 2014; Bartik et al., 2012; Martín de Lama 2015; Maíz-Arévalo, Domínguez Romero, 2013; Tsuchiya & Pérez Murillo, 2015; Carloni, 2018).

Vilkancienė (2011) undertook an applied research study to analyse the CLIL potential on HE (survey to 120 university students) and the findings indicate that "CLIL type teaching in higher education increases learner motivation, contributing to both cognitively more demanding content and language learning and communicative skills development. It enables learners to perform to the level of their linguistic and academic competence" (2011, p. 115).

### 3.1. The CLIL/ICLHE approach in HE in Portugal

In Portugal, although there are a few experiments reported on CLIL experiments in pre- primary and primary education, the CLIL approach is reported to be still scarcely used. For most HE lecturers and stakeholders in Portugal, CLIL is not familiar, while English for Specific Purposes or English as a Medium of Instruction sound more familiar (Morgado & Coelho, 2013).

In a more recent overview of CLIL implementation in Portugal, Ellison (2018) presents a more update report of the situation in the country:

> "Given […] recent expansion of the Bilingual Schools Programme, and the burgeoning of English Medium Instruction in institutions of higher education in the country, it would seem that approaches involving the integration of content and an additional language are here to stay. And while Portugal may learn from those who have gone before it, it still has much to gain from an understanding of its own CLIL phenomenon, because even though principles apply across the board, CLIL remains a highly flexible approach determined by contextual idiosyncrasies which make a study of it anywhere interesting and necessary, especially where it involves compulsory schooling and higher education.
>
> Ellison, 2018, p. 6

The Eurydice national report on CLIL states that no official provision is made for CLIL in the Portuguese national curriculum and it is up to the schools to decide whether or not to introduce it. It should be highlighted, however, that there is a pilot project in a couple of primary schools underway in collaboration with the British Council. The uncommon use of CLIL-type provision in Portugal is attributed more to geographical or historical factors than to some kind of theoretical opposition to its use. In contrast to Spain, for example, where CLIL has been an educational strategy for bilingualism, there seems to be little immediate motivation for the progressive learning of language and content in two or more languages in Portugal.

In Portuguese tertiary education English is used as a medium of instruction, especially at master and doctoral programs (webpages of Universities and Polytechnics report it), but there are almost no reports on experiences with EMI, CLIL or even a widespread discussion on the linguistic policies needed for HEIs. Apart from a few reports on experiments (conveyed in a few research papers and Phd thesis) the only more extensively reported experiment on CLIL in Portuguese HEI is the CLIL-ReCLes project, an innovative pedagogical experience in HE in Portugal, which addressed undergraduate and postgraduate English provision (Morgado et al., 2015a, 2015b; Arau Ribeiro et al., 2016). This research project, beginning in 2012 and involving 6 HEI in Portugal, was implemented in three phases over the course of three years (2012-15) and gained momentum through the Network Association of Higher Education Language Centers in Portugal –[ RECLES.pt (http://recles.pt)]. It aimed at experimenting with CLIL in HE students' foreign language skills besides their regular ESP classes. It also addressed the training/education of HE lecturers to develop competence to teach confidently and effectively in English for the Portuguese context and it promoted pilot teacher training courses in CLIL for content teachers.

Apart from the CLIL-ReCLes Project, in which the Polytechnic Institute of Portalegre (IPP) had the opportunity of participating, the existence of content subjects lectured in English (or any other foreign language) at university level in Portugal relies solely on the availability of a content teacher, who happens to know the target language and is willing to teach in that second language (Morgado, & Coelho, 2013).

However, and despite the increasing amount of research work on CLIL, in a complete and updated overview of the literature produced on CLIL, Pérez-Cañado (2012) still finds that there are few solid empirical studies on CLIL and concludes that "we clearly stand in need of solid empirical research which build in rigorous assessment of the variables under scrutiny." (330)

Morgado et al. (2015) report the result of an ongoing project on the parallel and comparative study of the use of CLIL in five Higher Education Polytechnic Institutes in Portugal that received support from FCT for a seven-month period as potential best practice in higher education. The study was developed over a two-year period (2013-2015) and comprised three different research stages. The first stage (2013-2014) focused on needs across HE institutions to assess the readiness of institutions to engage with ESP, EMI or CLIL /ICLHE approaches to meet their internationalisation strategy. During the second stage, the emphasis was on the development of a CLIL community of practice across higher education institutions (HEI) in Portugal. This article reports on how this community was created and nurtured, the resources used and shared, guidelines offered through the interaction and collaborative work of HE content and language lecturers. Comments are offered on the Training Guide written collaboratively by a number of language teachers across the Institutes and about the CLIL training courses developed in each institute; the applied research that highlighted the importance of building local CLIL communities of practice that were supported by ReCLes (Associação em Rede dos Centros de Línguas do Ensino Superior) as a wider CLIL community of practice, understanding scaffolding in higher education as opposed to what is advised for secondary education, and using terminology-based CLIL or TerminoCLIL. Insights are also offered on the third stage where CLIL pilot sessions or modules were put into practice by subject teachers and on their students' reactions and perceptions on the implementation of CLIL through a series of case studies at each HEI as a way to highlight the perspectives of content teachers in HE.

The challenges to the future implementation of CLIL in Portuguese HE reside primarily at the institutional macro level since a clear definition of language and internationalisation policies in HE must provide the necessary framework for CLIL to thrive and, simultaneously, contribute to the success of these policies.

At this juncture, the groundbreaking ReCLes.pt implementation of CLIL in Portuguese HE has designed a road map for other education institutions to implement a similar project on their own. The results of this extensive study suggest that policy could be based on the following aspects: i) the

essential conditions for maintaining CLIL CoP; ii) the specific goals, benefits and challenges for implementing CLIL (for the HEI themselves, for staff and for students); iii) the form of needs analysis to be undertaken (e.g. student FL level, student motivation, subject specific goals and learning outcomes); iv) 77 selection and justification of which subjects to offer through CLIL; v) simultaneous accommodation of the needs of students who may choose not to be taught through CLIL; vi) the number of students per CLIL group/class; vii) the changes to be implemented in course syllabi to accommodate student-centered methodologies that promote collaborative work, oral interaction, and critical thinking; viii) (in)formal assessment in CLIL; ix) the monitoring of the CLIL teaching and learning experience.

The initial collaborative research and learning among the language specialists across ReCLes.pt to share research, best practice, and results was a precursor to the creation of CLIL CoP in each HEI. This successful and innovative strategic activity fostered skills for teaching in English among subject teachers in HEI, developed cooperative work among subject and FL teachers, and contributed to creating a sustainable international environment in HE with conditions for an effectively integrated and balanced representation of language and content through the publication of the training guide. On a cultural level, the CoP created within this ReCLes.pt CLIL pilot study would appear to represent the first step toward bridging the status inequalities that exist between language specialists and subject specialists within HEIs, moving towards a cooperative model which requires further research in its multiple models in tandem teaching and support teaching, among others.

Nationally, ReCLes.pt will continue to foster collaborative work on CLIL in HE, sharing these findings locally among the language and subject teachers of its 16 national members.

Internationally, the ReCLes.pt CLIL research team will foster further collaboration between language teachers and content specialists in HE contexts through ERASMUS+ teacher mobility and European projects with the 321 university network partners in CercleS (the European Confederation of Language Centers in Higher Education).

The Working CLIL Research Strand of TEALS recognises the recent growth of CLIL/bilingual education across school levels in Portugal (Eurydice, 2017), and English Medium Instruction (EMI) and Integrating Content and Language practices in Higher Education (ICLHE) (Wächter and Maiworm, 2014; Dearden, 2014) fuelled by internationalisation strategies which have placed a premium on English as the academic lingua franca. All of this necessitates continuing professional development for teachers, and examination of the phenomenon in order to provide for a stronger research base in the national context.

## 4. CLIL/ICLHE teacher education in HE

The introduction of a second language as a medium of instruction at tertiary level is, according to O'Dowd "a serious and complex process which raises a series of questions for university teaching staff" (2018, p. 1). Issues such as the cultural impact of offering subjects through a lingua franca, the teachers' level of English, methodological skills involved in teaching through another language, teachers' training for teaching content through English, among others, are part of a problematic process which raises a series of questions and challenges. In a survey conducted by O'Dowd (2015) in 2014-2015, 70 European universities reported on how they engaged in the training and accreditation of EMI teachers. Results revealed many different current practices to these matters and highlight the need to invest in the training of teaching HE staff before and while they engage in EMI (O'Dowd, 2015). Acknowledging that many HE teachers "are confronting these issues without a great deal of training and preparation and are therefore forced to come to terms with the challenges as they teach through English on a daily basis" (O'Dowd, 2015, p. 1), the findings of the study point to the need to build a structured approach to educate the teachers for teaching in English: "We would argue that any university which is offering any number of subjects through English should be preparing training and development courses for their teachers involved in this activity" (O'Dowd, 2015, p. 11).

Pavón Vázquez et al. (2013), analyzing the implementation of programmes that include the teaching of subjects through a foreign/additional language ("bilingual programmes" or "English-medium university courses") in HE, in Spain, also warns against the common misconceptions that the implementation of these programmes only requires the changing of the language in which the subjects are taught. For the authors, to implement such programmes, such problems as the students' language proficiency, the language proficiency of the teachers and the methodological training of the teachers involved have to be dealt with in an initial stage, and later used to tailor the programmes to be implemented.

Pérez Cañado (2014, p.267) reminds us that "[…] the rapid spread of CLIL has outpaced teacher education provision" and that the "new – and increased – demands which the implementation of this approach places on teachers have been largely overlooked and insufficiently addressed, a situation which should be countered, as the key to any future vision for bilingual education is to be found in teacher training (Coyle, 2011): it is where CLIL will stand or fall in terms of sustainability." This concern is shared by Dafouz Milne (2015, p. 22), who claims that "El reto pendiente es cómo articular estas estrategias en los cursos de formación del profesorado universitario y cómo concienciar a los interesados de que para una docencia eficaz en inglés hemos de concebir la competencia lingüística como algo más que un nivel de inglés avanzado." More recently, Pérez Cañado (2016) addressed some recent discouraging criticism (Bruton, 2011, 2013, Paran, 2013) on CLIL characterization, implementation, and investigation, and presents "future research agenda in order to bring the pendulum

to a standstill through solid, unskewed, and unbiased CLIL research" (p. 1). One of the five main niches that, according to specialized literature, needs to be included in the new CLIL research agenda, is "[…], from a qualitative perspective, stakeholder perceptions on training needs and the way CLIL programs are playing out should equally continue to be canvassed (Pena Díaz & Porto Requejo, 2008; Czura et al., 2009; Infante et al., 2009; Lasagabaster & Ruiz de Zarobe, 2010; Fernández & Halbach, 2011; Pérez Cañado, 2015). Methodological triangulation through the use of questionnaires, interviews, and observation can greatly assist in attaining this objective." (p.14).

Teacher education is a complex area within the education field, placed often at the crossroads of both national and international policies and of recent and long-time entrenched education strategies. It covers initial teacher education (the training of future qualified teachers) and continuous professional education. That is why an exhaustive pre-service training for teachers might be not enough without thinking of a long-life in-service one, because real-life situations constantly change over time, as well as the needs of students and classrooms (Dalton-Puffer, 2011).

The topic has been the focus of some publications from the Council of Europe, which present guidelines for teaching in CLIL contexts. In *Teacher Education for CLIL across Contexts: From Scaffolding Framework to Teacher Portfolio for Content and Language Integrated Learning*, Hansen-Pauly *et al.* (2009) suggests eight areas of CLIL teacher competence: learner needs, planning, multimodality, interaction, subject literacies, evaluation, cooperation and reflection, context and culture.

There is a considerable research amount of literature on teacher training for CLIL varying from more general studies to investigations that center on different aspects of teacher training (Durán-Martínez & Beltrán-Llavador, 2016; Lancaster, 2016). There are small scale studies (Infante, Benvenuto, & Lastrucci, 2009) and large scale ones both numerically and geographically (Pérez Cañado, 2016a; 2016b, 2017; Czura, Papaja, & Urbaniak, 2009) now including areas outside Europe such as Latin America (Banegas, 2012). Finally, in certain contexts, there has been an interesting replication of studies from the initial implementation of CLIL programs to their present state. This is the case of the autonomous community of Madrid (with the studies by Fernández Fernández, Pena Díaz, García Gómez, & Halbach, 2005; Pena Díaz & Porto Requejo, 2008; Fernández & Halbach, 2011; and Cabezuelo-Gutiérrez & Fernández-Fernández, 2014) and that of Andalusia (through the investigations by Lancaster, 2016; and Pérez Cañado, 2017b), both of which have revealed a very interesting and positive evolution of bilingual programs in monolingual contexts, (Pérez Cañado, 2018),

Teacher education is pointed out by recent research as a crucial element for ensuring the future sustainability of the CLIL approach (Coonan, 2007; de Graaff et al., 2007; Mehisto et al., 2008; Ruiz-Garrido, M. F. & Fortanet-Gómez, I., 2009; Coyle et al., 2010; Coyle, 2011, Wolff, 2012). Pérez-Cañado (2018) pointed the need to provide teachers with thorough and context-responsive support in

the form of ongoing professional development courses, to manage key CLIL concepts. In fact, being both an expert in a content area and competent in the foreign language are not sufficient qualifications per se to guarantee that a content teacher will impart effective CLIL classes. To do it, content teachers need to understand and know how to scaffold students' learning in terms of content and language, how to elicit their prior knowledge, how to focus on the learner when using a content-specific methodology, among other pedagogical competences and tools to be used when teaching content and language in an integrated way.

Pavón Vázquez et al. (2013, p. 88) argue that the training of teachers to effectively teach content in a foreign language should focus on two major areas: language and methodology (CLIL), the latter being a crucial element in this process. Fernández-Costales et al. (2014, p. 21) also highlight the relevance of teacher training in CLIL and similarly acknowledge the increasing awareness "on the need of specific and tailor-made programmes for teachers willing to engage in CLIL programmes". Research data also indicates that weak language proficiency in a foreign language may limit the students and prevent them from expressing and work with complex concepts (Airey, 2009). Similar findings apply to HE teachers, who report difficulties in classroom management language (Strotmann et al., 2014). But language proficiency is not the only crucial skill to teach content mediated by a second language. Barrios et al. (2016, p. 211) emphasize that "Teachers also need to impart knowledge, promote cognitive and metacognitive skills, engage in sophisticated thought-provoking interaction and design instructional materials in which the learning of the instructional and subject-related language is integrated with subject content knowledge." And they conclude that it "is thus imperative that teachers engage in some form of methodological training to teach in another language, and recognize and cater for the students' difficulties to academically perform and express themselves in the foreign language." (211).

Arau Ribeiro et al (2016: 31) also emphasize the need, for subject teachers, "to acquire the specific culture of learning in English so that they can move beyond EMI, the mere translation of the subject teacher's regularly planned class. This culture of learning in a FL involves a broad range of organizational and communication practices related to research and its results, as well as the specific terminology and the respective norms for contextualization and collocation." This opinion is sustained by findings in recent research on successful CLIL in HE (Dafouz et al., 2007; Chang, 2010; Airey, 2011; Jensen & Thøgersen, 2011), which claim that teachers should be trained in accordance with the social conditions proscribed by a specific HE context, and provided with teaching strategies for subject-specific language, as the construction of knowledge differs across languages (Wilkinson & Walsh, 2015, p. 10).

However, and although the need for CLIL teacher training has already clearly been stated in many research works (Fortanet-Gómez, 2010; Lasagabaster & Ruiz de Zarobe, 2010; Ball & Lindsay,

2012 and Martín del Pozo, 2013, 2015), the number of CLIL training programmes implemented is still considered scarce (Fernández-Costales et al., 2014).

A clear definition of the language and internationalisation policies at HEIs will, according to Morgado et al (2015: 76) "provide the necessary framework for CLIL to thrive and, simultaneously, contribute to the success of these policies". This is the conclusion drawn from the assessment of a small scale pilot CLIL teacher training course through the CLIL-ReCLEs.pt project (Morgado et al. 2015; Arau Ribeiro et al. 2016), which took place in seven portuguese HEIs, including IPP, from 2013 to 2015. With the ultimate goal of training HE teachers to teach in English, not simply using this foreign language to communicate but to teach through English confidently and effectively, the project covered a brief needs assessment questionnaire, materials development, and design and implementation of Communities of Learning and Practice at each of the 7 participating Polytechnic Institutions which aim to join teachers, at least one English language teaching specialist with four to 10 subject specialists, based on a training manual written collaboratively by the researchers to be tested in this pilot phase. The pilot course enabled us to draw some preliminary conclusions here summarized and which we consider as very relevant for the future implementation of CLIL courses at IPP:

> " […] subject teachers assigned significant value to CLIL strategies and teaching competences learned first through the community practice and then through hands-on experience in preparing/teaching the CLIL modules. They emphasize the urgency of rethinking their own teaching material and teaching methods, the students' needs and student-centered approaches. Many highlight specific domain terminology as a cornerstone in their class preparation and the resources that strengthen and reinforce this knowledge. Designing and preparing appropriate scaffolding materials were valued for their intrinsic motivation in student-centered interactive CLIL classes and especially for increasing their own self-assurance in teaching through English. The language specialist was recognized as a reliable co-teacher, team teacher or valued helper during the class preparation stage and as an observer, lending confidence throughout the implementation of the pilot module"
>
> Morgado et al. 2015, p. 74-75

For Fernández and Cañado (2012) "it is precisely this rapid spread of CLIL which is outpacing teacher education provision" p.182 They explain that "Given the heightened importance of CLIL as the answer to Europe's need for plurilingualism, and the dearth of teacher training actions to prepare practitioners to successfully step up to this novel approach, it becomes increasingly necessary to equip them for one the key challenges of the 21st century: plurilingual education. To this end, the chapter unpacks the main objectives and competencies which pre-service teacher training degrees and Masters would need to develop for a success-prone implementation of CLIL programs." p. 183

As mentioned by Macaro, Jiménez-Muñoz and Lasagabaster (2019, p. 155) "content teachers in universities cannot simply be encouraged or required to switch from their L1 as the medium without infrastructure planning and support."

# *Part Three*

# *Methodological Framework*

# CHAPTER FOUR: THE CASE STUDY CONTEXT, RESEARCH METHODOLOGY AND DESIGN

Informed by and aligned with the contextual and theoretical frames drawn in Parts 1 and 2 of this dissertation, in Part 3, chapter four, we introduce the methodological framework of the dissertation starting by providing a close-up view of the specific educational context in which the study was conducted, followed by the explanation of the research methodology used, drawing in the literature reviewed in the previous chapters.

In section one of chapter four, the research study converges to the educational context of the Polytechnic Institute of Portalegre, where this study was carried out. We start by examining the context of IPP within the binary education system of HE in Portugal (1.1) and then we present a broad overview of the Institution (1.2) in terms of its organisational structure (1.2.1); the mission, principles and values that guide it (1.2.2); its strategy (1.2.3) and a quantitative description of the major stakeholders, that is, teaching staff and students, that make part of it (1.2.4). Particular attention will be paid to the internationalisation and foreign language policies of IPP, and to the incipient experiences of CLIL training and English-taught courses at IPP (1.3). The characterization of IPP will concentrate on the academic year 2016-17, the year when the quantitative and qualitative research tools used in this study (questionnaires and framed narrative inquiries) were applied, but given the time elapsed up to the present (academic year 2020-21) some relevant updates related to the theme under discussion, mostly concerning the internationalisation policy of the institution, will also be provided.

The information provided about the IPP is supported by data collected through a documentary analysis of various reports officially made available by institutional bodies of the Polytechnic of Portalegre and complemented by data from research studies concerning the institution.

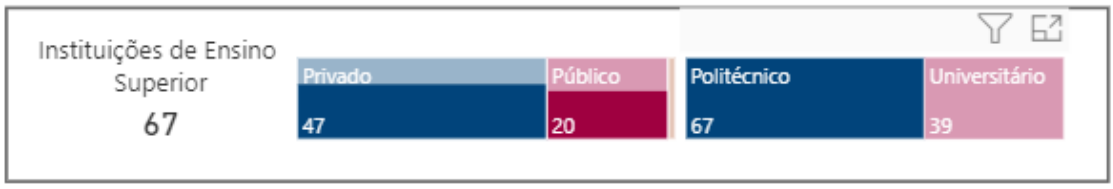
In section two of chapter four, the research questions that were formulated for the study are explained and the main decisions regarding the methodology used (questionnaires and framed narrative inquiries) are justified. We start by presenting the rationale for choosing this research design and then state the aims of the study and its significance both locally and at a broader sphere (2.1). Section 2.2 concerns the formulation of the research questions that frame this study and under 2.3 we present the overall research design conceived to address these research questions. In 2.4 the research instruments used are presented and 2.5 the administration procedures adopted are explained and the demographic characterisation of the respondents to the questionnaire is also presented. Finally, we address issues of reliability and validity of the research instruments (2.6) to ensure the consistency of the findings.

## 1. Context of the study: The Polytechnic Institute of Portalegre

The Portuguese HE system is organized in a binary format structure, integrating the University and the Polytechnic subsystems. The Polytechnic Institute of Portalegre is one of the 20 public polytechnic HEIs in Portugal. Data from "Direcção Geral do Ensino Superior" (DGES) report the existence of a total of 67 polytechnic institutions in Portugal (20 public and 47 private), and 39 universities (14 public) (Table 4.1).

Table 4.1

*Total number of HEI in Portugal (private and public) 2021*




Source: DGES https://www.dges.gov.pt/pt/pagina/ensino-superior-em-numeros?plid=371

### 1.1. IPP within the binary HE system in Portugal – an overview

The Polytechnic Institute of Portalegre is a public institution of higher education devoted to teaching, training and research at tertiary level. It was legally created in 1980, but its activities only started in 1989, when the president of its first committee board was appointed. This time lapse must be viewed under the very particular circumstances that Portuguese HE system was undergoing at the time, with the redesigning of the tertiary sector and the implementation of a network of polytechnic institutions (Decree-Law 513-T/79, 26 December and Decree Law 303/80, 1 August) to run parallel to

the university system. The university/polytechnic binary organization of Portuguese higher education system was confirmed by the Education Framework Act of 1986 (Law 46/86, 14 October), which defined the roles of universities and polytechnics (Almeida & Vieira, 2012) assigning a professionalizing nature to the latter and a more theoretical and conceptual character to the former (Ferreira, et al, 2008; Heitor & Horta, 2014; Henriques, et al, 2015). Besides the diverse nature of the type of teaching provided by universities and polytechnics, there is also a distinction in terms of the kind of research conducted (fundamental and applied for universities, and applied research for polytechnics) and the academic degrees that each subsystem can award. Both systems offered undergraduate, postgraduate and master's degrees, but doctoral degrees were exclusive of universities. This last premise has recently changed with the approval of the decree-law 65/2018, of 16th August, which determines that the accreditation of a doctoral degree (3rd cycle of studies) is subject to the institutional assessment of the Research Unit the institution integrates, and not the subsystem it is part of.

Henriques et al. (2015, p. 173) view "the creation of the Polytechnic Higher Education Institutions as a way to the democratization, access and success in the system of Portuguese higher education in the 70s and 80s of the XX century' and highlight its fundamental contribution to the "regional decentralization of higher education institutions across the country and of democratic opportunity in order to allow more citizens to access and complete a degree, regardless of their social, economic and cultural roots" (p. 174). Also acknowledged in research (Neave & Amaral, 2012) is the economic and political rationale presiding over the creation of the binary system in HE in Portugal. Magalhães and Santiago (2012, pp. 233-234) make it very clear when they state:

> The binary system was designed to support economic development and to respond to the demands of the labour market. Human capital theories were highly influential, particularly those based on central planning, which was seen as the main instrument in reforming the public sector and Portuguese society. So too was the advice of the OECD and the World Bank. Setting up the binary system to enhance industrialisation and to accelerate development in the service sector of the economy at both national and local levels was a political priority. The importance government attached to the polytechnics in this task may well explain the closer control government maintained over their management, internal governance and the more circumscribed degree of autonomy granted to them in the Law of 1990.
>
> Magalhães and Santiago, 2012, pp. 233-234

The massification of a network of Polytechnic HEIs throughout the country launched a wider strategy of the Portuguese government aiming at fostering regional development in more depressed areas of the country (Mourato, 2014) and democratize citizens' access to HE and to all the social, cultural and economic advantages it might bring them (Henriques et al., 2015).

Moreover, it enabled the participation of many different stakeholders (cultural entities, public and private enterprises, business associations, among others) in joint projects with HEIs; it enhanced the growth of knowledge and applied research, the country's competitivity and innovation capacity and the opportunities for social-economic and cultural development of the different regions (Pereira & Marques, 2018).

Presently, it is generally accepted that polytechnic higher education in Portugal has decisively contributed to regional development and to the training and qualification of the active population (Patrício et al., 2018, p. 70), and recent quantitative studies on the social and economic impact of Portuguese polytechnic institutes on local economies have quantified the benefits these institutions have brought to the regions (Cunha et al., 2013; Alves et al., 2015; Costa, 2019). In a recent study that quantifies the economic impact of 12 Portuguese Polytechnic Institutes in the regions where they are located, Oliveira et al. (2019) argue:

> Results of this study show that the economic impact of HEIs ranged from 27 million euros to 172 million, which represents between 1.8% and 10.6% of the local GDP. In addition, the level of economic activity generated, for every euro of government funds, ranges from 1.7 to 4.7 euros. Moreover, these Institutes are, in general, major local employers and, therefore, their impact is even more significant in less developed and isolated regions; furthermore, they have a major role in granting access to higher education to young people that, without the presence of these Institutes in these regions, would not enrol in higher education.
>
> Oliveira et al., 2019, p. 10

Oliveira et al. (2019) quantify the impact of the Polytechnic Institutions in the area of their location through the measurement of specific economic and social indicators, such as the financial return from public funds invested in the region, the number of jobs created, and the impact on the local gross domestic product (GDP). According to Oliveira et al. (2019, p. 7), at the Polytechnic Institute of Portalegre the average monthly expenditure of students who, in the year 2017, changed their residence to Portalegre is 394 euros, with a median value of 472 euros. The global results of the direct impact of each of the twelve institutions in their local region are presented in Table 4.2. and IPP accounts for a total impact of about 10 million euros in the region, with 82% of the total direct impact steaming from the expenses incurred by students in acquiring goods and services (including housing); 13.4% related

to faculty-related expenditure; 3% from staff-related expenses, and about 1% of the direct impact comes from institution's expenses.

Table 4.2

Summary of the direct impact of each Polytechnic Institute in 2017

| | PI-Beja | PI-Bragança | PI-Castelo Branco | PI-Cávado e Ave | PI-Guarda | PI-Leiria | PI-Portalegre | PI-Santarém | PI-Setúbal | PI-Tomar | PI-Viana do Castelo | PI-Viseu |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (1) Faculty spending | 1,315 | 5,940 | 3,741 | 595 | 3,602 | 11,223 | 1,366 | 4,668 | 4,441 | 1,999 | 1,476 | 2,896 |
| (2) Staff spending | 229 | 1,127 | 530 | 253 | 1,219 | 1,708 | 327 | 1,144 | 504 | 569 | 349 | 670 |
| (3) Students spending | 9,184 | 30,193 | 18,554 | 16,007 | 15,307 | 61,384 | 8,338 | 18,537 | 28,941 | 7,792 | 17,018 | 22,285 |
| (4) Institution spending | 215 | 767 | 293 | 864 | 897 | 1,848 | 131 | 200 | 445 | 233 | 854 | 502 |
| **DIRECT IMPACT (1+2+3+4)** | 10,943 | 38,027 | 23,119 | 17,719 | 21,024 | 76,163 | 10,163 | 24,548 | 34,331 | 10,594 | 19,697 | 26,353 |

Note: amounts in thousands of euros for the year 2017; the sum of expenses may differ from the direct impact due to rounding.

Source: Oliveira et al., 2019, p. 8.

In terms of the economic activity generated, the total impact of IPP is translated into an amount of 17 million euros, with a relative weight in local GDP of 3.68% (Table 4.3). The study also concluded that for each euro of funding received from the State Budget, the level of economic activity generated for the region was 1.84 euros; 471 jobs were generated due to the location of the Polytechnic of Portalegre in the region, which means that the relative weight of jobs generated in terms of active population is 2.25%, with a multiplier of 1.35 associated to the number of jobs created (Oliveira et al., 2019).

Table 4.3

*Summary indicators for the various Polytechnic Institutes*

| | PI-Beja | PI-Bragança | PI-Castelo Branco | PI-Cávado e Ave | PI-Guarda | PI-Leiria | PI-Portalegre | PI-Santarém | PI-Setúbal | PI-Tomar | PI-Viana do Castelo | PI-Viseu |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Regional GPD estimates *-(1000€)[1] | 567,860 | 611,982 | 743, 694 | 1,487,738 | 787,388 | 3,095,872 | 470,037 | 1,006,265 | 3,299,929 | 866,372 | 1,738,274 | 1,750,541 |
| Total Impact of HEIs[2] (1000€) | 18,604 | 64,647 | 39,302 | 30,123 | 35,741 | 129,477 | 17,277 | 41,731 | 58,363 | 18,009 | 33,484 | 44,800 |
| Weight in local GDP | 3.28% | 10.56% | 5.28% | 2.02% | 4.54% | 4.18% | 3.68% | 4.15% | 1.77% | 2.08% | 1.93% | 2.56% |
| Public funding (1000€) | 10,877 | 19,376 | 17,834 | 5,822 | 11,202 | 27,647 | 9,356 | 13,787 | 18,516 | 10,227 | 13,509 | 16,956 |
| Economic activity[3] | 1.71 | 3.34 | 2.20 | 5.17 | 3.19 | 4.68 | 1.84 | 3.03 | 3.15 | 1.76 | 2.48 | 2.64 |
| Employer rank | 3 | 3 | 3 | 6 | 4 | 2 | 3 | 4 | 2 | 3 | 5 | 4 |
| Number of jobs created[4] | 508 | 2,188 | 1,280 | 1,020 | 1,164 | 4,218 | 471 | 1,139 | 1,349 | 587 | 1,133 | 1,460 |
| % of active population | 3.15% | 9.02% | 4.67% | 1.77% | 3.99% | 4.34% | 2.25% | 3.05% | 1.47% | 1.81% | 1.69% | 2.58% |
| Employment multiplier[5] | 1.28 | 2.69 | 1.98 | 2.98 | 3.05 | 3.40 | 1.35 | 2.42 | 1.66 | 1.77 | 2.21 | 2.24 |

* Regional GDP understood as the GDP of the counties where the Institutes are located.

[1] Extrapolated from GDP growth rates of Portuguese NUT III for the period 2000 to 2016.

[2] Considering a multiplier value of 1.7.

[3] Level of economic activity generated by each euro of public funding.

[4] Calculated based on the concept of apparent labour productivity.

[5] Calculated on the basis of the ratio between the number of jobs created and the number of employees of the Polytechnic Institute.

Source: Oliveira et al., 2019, p. 9.

These results are consistent with previous literature on the topic (Pereira et al., 2013; Alves et al., 2015), and are aligned with Pereira et al. (2021) conclusions in their research focusing on IPP as a case study. The authors particularly highlight the relevance of the impact of HEIs "for low-density regions, given that such institutions are, generally, the major employers and responsible for substantial increases in local spending" (Pereira et al., 2021, p. 12).

Assigned the role of an important stakeholder in the local economy of the region where it operates, IPP views the promotion of a close relationship with the community and the region, a strong commitment/mission to regional development as one of its guiding principles (IPP Strategic Plan of development 2018/21, https://www.ipportalegre.pt/pt/sobre-nos/documentacao-e-legislacao/instrumentos-de-gestao/).

## 1.2. The Polytechnic Institute of Portalegre - characterisation

### *1.2.1. Brief history and organisational structure*

The Polytechnic Institute of Portalegre integrates four schools, or organic units, located in two different cities of the Alentejo region of Portugal, namely, the School of Education and Social Sciences

(ESECS), which ran its first undergraduate courses in 1985; the School of Technology and Management (ESTG), with its first-degree courses (two) opening in 1989; and the School of Agrarian Studies at Elvas (ESAE), beginning in 1995. The School of Health (ESS) was formerly a non-integrated School of Health, and it became the fourth school of the Polytechnic of Portalegre in 2001[1].

The Social Action Services (SAS) of IPP is also an organic unit itself, which mainly provides support services such as scholarships, lodgings, meals, cultural and sports activities, medical, psycho-pedagogical and social support. There is a Common Services Office of the Institute and schools, which integrates the Assessment and Quality Office, General Services and Support Services.

Working together with the executive and advisory bodies of the institution (Presidency; General Council; Management Council and Academic Board) and the schools, there are other vital divisions of the Polytechnic of Portalegre - functional units - as displayed in the organizational chart of IPP (Figure 4.1.), which support management and academic activities, provide services to the community and are responsible for the development of research and the production of scientific knowledge: the Entrepreneurship and Employment Office, which integrates the Continuous Training Office; the Research and Innovation Office, where VALORIZA, IPP's Research Center for Endogenous Resources Valorisation is integrated; the Communication and Image Office; the International Relations office and the Languages and Cultures Center (CLiC).

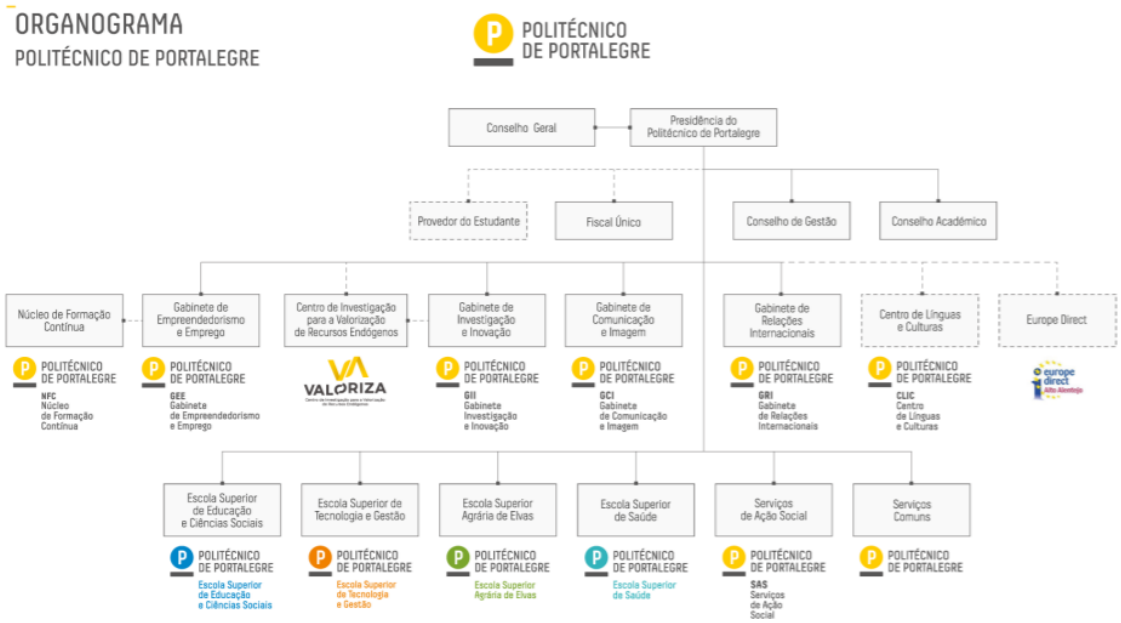



*Figure 4.1.* Organizational chart of the Polytechnic Institute of Portalegre (2020). Source: Manual Sistema Integrado de Gestão 2020, p. 14

[1] Unless otherwise indicated, all citations from institutional documents from IPP were translated by me.

The organizational chart reproduced in Figure 4.1 corresponds to the internal organisation of IPP, as defined in the recent Statutes of the institution approved and published in 2021. The previous Statute of IPP, in force from 2016 to 2021 has undergone some changes, particularly on what concerns the internal structure organisation (Chapter II, article 11 of Statute 2016 and 2021). In general terms, this restructuring comprised an increase in the number of existing functional units (from two to five) with former "support services" of the IPP becoming functional units (vid. Appendices for further information). This was the case of the External Relations and Cooperation Office, the Communication and Image Office and the Technical Office. The new organisational structure defined by the 2021 Statute seems to indicate a movement of transformation in IPP policy towards a more heavily specialized structure of functional units, each unit with very specific roles assigned to them and each of them reporting to the president of IPP. The recent creation of the Research and Innovation Office and the Communication and Image Office as functional units also suggest an increased relevance assigned to these areas. Of relevance for the future, we find the following:

- the International Relations Office, which continues to be focused exclusively on the "aim of fostering the mobility of students, teaching and non-teaching staff and the development of joint projects" (n.13, 6 of the Statutes of IPP, 2021);

- the Research and Innovation Office, which "aims to develop scientific research and innovation activities, to provide services, to transfer knowledge and technology, to disseminate its results and, where possible and desirable, apply them to the activities of the surrounding community, with a view to promoting local, regional and national development and the expansion of scientific knowledge" (n.13, 5 of the Statutes of IPP, 2021) makes no mention to any international dimension of its activity and

- the Entrepreneurship and Employment Office, which continues to be a vital division of IPP, aiming "to foster an entrepreneurial culture, stimulate the emergence of business ideas and support the development of innovative projects innovative projects; support the insertion in active life of students and graduates and accompany their professional paths; contribute to the improvement of knowledge and personal and professional skills of students professional skills of students, graduates, IPP workers and other audiences" (IPP Statues, 2021) has now enlarged the scope of its action and coordinates the Continuous Training Office.

### *1.2.2. IPP Mission, Principles and Values*

IPP Statutes 2016 and 2021 introduce no changes in article 1, which determines the Mission, Principles and Values of the Institute.

IPP sets as its Mission the creation, transmission, and dissemination of knowledge, in a professionally oriented way, by providing higher level training and qualification to different audiences, at different stages of their academic and professional lives. Research and technological development

directed towards the promotion of the communities, and cooperation with regional, national and international entities are also explicitly mentioned as structural dimensions of IPP's mission. The Strategic Development Plan of IPP (2018-21), which establishes the guidelines of IPP policy, significantly highlights the keywords "knowledge", "qualification", "research" and "cooperation" in the mission statement of the Institution.

In line with its mission manifesto, IPP identifies the following key values for the institution: organisational excellency; ethics and transparency; subsidiarity; engagement with and orientation towards stakeholders and sustainable development.

The underlying principles that rule IPP are based on democratisation and participation, ensuring the free expression of ideas and opinions, critical spirit and continuous innovation (scientific, artistic and pedagogical), aiming at fostering the participation in IPP activities of students, teaching and non-teaching staff in close connection with and involvement in the regional community, for the promotion of the integration of its graduates in professional life.

*1.2.3. IPP Strategy of development*

To contribute to the fulfilment of the Mission, Values and Principles of IPP, every four years the General Council of IPP defines the strategic objectives of the Institute and the actions needed to achieve them. In the last 8 years, IPP Development Programme (2014-17, https://www.ipportalegre.pt/pt/sobre-nos/documentacao-e-legislacao/instrumentos-de-gestao/) and IPP Strategic Development Plan (2018-21) have established the institutional strategy of the Polytechnic of Portalegre and they outline the roadmap pursued by IPP to accomplish its goals. Both plans are organised around strategic lines/objectives, which are then allocated to specific strategic axes and lines of action to be developed. Indicators and targets to be achieved during the four-year period are also established.

Although IPP matrix of strategic development has remained consistent along the years, with a focus on the quality of teaching, the development of applied research, the enhancement of internationalisation and the sustainability of the institute, the 2018-21 Strategic Development Plan includes some significant emergent strategic axes. Considering the findings of specialised literature on the impact of institutional policies in the success or failure of bilingual educational practices in HE (Coyle, 2007; O'Dowd, 2018; Lasagabaster, 2015; Pérez Cañado, 2021), it is important to take these new directions into account. Thus, comparing the strategic lines provided by both documents (Table 4.4), we observe that (1) the objective of promoting "differentiating" training formats is introduced; (2) IPP repositions itself as the "promoter" of knowledge and innovative regional solutions and not as the provider of answers to the needs of the region; (3) the aim to invest in the HEI network and in internationalisation is now presented as the goal of "having" an international environment; and (4) being an "inclusive Polytechnic" is introduced as a target to achieve.

Table 4.4

*Strategic Lines of IPP Development Programme (2014-17) and Strategic Development Plan (2018-21)*

| IPP Development Programme (2014-17)- Strategic Lines | IPP Strategic Development Plan (2018-21) - Strategic Lines |
|---|---|
| •**1. Improve the quality of teaching** Train with quality and respond to the needs of society<br>•**2. To direct research and technological development to the needs of the North Alentejo** Foster applied research, involving the main regional players, and ensuring technology transfer.<br>•**3. To invest in the HEI network and in internationalisation** Reinforce privileged relations with other institutions, both national and international, in order to generate synergies in training, research, internationalisation and provision of services.<br>•**4. To achieve the Institute's sustainability** To reinforce the integrated administration system and adjust the organisational model to the new educational, scientific and cultural project. | •1. To have quality TEACHING and differentiating TRAINING<br>•2. To be a RESEARCH AND TECHNOLOGICAL DEVELOPMENT community, promoter of knowledge and innovative regional solutions<br>•3. To be an open organization with an INTERNATIONAL ENVIRONMENT<br>•4. To be an INCLUSIVE AND SUSTAINABLE POLYTECHNIC |

Source: IPP Development Programme (2014-17), pp. 4-5 and IPP Strategic Development Plan (2018-21), p. 10. (Highlights and uppercases in the original; own translation).

### *1.2.4. The IPP in numbers*

In the last three decades, IPP has grown consistently, and the number of collaborators (teaching and non-teaching staff) has been slowly increasing. In 2017, the year when the research instruments used in this study were applied, there were 348 people working at IPP, teaching and non-teaching staff (Figure 4.2.).

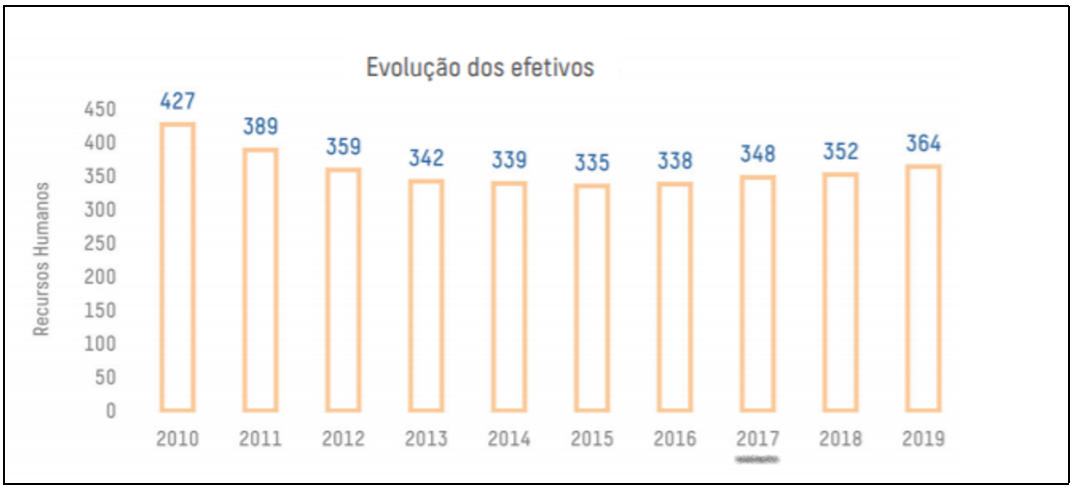



*Figure 4.2*. Evolution of the number of IPP workers 2010-2019 (teaching and non-teaching staff). Source: Activity report IP- Portalegre 2019 (p. 32).

The number of teaching staff has been increasing since 2013-15, when the number reached the lowest level of 192 teachers. In 2017 the number of teachers working at IPP was 207 (Figure 4.3).

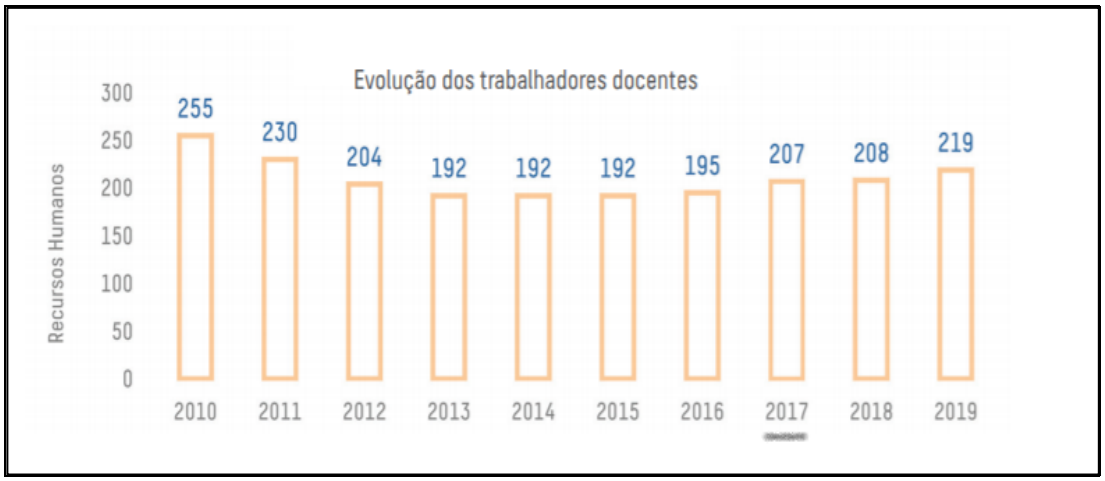



*Figure 4.3*. Evolution of the number of IPP teaching staff (2010-2019). Source: Activity report IP-Portalegre 2019 (p. 33).

Data collected from the Activity Report IP- Portalegre 2017 (p. 34) indicates that in 2017 most teaching staff were between 40-44 years old (24.6%). The second higher age group, from 45 to 49, corresponds to 21.2% of the teachers. There were 8.6% of teacher within the age group 60 to 64 and only one teacher (0.4%) younger than 30 (Figure 4.4).

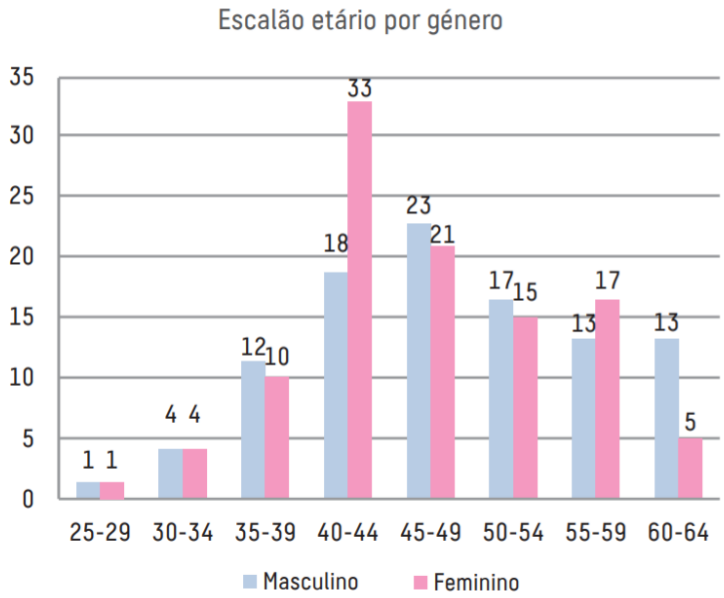



*Figure 4.4.* IPP teaching staff in 2017 divided by gender and age. Source: Activity report IP- Portalegre 2017 (p. 34).

In 2017, regarding academic qualifications, 40% of IPP teachers had a doctorate degree and 31.4% (65 teachers) a master's degree (Figure 4.5.). The number of women with a PhD (48) and with a master's degree (33) outnumbers the number of men with these academic qualifications (35 PhD and 32 master's).

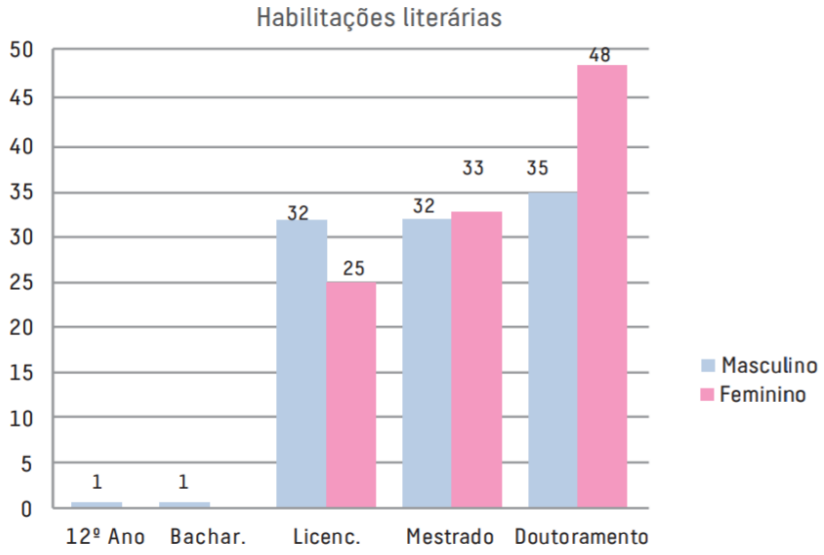



*Figure 4.5.* Academic qualifications of IPP teachers in 2016-17. Source: Activity report IP- Portalegre 2017 (p. 34).

There has been an increase in the total number of students enrolled in IPP courses in the last years. Figure 4.6 presents the total number of students who enrolled from 2016-17 to 2018-19, with a total of 1931 students enrolled in the first period.


*Figure 4.6.* Evolution of the number of students enrolled in IPP courses from 2016-17 to 2018-19. Source: Activity report IP- Portalegre 2018 (p. 46).

The students enrolled in IPP courses in 2016-2017 (up to 31 December 2016) attended twelve technical higher education courses (CTeSP), twenty-one undergraduate degrees, one postgraduate degree, and eleven master's degrees. The total number of students enrolled in the different degrees in the four Schools of the Institute in the academic year 2016-17 was distributed as shown in Table 4.5.

Table 4.5

*Total number of students enrolled in IPP courses in 2016-17, distributed by schools and type of course.*

| | **CTeSP** | **Undergraduate degrees** | **Postgradu. degree** | **Master's degrees** | ***Total*** |
|---|---|---|---|---|---|
| School of Health (ESS) | 42 | 306 | - | 15 + 112 | 475 |
| School of Agrarian Studies of at Elvas (ESAE) | 83 | 230 | - | 24 | 337 |
| School of Technology and Management (ESTG) | 55 | 443 | - | 58 | 556 |
| School of Education and Social Sciences (ESECS) | 56 | 362 | 17 | 111 | 535 |
| ***Total*** + 17 (external students) | 236 | 1341 | 17 | 320 | **1931** |

Source: Own elaboration with data from the Activity Reports IP- Portalegre 2016 and 2017.

IPP also participates in regular international cooperation activities related to the mobility of students, teaching and non-teaching staff, within the framework of the ERASMUS+ Programme and other programmes and actions, such as the Vasco da Gama national student mobility programme and the mobility programme with Macao Polytechnic Institute, established through a protocol between IPP and the Portuguese Polytechnics Coordinating Council (Conselho Coordenador dos Institutos Superiores Politécnicos - CCISP). The ERASMUS+ programme is the main framework for outgoing mobility actions at IPP, as seen in Table 4.6. From 2015-16 to 2016-17, the figures for outgoing mobilities remained stable for teachers but decreased for students both in a period of study abroad and

in job placements. The reported justification for this decrease (Activity Report IP- Portalegre 2017, p.108) is not students' lack of interest, but rather the dropout figure of students already selected, which in 2016/17 reached 59%. Most dropout decisions were due to insufficiency of the mobility grant.

Table 4.6

*Number of Outgoing-mobilities at IPP (2015-16, 2016-17 and 2017-18)*

| **Beneficiaries of Outgoing mobilities at IPP (2015 to 2018)** | | | | |
|---|---|---|---|---|
| Action | Beneficiary | 2015-16 | **2016-17** | 2017-18 |
| ERASMUS+ | Students, for period of study | 13 | 12 | 21 |
| | Students, for internships | 19 | 15 | 24 |
| | Lecturers, for teaching mobility | 25* | 25** | 25 |
| | Teaching and non-teaching staff for training | 1 | 1 | 2 |
| CCISP- IP Macau | Students, for period of study or internship | 2 | 2 | 2 |
| Vasco da Gama | Students, for period of study | 1 | 3 | - |
| Total | | 61 | 58 | 74 |

* 3 zero funded scholarships **1 zero funded scholarship

Source: Own elaboration with data from the Activity Reports IP- Portalegre 2016, 2017 and 2018.

In terms of incoming mobilities (Table 4.7), the general trend along the years is towards a general increase in the number of students and teaching and non-teaching staff coming to IPP for a period of study or for an internship. In 2016-17, although the number of incoming ERASMUS+ students decreased slightly, there was a boost in the number of lecturers coming to IPP in teaching mobilities. One of the reasons for the growth was the organisation of the first International Week of the School of Agrarian Studies at Elvas, and the implementation of the International Week of IPP in the academic year 2017-18. In 2016-17, besides the ERASMUS+ students, IPP received four students from Brazil and three students from a Vocational School in Spain. This is already the result of the institutional efforts to attract international students with a strong focus on the Community of Portuguese Speaking Countries (CPLP) countries, with Brazil, Cape Verde and Angola at the lead, mostly on account of linguistic and historical issues.

Table 4.7

*Incoming mobilities at IPP (2015-16, 2016-17 and 2017-18)*

| Action | Beneficiary | 2015-16 | 2016-17 | 2017-18 |
|---|---|---|---|---|
| ERASMUS+ | Students, for period of study or internships | 39 | 28 | 34 |
| | Lecturers, for teaching mobility | 26 | 36 | 41 |
| | Teaching and non-teaching staff, for training | 11 | 12 | 23 |
| Non- ERASMUS+ Mobility | Students, for periods of study or internships | - | 7 | 20 |
| | Lecturers, for teaching mobility or institutional visit | - | 1 | 2 |
| CCISP- IP Macau | Students, for period of study or internship | 3 | 2 | 4 |
| Vasco da Gama | Students, for period of study | 4 | 1 | - |
| Total | | 83 | 87 | 124 |

Source: Own elaboration with data from the Activity Reports IP- Portalegre 2016, 2017 and 2018.

### 1.3. Internationalisation policy of IPP

Each year IPP tries to attract more students and counter-fight the drawbacks of being an inland HEI in a depopulated and economically fragile region. This overarching concern is addressed by IPP through the proposal and implementation of strategic lines of action defined every four years by the General Council of IPP. For the period 2014-2017 the general target set was to have "more qualified teachers; more applied research; more internationalisation; more specialized curricular offer and more involvement and commitment with society and the region" (IPP Development Programme 2014-17, p. 6).

Of central relevance in IPP's strategic standing is its internationalisation policy, whose objectives are

> the reassertion of the Institution's international cooperation in order to reinforce the quality of the education it provides, to better equip IPP's graduates to enter a global job market and to guarantee scientific and technological competences and better answer the needs of the surrounding community.
>
> IPP's "Internationalization Policy" document, 2015, p. 3

IPP participates in Lifelong Learning and in ERASMUS programs since 1994-95 and to date many of IPP students have benefited from the experience of studying abroad under those programs, and many more from other countries have been welcomed at IPP. Similarly, every year IPP welcomes teachers from international partners' institutions and sends some of its teachers in teaching and training missions overseas. In addition, IPP has participated in several European projects as a partner and/or as coordinator. Presently IPP is an associate member of the EAEC (European Association of ERASMUS

Coordinators), now occupying one of the vice-presidencies, of UASNET (Universities of Applied Sciences network), AULP (Association of Portuguese Language Universities - Associação de Universidades de Língua Portuguesa) and WFCP (World Federation of Colleges and Polytechnics), the President of IPP being a member of the respective board. IPP has concluded cooperation agreements under ERASMUS+ program with over 80 institutions from all over Europe and other agreements with higher education institutions in Europe, Africa, Asia and South America. All the activities related to Internationalisation at IPP are coordinated by a Pro-President who works together with a team of people at IPP's Central offices and at each School. In the ERASMUS Charter for Higher Education 2014-20 signed by IPP and the European Commission, IPP states that its internationalisation policy "aims to consolidate the institution in international cooperation, to strengthen the quality of its training offer, to better prepare their graduates for the global labor market and to ensure the scientific and technological skills to better meet the needs of the surrounding community" (p. 13).

In 2015, the Academic Board of IPP approved a document concerning the internationalisation policy of the institute, which sets internationalisation as a priority area and a key strategic line of action of the institution (vid. Appendices for more detailed information). According to Morgado et al. (2015, p. 76) the major challenges to the implementation of CLIL in Portuguese HE are mainly situated at the institutional macro-level as a clear definition of the language and internationalisation policies at HEIs will "provide the necessary framework for CLIL to thrive and, simultaneously, contribute to the success of these policies". This is the conclusion drawn from the assessment of a small-scale pilot CLIL teacher training course through the CLIL-ReCLEs.pt project (Morgado et al., 2015; Arau Ribeiro et al., 2016), which took place in seven Portuguese HEIs, including IPP, from 2013 to 2015.

IPP's "Internationalization Policy" programme, a key pillar of IPP policy, is aligned with the objectives and mission of the Institution, and it corroborates IPP's strategic line of action defined in the Development Programme 2014-17, to enhance its internationalisation policy and to increase its participation in exchange and cooperation programmes. The "Internationalization Policy" programme also emphasises the idea that the internationalisation policy should go far beyond the provision of international mobility exchange programmes for students and teachers. As explicitly referred to in the document, the internationalisation of an HEI

> should not be taken as an end in itself, nor as a mere instrument to cater for students, but rather as a means that can lead to a better education/training of students in general, to the development of their research competences and ability to produce knowledge, to an increased cosmopolitan life of the Institution on account of the internationalization of the curricula, to the assertion of the institution international profile through the diversity of its students, teachers and administrative staff.
>
> IPP's "Internationalization Policy" programme, 2015, p. 1

IPP's "Internationalization Policy" programme defines as an objective the reinforcement of IPP international positioning to reinforce the quality of the education it provides, to support its graduates entering the global job market, to assure scientific and technological competences and to better answer the needs of the surrounding community. In accordance with these general objectives, IPP establishes four strategic lines of action to be followed, which aim at creating and consolidating

- a more sustainable IPP

- a more attractive IPP

- a more multicultural and multilinguistic education/training, and

- a closer involvement of and with the surrounding community

Each of these strategic lines of action is further developed in the programme, either with general expectations for the future, or with very specific measures to be taken to achieve these aims. For example, to turn IPP into a "more sustainable Institute", the document highlights the need to revert the continuous decrease of the population in the region and the need to create differentiating conditions to attract students. The process of internationalisation is pointed out as the answer to this purpose and as a possibility to offer students and teachers the opportunities to live exchange experiences.

To change IPP into a "more attractive Institute", the factor "internationalisation" and the cosmopolitan environment it can bring are presented as attractor factors and opportunities of international experiences for future teachers and students, for those who already work at the institution and for teachers and students from other countries.

For the implementation of "a more multicultural and multilinguistic education/training" some concrete measures are mentioned, such as the inclusion of an English curricular Unit in all degree courses taught at IPP, preferentially in the first curricular year; the possibility of implementing joint degree courses with foreign HEIs, and the offer of modules or Curricular Units (CU) in a FL (English or Spanish) to be made available to all students, or at least to foreign students, when necessary. It is acknowledged that the provision of CU or modules in a FL (either face-to-face, e- or b-learning formats) will guarantee an adequate formation to incoming students (ERASMUS and International) and will offer IPP students the possibility of improving their linguistic proficiency, if they decide to do part of their training in a foreign language (IPP's "Internationalization Policy" programme, 2015, pp. 3-4).

The closer involvement of IPP with the surrounding community, an essential element of IPP mission statement, is presented as mutually beneficial and a responsibility for both actors. Initiatives such as "Cidades Amigas dos Estudantes" (Students' Friendly Cities), the provision of accommodation in the city centres, or in the promotion of cultural initiatives with and for the academic community are suggested.

IPP “Internationalization Policy” programme also defines specific objectives to achieve, which include the promotion of IPP among foreign institutions; the establishment of strategic partnerships in Europe and in Portuguese-speaking countries (1) to enhance the mobility of students and teaching and non-teaching staff, (2) to promote and develop curricula in partnership, aiming at double or joint degrees or joint degrees; the creation of "mobility windows" in a set of courses to be defined; the development of multilateral projects of academic cooperation, in partnership with teaching institutions in Europe or elsewhere and the promotion and support of international research projects, in partnership with HEIs in Europe or elsewhere (IPP’s “Internationalization Policy” programme, 2015, p. 4).

IPP Strategic Development Plan for 2018-21 would reiterate the ideas concerning internationalization already presented in IPP Development Programme 2014-17 and in IPP’s “Internationalization Policy” programme, 2015. Strategic objective 3 of IPP Strategic Development Plan 2018-21 (“to be an open organisation with an international environment”), is based on the same principles and arguments. The rationale behind this objective is the need for a policy that attracts students, both international students, incoming and outcoming ERASMUS students and teachers, which makes the participation in international partnerships a decisive factor for the success of this policy. Besides the establishment of strategic partnerships in Europe and in Portuguese-speaking countries, the Strategic Plan 2018-21 pinpoints the University of Extremadura as a privileged partner to value. The support to FL language learning is also referenced as a fundamental line of action to be developed both internally and directed to the development of the region through the action of IPP language centre (CliC).

Since the approval of the IPP’s “Internationalization Policy” programme in March 2015, the urgency to implement these measures has been repeatedly stated by the External Relations and Cooperation Office (REC) though their representatives in each School/Faculty and reaffirmed in Department meetings. Both content teachers and English language teachers recognize, even out of personal experience, the urgency of the situation and the need to contribute to the implementation of these measures.

## 2. Research methodology and design

In this section the methodology and research design applied in this study are described. The section starts with the research aims and the significance of this research both locally and viewed within a broader scope (2.1). Next, we list the research questions that frame this study (2.2) followed by the outline of the overall research design conceived to address these research questions (2.3) mixed-methods research and the concurrent triangulation design, in a case study approach, and consider the strengths and limitations of the research design adopted.

In Section 2.4 we present the demographic characterization of the respondents to the two research instruments used in this research, namely, the questionnaires (2.4.1) and the framed narrative inquiries (2.4.2). The description of the research instruments and the data collection procedure used are the subjects of section 2.5., focussed on the questionnaires and sub-section 2.5.2 on the design and application of the framed narrative inquiries.

### 2.1. Research aims and the significance of the study

Set against a contextual background of an increasing need for internationalisation in HEIs in Europe and throughout the world, the urgency of preparing HE lecturers to teach their specialized subjects using a FL (generally English), and the conceptual background of a sound research on the advantages of the CLIL/ICLHE approach in bilingual programmes in HE, this research work aims, in general terms, to explore the perceptions of the lecturers of the Polytechnic Institute of Portalegre concerning the use of a FL/English as a medium of instruction and their perceived training needs, in order to adapt to a bilingual education model.

The research is focused on the analysis of the present situation at the Polytechnic Institute of Portalegre and the lecturers' perceived training needs to engage to a bilingual education model and it addresses specific aspects of bilingual education, namely the teachers' perception of their own and their students' competence level in the FL/English language; their theoretical and methodological knowledge of bilingual education; the knowledge of materials and resources for bilingual education and their personal development in terms of bilingual education.

At national level, this study contributes to the Portuguese still scant research on EMI and CLIL/ICLHE in HE and, within a wider scope, it adds to the sparse evidence-based research, grounded on solid diagnosed needs analysis aiming at providing for a more effective training of CLIL/ICLHE university lecturers. This "research gap" (Pérez Cañado, 2020b, p. 2), has recently been re-acknowledged by Pérez Cañado et al. (2021) in line with other voices like Macaro et al. (2018), O' Dowd (2018), Rubio-Cuenca and Perea-Barberá (2021), who have also pinpointed the scarcity of studies in this area and its relevance for the successful future development of EMI/CLIL in HE. Pérez Cañado et al. (2021) deems it as a priority on the CLIL agenda, to continue "replicating studies in different contexts in order to base decisions regarding CLIL programs on real and pertinent needs. The one-size-fits-all model no longer fits the bill in CLIL scenarios […] and greater contextualization and situatedness are thus necessary in order to attune CLIL to context-specific realities" (p. 2).

Thus, the data collected through this study will bring further evidence to the bulk of research in the area of teacher training for bilingual education, and it will contribute to paving the way for the implementation of CLIL in HE on the basis of objective empirical data. There is a need for more

evidence-based research, solidly grounded on diagnosed needs having in view the successful training of EMI/CLIL university lecturers.

Furthermore, given the dimension of the research undertaken – a questionnaire applied to the whole teaching staff of a Portuguese HE Institution – it can be replicated and used as benchmark for studies on EMI/CLIL/ICLHE teacher training needs and thus contribute to enhance the possibilities of CLIL/ICLHE implementation in HE in Portugal.

Reflecting on the growing popularity of EMI all over the world, Doiz et al. (2013) argue that empirical research is still needed to address many unanswered issues as

> every context has its own characteristics and, therefore, studies rooted in each specific context will be much welcomed. Results from other contexts may always be helpful and enlightening, but every institution should carry out its own research, which ideally will lay the foundation of the most appropriate language policy for them.
>
> Doiz et al., 2013, p. 219

The adoption of a mixed methods research approach, sustained by data collected through both quantitative (questionnaire) and qualitative (framed narrative inquiries) instruments, allowed for the necessary triangulation that ensures the validity of the research and its reliability.

### 2.2. Research questions and sub questions under study

Based on the overall aims of this study, two key **research questions (RQ**) have been formulated as meta-concerns to steer the research, further detailed into **sub questions**, **within-cohort comparisons questions**, and an **instruments comparison question**. Figure 4.7 provides a graphic representation of the research questions and sub questions, for easier reference (see appendices):

**RQ1**: How do IPP lecturers view their current linguistic, methodological, and ongoing professional development situation for teaching their content subjects in English/FL?

**RQ2**: Which training needs do IPP lecturers perceive as most relevant for teaching in English/FL?

These two general questions led to the formulation of more detailed **research sub questions (RSQ**) in two different focal areas:

**Focal area 1: Self-perceived skills and needs**

**RSQ1:** How do IPP lecturers perceive their skills for teaching in English/FL in reference to:

a) their own FL/English language competences,

b) their knowledge of theoretical and methodological aspects of bilingual education,

c) their knowledge of materials and resources used for bilingual teaching, and

d) their ongoing professional development for using English/FL as a medium of instruction?

**RSQ2**: Which training needs do IPP lecturers pinpoint for teaching in English/FL in terms of:

a) their own FL/English language skills,

b) their knowledge of theoretical and methodological aspects of bilingual education,

c) their knowledge of materials and resources used for bilingual teaching, and

d) their professional development for using English/FL as a medium of instruction?

**Focal area 2: Lecturers' perceptions on students' skills and needs**

**RSQ3**: How do IPP lecturers perceive their students' linguistic skills in English?

**RSQ4**: Which training needs do IPP lecturers consider their students have concerning the English language?

To explore the **within-cohort relationships** three sub-questions were formulated:

**RSQ5**: How are the perceptions held by IPP lecturers on their current situation (CS) and on their training needs (TN) (RSQ1 and RSQ2) influenced by such variables as their age, gender, number of years teaching in HE, type of contract, specialisation area or situation in which they have used the English language in academic context in the last two years?

**RSQ6**: How do the perceptions held by IPP lecturers towards teaching through English (RSQ1) relate to the training needs they identify (RSQ2)?

**RSQ7:** How do the perceptions held by IPP lecturers towards their students' linguistic skills in English (RSQ3) relate to the training needs they consider their students have concerning the English language (RSQ4)?

**QUAN & QUAL data comparison**

**RSQ8**: How do qualitative data (FNIs) contradict, confirm, expand, or provide context to the quantitative data (questionnaire) on IPP lecturers' perception of their skills for bilingual teaching and their major training needs to engage in it?

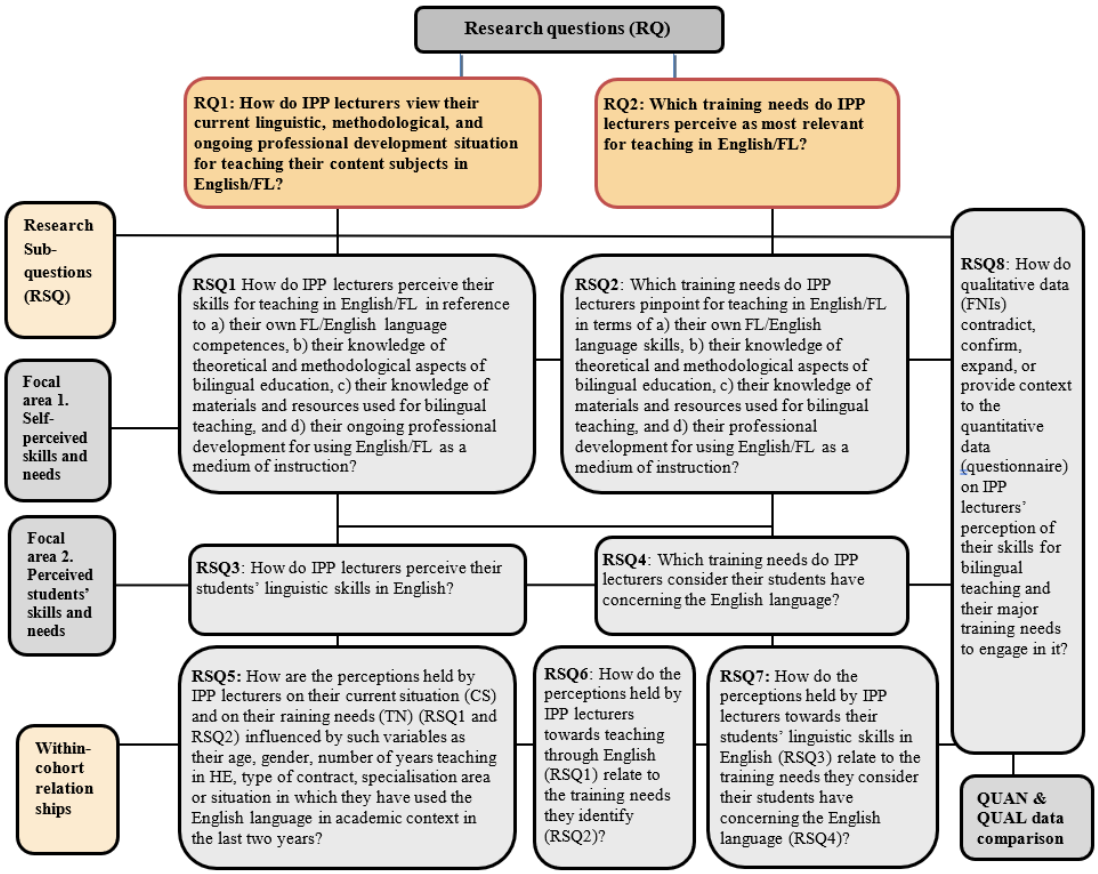



*Figure 4.7*. Research questions (RQ) and sub questions (RSQ) under study

## 2.3. Research design

### *2.3.1. Mixed methods research*

In this study we adopted a mixed methods research form of inquiry, a procedure which Dörnyei (2007), defines as "some sort of a combination of qualitative and quantitative methods within a single research project" (p. 44) and which "involves different combinations of qualitative and quantitative research either at the data collection or at the analysis levels" (p. 24). One of the advantages of using both qualitative and quantitative methods is the possibility of developing a multi-layered and in-depth analysis of the topic under research, and thus gain a more complete understanding of the research problems. By applying both quantitative and qualitative methods, it is possible to counterbalance the limitations of one method with the strengths of the other (Creswell et al., 2003; Dörnyei, 2007) and to "broaden the scope of the investigation and enrich the researcher's ability to draw conclusions" (Dörnyei, 2007, p. 186). Johnson et al. (2007) highlight the integrative nature of this type of research method, which "attempts to consider multiple viewpoints, perspectives, positions, and standpoints (always including the standpoints of qualitative and quantitative research)" (p. 113). The combined use of quantitative and qualitative approaches makes it possible "to confirm, cross-validate, or corroborate findings within a single study" (Creswell et al., 2003, p. 183); to reach a more comprehensive

understanding of the object of study; to expand the understanding of the issues under research and, potentially, to achieve more consistent evidence as conclusion (Johnson & Onwuegbuzie, 2004).

The mixed method research follows a concurrent triangulation design (Creswell et al., 2003; Creswell, 2014), with the collection of quantitative and qualitative data occurring concurrently in one of the phases of the study and the combinations of qualitative and quantitative research taking place at the analysis level. Figure 4.8 reproduces Creswell's (2003) representation of a concurrent triangulation design, and it also embodies the research design followed in this study.

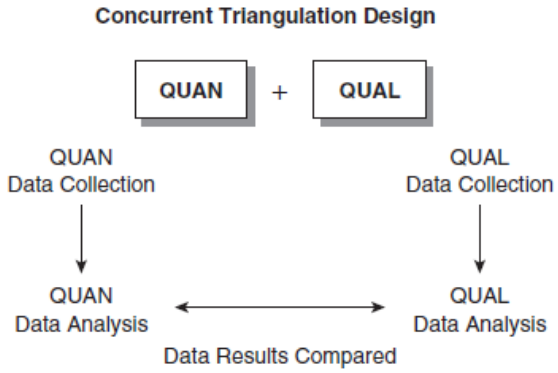



*Figure 4.8.* Creswell's "concurrent triangulation design" representation. Source: Creswell et al., 2003, p. 181

Firstly, data was concurrently collected both through a questionnaire (QUAN instrument) applied to all IPP lecturers in July 2017, the end of the academic year 2016-17, and through framed narratives inquiries (QUAL instrument) sent at the of 2017 to all the lecturers of IPP who had either (1) been in a teaching mission abroad in the academic year 2016-17, or (2) who had received ERASMUS students in their classes in 2016-17. Data from the different sources were analyzed separately and then, at the discussion stage, results from both the questionnaire and the framed narrative inquiries compared for convergences, differences, or combinations (Creswell, 2014).

### *2.3.2. Case study approach*

This research study is centered on one specific HEI, the Polytechnic Institute of Portalegre, thus it adopts a type of approach which allows for "in-depth inquiry into a specific and complex phenomenon (the "case"), set within its real-world context" (Yin, 2013, p. 321). The case study approach is described by research (Flyvbjerg, 2006; Zainal, 2007; Yin, 2013) as a robust research method, taking into account the holistic, in-depth investigation it entails and develops. Duff (2014) reports that in recent years there has been a growing trend towards the use of case studies in applied linguistics, especially in the areas of language learning and multilingualism, and that this framework for a close and comprehensive analysis of a particular case, can enhance new understandings in research and pedagogy. The common criticism that it is difficult to arrive to general principles or knowledge of wider significance based on

a single case or that case studies are arbitrary and subjective is contended by the acknowledged added advantages of case studies to produce in-depth research that can help to understand the complexities of the particular cases and contribute to the systematic production of broad implications examples and of effective general insights (Flyvbjerg, 2006). Thus, the use of a mixed methods and case study approach in this dissertation enables us to explore in a thorough and detailed way the current situation and the training needs perceptions of lecturers at IPP to engage in bilingual teaching.

For this convergent type of research design, the different sample sizes of the research instruments used (Table 4.8) is considered adequate because, as conveyed by Creswell and Clark (2017) a smaller qualitative sample "helps the researcher obtain a rigorous, in-depth qualitative exploration and a rigorous, high-power quantitative examination of the topic" (p. 191). Furthermore, considering that our aim with the use of the QUAN. and QUAL. tools was to combine the two databases and compare the different results by topic to achieve a broader view of the topic under research, then, "size differential is not a problem because the intent is to combine the conclusions from gathering the two different databases: quantitative data collection aims to make generalizations to a population while qualitative data collection seeks to develop an in-depth understanding from a few people" (Creswell & Clark, 2017, pp. 191-192).

Table 4.8

*Sample sizes of the QUAN. and QUAL. research tools used*

| | **Number of lecturers inquired** | **Number of respondents** | **Total sample** |
|---|---|---|---|
| QUAL. Questionnaire | 193 | 106 | 106 |
| QUANT. FNI@home | 43 | 24 minus 7 (not validated) = 17 | 32 |
| FNI@broad | 24 | 15 | |

*2.3.3. Needs analysis study for CLIL*

A needs analysis study was selected for this research study, considering the sound evidence-based it would be able to supply to access lecturers' current situation and training needs. In this sense, needs analysis research pairs with a mixed method approach, as it can bring into the research a range of data collection methods that can contribute to the analysis (Basturkmen, 2006; Dudley-Evans & St. John, 1998).

Ruiz-Garrido and Fortanet Gómez (2009) have argued for the advantages of implementing needs analysis studies either in ESP or in CLIL, as they consider that the already credited high relevance of needs analysis studies in the design and development of ESP courses can be transferred to CLIL research:

> Although there are many differences between ESP and CLIL, we believe needs analysis is a useful approach that can be easily transferred. Needs Analysis can be applied to CLIL to define the programme and to establish the needs of teacher training, materials and specific means.
>
> Ruiz-Garrido and Fortanet Gómez, 2009, p. 179

According to Ruiz-Garrido and Fortanet-Gómez (2009), needs analyses can guarantee the success of a CLIL programme by providing teachers "with the support and the training they need" (p. 184). The application of such instruments as interviews, questionnaires, tests or class observation will provide information about the wants and lacks of the teachers and, depending on the purpose of the investigation, it will focus of particular aspects (i.e. vocabulary of CLIL- students vs vocabulary of no-CLIL students). Similarly, teachers' needs on materials and resources can be identified and training need and support can be supplied. And, despite the many differences between CLIL and ESP, it is possible to transfer to the context of CLIL the methodology of needs analysis, applying needs analysis "to CLIL to define the programme and to establish the needs of teacher training, materials and specific means" (Ruiz-Garrido & Fortanet-Gómez, 2009, p. 179).

Alejo-González and Piquer-Píriz (2010) also corroborated the idea that "needs analysis, as developed by ESP theory, can supply CLIL with a whole array of concepts and tools, which have evolved over the years." (p. 223).

Pérez Cañado (2021) also endorses the adoption of needs analysis studies in EMI/CLIL referring that "needs analyses should be conducted to feed directly into pedagogical proposals which are solidly grounded on such empirical" (Pérez Cañado, 2021, p.173). That means that there should be an alignment between CLIL/EMI courses pedagogical proposals and the training needs as "there is a documented mismatch between the actual needs of target academic situations and what is actually provided by EMI training programmes" (Pérez Cañado 2021, p. 173).

This dissertation study also investigates IPP lecturers' beliefs about their current situation and training needs towards bilingual education, by using a questionnaire and framed narrative inquiries where lecturers self-report their perceptions towards different issues related to bilingual education and teaching

*2.3.4. Framed narrative inquiries (FNIs)*

To learn further about lecturers' self-perceived understanding of their current situation and future needs when teaching their classes in a FL/English, a framed narrative inquiry was adopted, a qualitative research instrument that gives the voices of the lecturers a forum and a space to present their ideas and practices. The use of narrative inquiry in teacher education gives access to the experience of

teachers in particular contexts, and it has been previously adopted to elicit teachers' personal understanding and experience of aspects of professional development (Barkhuizen & Wette, 2008).

In language teacher education, it is common to use reflective practices such as teacher logs, diaries, or journals; interviews; audio or video recordings of teaching; and teacher narratives or case studies of teacher practice, to learn and understand about the experiences of teachers in their contexts and help them develop more informed practice, make explicit their own beliefs about teaching (Bell, 2002; Benson, 2014; Borg, 2006; Crandall, 2000). Teachers' narratives about their teaching experiences "represent a primary way in which teachers organize and understand the complexities of their profession, involving competing demands, constraints, policies, and power relations" (Crandall, 2000, p. 40). According to Barkhuizen and Wette (2008, p. 374), "in telling their stories of experience teachers necessarily reflect on those experiences and thus make meaning of them; that is, they gain an understanding of their teaching knowledge and practice".

Moreover, there is a growing recognition of the need for university faculty to reflect on their teaching, as "reflecting on one's teaching, it is argued, should foster personal growth and development as a university teacher, lead to better understanding how students learn, help faculty members assess which practices are effective in specific circumstances, aid in the development of responsive curricula, and enhance the scholarship of teaching and learning" (Hubball et al, 2005, p. 58).

In 2008, in the article "Narrative frames for investigating the experiences of language teachers", Barkhuizen and Wette reported on an approach they introduced to investigate the experiences of university English teachers in China. By using specifically designed narrative frames as instruments for collecting research data, they were able to explore the teachers" experiences and gain "entry into an unfamiliar research context" (Barkhuizen & Wette, 2008, p. 372).

Barkhuizen et al. (2014) define "narrative frame" as "a written story template consisting of a series of incomplete sentences and blank spaces of varying lengths. It is structured as a story in skeletal form. The aim is for respondents to produce a coherent story by filling in the spaces according to their own experiences and their reflections on these" (p. 45). Narrative frames act as a skeleton outline which scaffolds and prompts the lecturers' reflections in terms of both the structure and content of what is to be written. In terms of its advantage as research instruments, "the frames ensure that the content will be more or less what is expected (and required to address the research aims) and that it will be delivered in narrative form" (Barkhuizen & Wette, 2008, p. 376). Moreover, by supplying frames for the narrative writing, it is possible to decrease the anxiety usually connected with the process of writing (Barkhuizen & Wette, 2008, p. 381).

Barkhuizen (2014) also pinpoints what he believes is "perhaps the main strength of narrative frames" (p. 13), which is its exploratory nature and capacity for collecting data, particularly when combined with other methods of research. The author argues for the integration of narrative frames with

other research methods (mixed methods approach) so as "to reach a fuller understanding of what is being investigated, and to verify one set of findings against another. To achieve this, the methods need to be properly integrated, and this is the challenge for those who use narrative frames" (p. 22). In this dissertation, this aspect was particularly considered and the FNIs were designed having the questionnaire into consideration and trying to match it as much as possible (v. Table 4.11).

Barkhuizen and Wette (2008) give arguments for the adoption of this type of research tool stating that although "each teacher's frame may not represent a long, detailed story, […] it is nevertheless a storied snapshot of that teacher's working life which, together with stories of other teachers working in similar contexts, is informative and relevant for the researcher" (p. 381). The authors list six advantages for the use of narrative frames that are here summarised:

1. Narrative frames starters provide the necessary scaffolds to enable more unconfident respondents to write narratively following a structure.

2. The frames guarantee that the themes under study are addressed by the respondents yet giving them flexibility to write the narrative.

3. The framed narrative guides (topic wise) and establishes a boundary (narrative length) in the respondents' narrative about their experience. All the narratives together, from similar contexts, are informative and relevant for the researcher

4. Data is highly structured, which makes analysis easier.

5. As the frames limit the amount of data, it is possible to work with larger amounts samples.

6. Frames serve an exploratory purpose and are useful for getting to know a new context.

And some limitations include:

1. The writing process with the frames may discourage some respondents who may need or desire more space and less guidance to express themselves.

2. The narrative sequence of prompts may not be compatible with the way a particular writer organises his/her ideas and that can lead to difficulties and cause content not to be as rich as it might be. Moreover, non-framed topics are out of reach for respondents.

3. Some prompts may be interpreted in a different way than the one intended to by the researcher.

4. If the frames are poorly designed or the instructions are not clear, narrators may write unconnected ideas.

> 5. Ironically, when there is a large amount of data, the use of narrative frames tends to de-personalize the participants' narratives and become a set of factual statements which lack sociocultural, sociohistorical, and rhetorical influences that shape the narrative constructions.

The use of framed narrative inquiries (FNIs) as qualitative research instrument has enabled the further exploration of the questions that guide our research. With this tool it was possible to collect relevant data for the understanding of what lecturers at the Polytechnic of Portalegre think about teaching their specialized subjects through a FL, their more and less positive experiences when doing it and the needs they perceive as relevant to improve the quality of their professional skills to engage in it.

Since their introduction (Barkhuizen & Wette, 2008), narrative frames have been used in a variety of contexts for research on language learning and teaching, mainly to explore learners and teachers' beliefs, experiences, and identity (Barkhuizen, 2014).

Macalister (2012) reported on the framed narratives as a research tool for needs analysis in the design of an English language curriculum:

> Narrative frames proved to be a practical tool in this context for needs analysis with a large number of people. They provided a collection of 'storied snapshots' that allowed the serving seamen to write about their experiences in a way that traditional instruments such as questionnaires and surveys would not. The stories could then be analyzed for their commonalities and gave the course designer insights that would not otherwise have been gained, particularly about learner wants. This not only had implications for what was included in the curriculum, but also contributed to the design of materials to support the new curriculum.
>
> Macalister, 2012, p. 125

In 2012 Viet reported a multi-method research project which investigated teachers' beliefs and practices regarding their willingness for task-based language teaching (TBLT) in Vietnam context. The author used "narrative frames" (Barkhuizen & Wette, 2008), to elicit teachers' approaches to their experiences of recent lessons in relation to TBLT.

In a recent paper on the innovative use of visuals with narrative research in applied linguistics, Grenieer & Moodie (2021) describe a narrative frame (NF) as "a data collection instrument comprising a series of sentence prompts that facilitate the elicitation of participant narratives by scaffolding the writing process" (p. 1). The same authors summarise the advantages of using narrative frames because they "allow multiple respondents to compose narratives that are comparable in length, form, and substance, thus allowing the researcher to focus on more precise research aims than are generally possible with more open-ended types of narrative data" (p. 1) and add that narrative frames "provide

structure and focus to written narratives, helping to organize and condense accounts of a participant's experience while still maintaining the essence of narrative research" (p. 2).

Farrell (2020) includes "narratives" as one of the reflective tools available to EMI teachers to facilitate their reflections so that they closely examine their classroom practices, and thus are able to pursue professional development. Besides "narratives", the author lists "dialogue", "writing", "classroom observations", "action research", and "team-teaching" as other possible reflective tools to be used. The narrative/story format can give lecturers a better overall understanding of their practice:

> Such teacher narratives serve to bring meaning to EMI teachers' experiences and as such offers teachers more evidence of who they are, where they came from and who they want to be professionally (Farrell 2015). Thus EMI teachers can use their narratives of events to bridge the theory/practice gap that often exists in practice as interpretations are made from the story.
>
> Farrell, 2020, p. 284

We used narrative frames, which is a form of scaffolded writing in an outline story composition, used as data collection instruments (Barkhuizen & Wette, 2008), in which the prompts were related to the topics covered in the questionnaire.

### 2.4. Research Instruments

This section provides a general overview of the research instruments used to carry out the needs analysis study, namely, the current situation (CS) and training needs (TN) analysis questionnaire, and the framed narrative inquiries (FNIs). Each research instrument used is presented in different sub-sections, 2.4.1. for the questionnaire and 2.4.2. for the framed narrative inquiries.

#### *2.4.1. The questionnaire*

The questionnaire used in this dissertation is adapted from the questionnaires used in the NALTT Project ("Needs Analysis of Language Teacher Training: A European Perspective") for the analysis of the main training needs of pre- and in-service teachers, coordinators, and teacher trainers across Europe in order to successfully implement bilingual education programs (Peréz Cañado, 2016a, 2016b).

The questionnaire was applied through Google Forms and sent to all 193 teachers of IPP at the end of the academic year 2016-17 (July 2017).

##### *2.4.1.1. Adapting the questionnaire*

The questionnaire applied to IPP teachers was adapted from the questionnaire used by Pérez Cañado (2016a) for data collection in the NALTT Project ("Needs Analysis of Language Teacher

Training: A European Perspective"), a European investigation which targeted at analysing the main training needs of pre- and in-service teachers, coordinators, and teacher trainers across Europe in order to successfully implement bilingual education programs. The NALTT questionnaire was based on the results from a literature review, which enabled the researchers of the project to identify five broad areas in teacher training for bilingual education. The areas are: (1) Linguistic and intercultural competence, (2) Theoretical underpinnings of bilingual education/CLIL, (3) Methodological aspects, (4) Materials and resources and (5) Ongoing professional development" (Perez-Cañado, 2016a). These five critical areas constitute the bulk of the content of the 5 thematic blocks of the final version of the NALTT project questionnaire.

Although the NALTT project survey was directed to a much broader audience than the teaching staff at IPP, and its focus was clearly directed to the theoretical and methodological aspects of bilingual education, the adaptation of this questionnaire to inquiring into IPP teachers' training needs was considered as a good option, considering its reliability, supporting theories and the model of inquiring into the teachers' current situation and training needs.

Pérez Cañado (2016a) contextualises the broad setting of her study referring, on the one hand, the growing spread of CLIL in such a way that it "outpaced teacher education provision" (p. 267), and on the other, the heavy requirements falling on teachers who are implementing CLIL at schools. Considering that this situation has been "largely overlooked and insufficiently addressed" (p. 267), Pérez Cañado signals teacher training as the way to counter the situation and even the differentiating component that will decide whether "CLIL will stand or fall in terms of sustainability" (p. 267). In order "to prepare practitioners to successfully step up to this novel approach" (p. 267), the NALTT Project set up a "comprehensive needs analysis of the training needs which language teachers, content teachers, and teaching assistants (TAs) across Europe currently have in facing up to bilingual education, in terms of linguistic and intercultural competence, theoretical and methodological aspects of CLIL, materials and resources, and ongoing professional development" (p. 267). This key idea resonates in this dissertation, adapted to the context of IPP and to the lecturers who are now under the high demands of teaching their classes in a FL/English.

Moreover, when asserting the potential contribution of this European project to the research field, Pérez Cañado (2016a) draws attention onto the "increased comparability and transferability" (p. 270) that such large international studies can provide, and she advocates that they "greatly complement smaller national or regional endeavors, which are equally valuable and necessary in identifying teacher training needs and making institutional decisions on CLIL teacher education programs" (p. 270). Later, when explaining the design and validation process of three other sets of parallel questionnaires based on the NALTT Project questionnaires and used in another large longitudinal project (MON-CLIL Project), Pérez Cañado (2016c) reinforces the validity of the replication of these instruments at all curricular and organizational levels, to diagnose the conditions for successful CLIL approach

implementation (p. 88). More recently, reporting on results of another large-scale investigation conducted on the training needs of the lecturers at the University of Jaén to undertake bilingual education in an EMI context, Pérez Cañado (2020) reiterates the idea that "there is a well-documented paucity of evidence-based research tapping into pre- or in-service teacher training which is solidly grounded on previously diagnosed needs" (p. 2).

Thus, although the questionnaire applied in this research is an adaptation and not the replica of the one used in the NALTT project, it can support comparability and contribute to the reinforcement of reported outcomes and to the enhancement of present and further research in teacher training for bilingual education in HE. The changes introduced to the model questionnaire were presented mainly to gain a clearer focus on the lecturer's current situation and current training needs for teaching in a FL/English, rather than the methodological specific content for pre- and in-service teachers and teacher trainers.

The detailed comparative table of the changes introduced into IPP questionnaire compared to the questionnaire used in the NALTT Project – rewording or combination of items, exclusion of items irrelevant for the aim of the research or for IPP context and inclusion of new relevant items – can be found in Appendices and in Table 4.9 a comparative summary of the final versions of the two questionnaires in terms of the number of thematic blocks, the total number of statements and the number of items per thematic block or dimension is presented.

Table 4.9

*General format comparative table of NALTT and IPP questionnaires*

| | **NALTT Questionnaire** | **IPP Questionnaire** |
|---|---|---|
| Number of thematic blocks | 5 | 5<br>(NALTT blocks 2 & 3 were merged into block 2. Block 5 is new) |
| Total number of statements | 52 total statements, each statement inquiries about the CS **and** TN | 28 statements on CS + 28 statements on TN<br>Total: 56 statements |
| Number of items per thematic block and dimension (CS and TN) | 1 – 13 (CS +TN)<br>2 – 8 (CS +TN)<br>3 – 9 (CS +TN)<br>4 – 11 (CS +TN)<br>5 – 11 (CS +TN) | 1 – 7 (CS+TN)<br>2 – 5 (CS+TN)<br>3 – 3 (CS+TN)<br>4 – 6 (CS+TN)<br>5 – 7 (CS+TN) (new) |

The data collected through the questionnaires were analysed using the computer programmes Microsoft Excel 2016 and the IBM software packages *Statistical Package for the Social Sciences Software* (*SPSS*) version 20. Microsoft Excel 2016 program was mainly used in the descriptive analysis of the data and *SPSS* was used to perform descriptive and inferential analyses.

After translating the whole questionnaire, the data was entered into the SPSS programme, coded accordingly ("closed" and "open" questions) and checked for any duplicates in the variables or the minimum and maximum values for each variable, which were corrected (vid. Appendices for more detailed information). For the analysis of the data, descriptive and inferential statistics were used.

*2.4.1.2. The structure of the questionnaire*

The questionnaire applied to the lecturers of IPP is divided into two parts: part I introduces opinion or value questions which inquire about lecturers' perceptions regarding their skills for bilingual teaching and their major training needs to teach content using a FL/English; part II has demographic or background questions to collect biographical information from the respondents.

The questionnaire (in Appendix) answered by the lecturers was written in Portuguese language and it began with a brief statement of its aims and scope, followed by five sections or thematic blocks with statements that elicit an alternative answer in Likert-scale type format, from 1 to 4, to avoid the central tendency error. In each thematic block respondents were asked to express, first, their perception towards a given statement, and then to give their opinion on those same statements but now considering their training needs on those issues.

Each of the five sections was directed to a different aspect of bilingual education, namely: (1) Linguistic and intercultural competence, (2) Theoretical and methodological foundations of bilingual education, (3) Materials and resources, (4) Individual ongoing professional development, and (5) Teachers' perception of students' linguistic competence. The last block of questions was only to be answered by those lecturers who have already taught in a FL/English at IPP. At the end of each block (except for block two) respondents were invited to indicate any other significant issue.

Item 57 through to item 76 of the questionnaire referred to the sociometric data of the respondents, with seven identification variables to collect biographical information from the respondents and their opinion or value questions regarding various aspects related to bilingual education (Table 4.10).

Table 4.10

Questionnaire - respondents' sociometric data

| | |
|---|---|
| 57. Age | < 30; 31-40; 41-50; 51-60; >60 |
| 58. Gender | (Male; Female) |
| 59. Number of years working as a teacher in Higher Education | 1-5; 6-10; 11-15; 16-20; >20 |
| 60. Type of contract | Full time; partial time |
| 61. Area of specialization | Arts, Design and Animation; Agrarian and Veterinary Sciences; Languages and Communication Sciences; Economic and Organisational Sciences; Sciences and Health Technologies; Social Sciences, Territory and Development; Education and Training; Technologies |
| 62. Availability to teach in English/a foreign language | Yes; No; Maybe |
| 63. Situations in which you have used the English language in an academic context in the last 2 years (tick as many as necessary) | 64. Writing a paper/book chapter<br>65. Presenting a paper/poster<br>66. Reading specialized/technical literature<br>67. Writing professional correspondence<br>68. Classes with Portuguese students at IPP<br>69. Receiving foreigner lecturers at IPP<br>79. Classes with Portuguese and ERASMUS students at IPP<br>71. Tutoring ERASMUS students<br>72. Erasmus exchange classes abroad<br>73. Study/research period abroad<br>74. Work developed for an international project<br>75. Meeting with international partners<br>76. Contacting local or visiting foreign businesspeople |

Before being sent to respondents, the questionnaire was pre-tested by eight lecturers at IPP to check for ambiguities, confusion, or redundancies. The corrections and suggestions received were integrated in the questionnaire and resulted in its final version.

### *2.4.2. The Framed Narrative Inquiries*

#### *2.4.2.1. The framed Narrative Inquiry Format*

In this research a narrative frame type of inquiry was used as the means to collect and explore teachers' rich accounts of what happened in their real-life teaching and their perceptions and actual experiences of teaching content using a FL/English. The use, within the case study methodological framework, of quantitative and qualitative analysis, through questionnaires and narrative framed inquiries, to explore the experiences of IPP content teachers, offers a still novel approach to research in the CLIL area. As noted by Sonday et al. (2020) on reflecting upon the research methodology used in

a doctoral thesis in occupational therapy, the merging of these methodologies can offer "an opportunity for deeper theorizing of case study as a method" (p. 4).

*2.4.2.2. The structure of the Framed Narrative Inquiries (FNIs)*

Two similar FNIs were developed for this research: one to be answered by IPP lecturers who in the academic year 2016-17 had been abroad in an ERASMUS teaching mobility (FNI@broad), and the other for those lecturers who had received ERASMUS students in their classes in the same academic year (FNI@home).

Each narrative frame inquiry consisted of seven written prompts to be completed freely by the respondents and aimed at obtaining an inside view on teachers' thoughts and feelings about different aspects of their experience of teaching in a FL/English in IPP context, and which, as stated by Viet (2012), intended to be "facilitative rather than constraining" (p. 50).

Each starter (1 to 7) of the FNIs, both at home (@home) and abroad (@broad), aimed at collecting information on the lecturers' beliefs and practices on specific topics related to teaching in a FL/English. These topics are in turn mostly coincident with the issues covered in the questionnaire, as shown in Table 4.11. (vid. appendices with the text of the FNI@broad translated into English and with texts of the Framed Narrative Inquiries @home and @broad, in Portuguese). This helped us eliciting lecturers' beliefs on the following 7 topics: 1. Attitude towards teaching in a FL; 2. Concerns about teaching in a FL; 3. Materials and Resources for teaching in a FL; 4. Methodologies for teaching in a FL; 5. Difficulties of teaching in a FL and Strategies to overcome them; 6. Successful experiences of teaching in a FL 7. Professional development expectations and needs for teaching in a FL.

Table 4.11

*Comparative table between the themes covered in the questionnaire and the themes in the FNIs*

| **Questionnaires – Themes** | **FNIs –Themes** | **Framed Narrative Inquiries @home Starters** | **Framed Narrative Inquiries @broad Starters** |
|---|---|---|---|
| | Country identification | A. In the academic year 2016-17 I received ERASMUS students from ... (country) in one of the curricular units I taught. | A. In academic year 2016-17 I went on an ERASMUS mobility teaching mission to … (Country/Institution). |
| | Language identification | B. When these students were in class the language of instruction was … | |
| 1. Linguistic and Intercultural Competence (5. Lecturers' perception of their students' linguistic competence level) | 1. Attitude towards teaching in a FL | 1.The fact that there were foreign students in class made me think about … | 1. The fact that I was going to use a foreign language in the ERASMUS Mobility classes made me feel… |
| | | 1b. and so I decided to … | |
| | 2. Concerns about teaching in a FL | 2. My main concerns about preparing the classes where there were ERASMUS students had to do with … | 2. My main concerns about preparing these classes had to do with… |
| 3. Materials and Resources for Bilingual Education | 3. Materials and Resources for teaching in a FL | 3. In these classes I decided to use materials that were … | 3. As for the materials to use, I wanted them to be … |
| | | 3b. because… | 3b. because… |
| 2. Methodological Aspects and Theoretical Foundations of Bilingual Education | 4. Methodologies for teaching in a FL | 4. In terms of methodologies to adopt I preferred … | 4. In terms of methodologies to adopt I preferred … |
| | 5. Difficulties of teaching in a FL and strategies to overcome them | 5. I felt more difficulty in … | 5. I felt more difficulty in … |
| | | 5b. but I overcame that problem by … | 5b. but I overcame that problem by … |
| | 6. Successful experiences of teaching in a FL | 6. I remember a situation when I successfully … | 6. I remember that in one of the classes taught in a foreign language I successfully … |
| 4. Ongoing Professional Development for Bilingual Teaching | 7. Professional development – expectations and needs for teaching in a FL | 7. In order to improve the quality of my professional skills in classes with ERASMUS students, I would like to … | 7. In order to improve the quality of my professional skills in ERASMUS mobility I would like to … |

## 2.5. Administration procedures and participants

### *2.5.1. The questionnaire*

The questionnaire was created Online, with Google Forms, a free digital tool that secures the anonymity of the respondents and allows for an easy access to the data collected, which is automatically saved in an Excel-like format (Google Sheets) for analysis. All IPP teaching staff (193 lecturers) at the time (June 2017), were invited, via e-mail to fill in the online questionnaire on a voluntary basis.

This research focuses on all lecturers at the Polytechnic Institute of Portalegre, who constitute the population of this research. The list of the lecturers was supplied by the Human Resource Department of IPP, including the information on the type of working relationship of each lecturer and the school they belong to. The population of the research is distributed as presented in table 4.12.

Table 4.12

A Number of lecturer at the Polytechnic Institute of Portalegre in May 2017 divided by Schools and type of contract (full time / part-time) with the Institution.

| | **ESE** | **ESTG** | **ESAE** | **ESS** | **Total** |
|---|---|---|---|---|---|
| Full time lecturers | 52 | 48 | 12 | 20 | 132 |
| Part time lecturers | 15 | 18 | 16 | 12 | 61 |
| subtotal | 67 | 66 | 28 | 22 | |
| Total | | | | | 193 |

The email invitation was sent to all IPP teaching staff (193 lecturers) on the 5th June 2017 with a brief contextualization of the research project and a link to a Google form questionnaire to be filled in up to the 7th July 2017. The invitation was renewed twice before the deadline (2nd June and 4th July). In a population of 193, a total of 106 teachers answered the questionnaire, which constitutes a 54.9% response rate.

### *3.5.2. Demographic characterization of the respondents*

A detailed analysis of the demographic data indicates that there is a balance in the number of male (49.1%, n=52) and female respondents (50.9%, n=54), women outnumbering male respondents by 2 people (Table 4.13).

The average profile of the respondents to the questionnaire can be described as being predominantly female, between 41 and 50 years of age, with 16 to 20 years of experience teaching in Higher Education, working in the Department of Economic and Organisational Sciences, having used English in the past two years mostly for reading specialized literature and who show availability to teach through the English language.

Table 4.13

Table of participants

| | AGE | GENDER | YEARS TEACHING IN HE | TYPE OF CONTACT | SCIENTIFIC AREA | AVAILABILITY TO TEACH IN ENGLISH |
|---|---|---|---|---|---|---|
| Item | 41-50 | Fem. | 16-20 | Full-time | Economic and Organizational Sciences | Yes |
| Frequency | 55 | 54 | 38 | 86 | 18 | 60 |
| Percentage | 51.9% | 50.9 % | 5.8% | 81.1% | 17% | 56.6% |

Moreover, in the last two years, respondents have used English mostly for reading specialized literature in their area of expertise (77%), to write letters and e-mails (60.4%) and to write papers in English (59.4%). Only 11.3% of the lecturers mention to have used English in a period of research or study abroad.

Most respondents are within the age range of 41- 50 (52%) and 33% between 61 and 60. Only a small percentage of respondents is older than 60 (5%) and 10% is between 31 and 40. No respondent is aged below 30.

As evidenced in Figure 4.9, the distribution of respondents' ages is higher within the age range of 41- 50 (51,9%, n=55). However, a considerable percentage of respondents is older than 51 (33%, n=35) or than 60 (4.7%, n=5).

Most respondents are experienced teachers, with 16-20 years of experience in HE (38%), or with teaching for more than 20 years (37%). A small percentage of respondents has been teaching in HE for 11-15 years (12%) and for 6-10 years (12%). Only 7% of the respondents have 1-5 years of teaching experience (Figure 4.9).

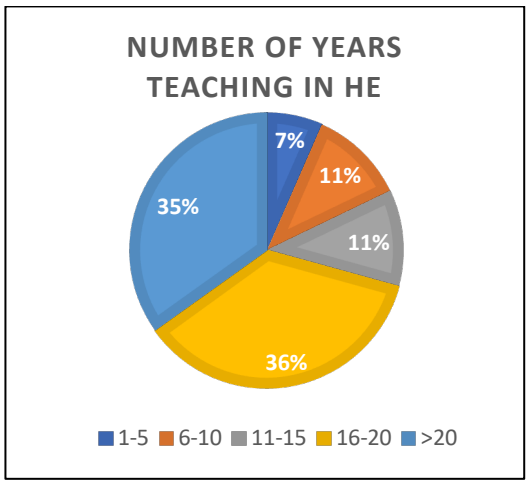



*Figure 4.9.* Respondents' number of years teaching in Higher Education

Most respondents (81%) are full time teachers at IPP. Most respondents (81%, n=86) have a full-time type of contract with the Institution (Figure 4.10).

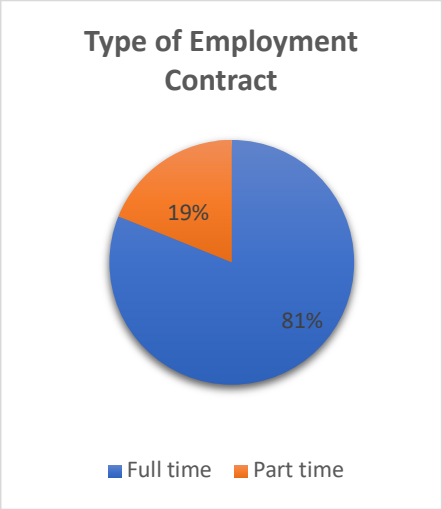



*Figure 4.10.* Respondents' number of years teaching in HE.

There are respondents from all the scientific areas/departments of the Schools of IPP, the Economic and Organisational Sciences department being the one with a higher percentage of respondents (17%). The Technologies Department and the Sciences and Health Technologies Department participated with 16% of respondents each, followed by the Agricultural and Veterinary Sciences Department with 14%, and the Education and Training Department (10%). The Social Sciences, Territory and Development Department and the Languages and Communication Sciences Department contributed with 8% of respondents each.

Lecturers from all the scientific areas/departments of the Schools of IPP answered the questionnaire and the number of respondents is evenly distributed. As depicted in Figure 4.11, the Economic and Organisational Sciences Department is the one with a higher percentage of respondents (17.1%, n=18). The Technologies Department and the Sciences and Health Technologies Department participated with 16.2% (n=17) respondents each, followed by the Agricultural and Veterinary Sciences Department with 14.3% (n= 15), and the Arts, Design and Animation and the Education and Training Department with 10.5% (n=11) each. The Social Sciences, Territory and Development Department and the Languages and Communication Sciences Department contributed with 7.6% (n=8) respondents each. There seems to be fewer respondents in the Social Sciences (or rather, the Education field, Economy and Management are strong) and Humanities (sort of) areas: 11 (Education and Training) and 8 (Languages and Communication Sciences).

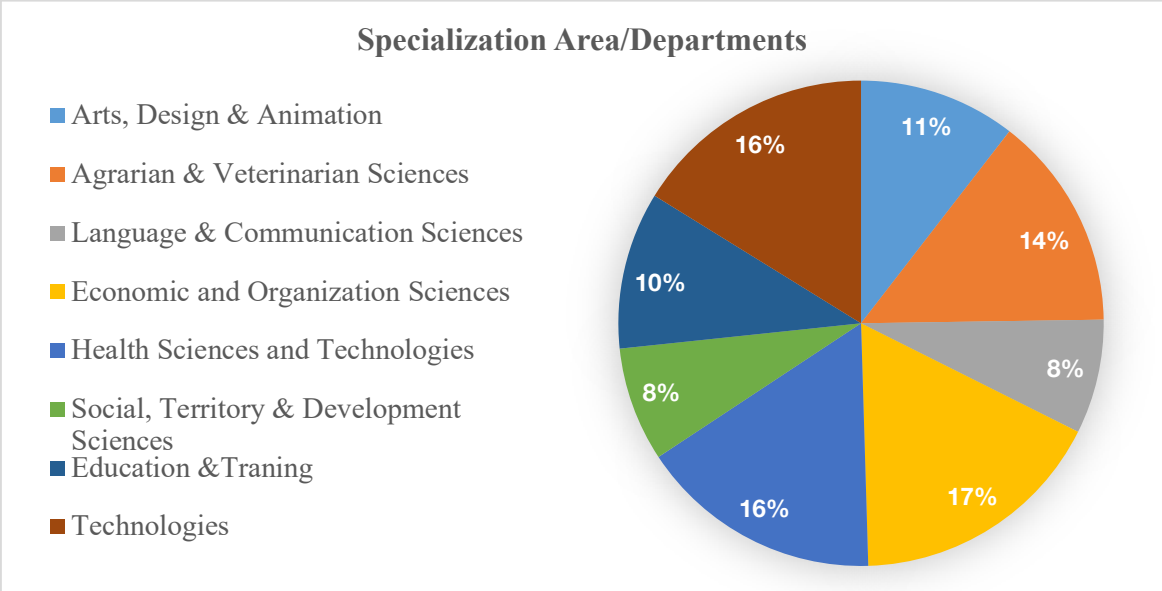



*Figure 4.11.* Respondents' specialisation areas

When asked about the possibility of teaching their subjects in English a total of 81% respondents were receptive to the prospect: 57.1% (n=60) respondents answered affirmatively to the question and 23.8% (n= 25) do not reject it and envisage it as a possibility. 19% (n=20) respondents are not available to teach in English or in any foreign language (Figure 4.12).

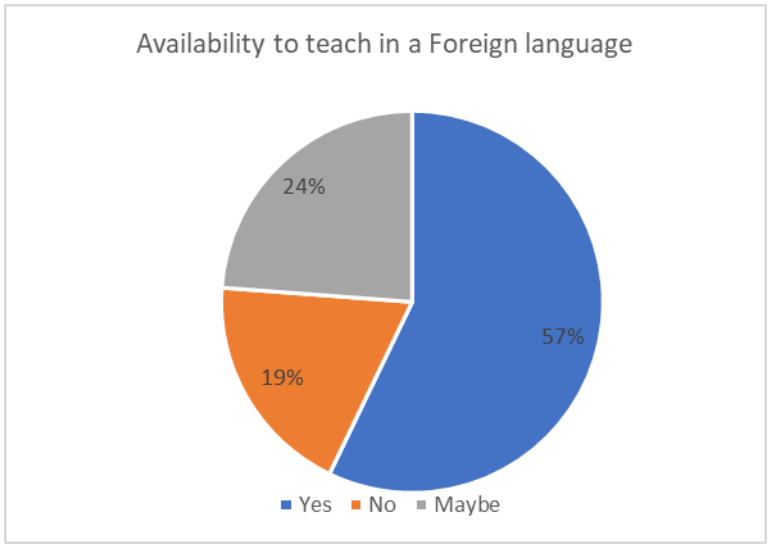



*Figure 4.12.* Respondents' availability to teach in English

Concerning the use of English in academic contexts, respondents reported that in the past two years they had used English mostly for reading specialized literature in their area of expertise (77.4%, n=82), to write letters and e-mails (60.4%, n=67) and to write papers in English (59.4%, n=62) (Figure 4.13. It is to be noticed that the three top activities reported are closely linked to lecturers' academic and research context, whereas the use of English to make contact with students ("Classes with Portuguese and ERASMUS students at IPP") is only ranked in the fifth place with 50% (n= 53). Contact with foreign visiting teachers at IPP and meetings with foreign partners are occasions when respondents

use the English language (55.7% (n=59) and 43.4% (n=46) respectively). The contact with ERASMUS students at IPP ("Tutorial work with ERASMUS Students at IPP") was the respondents" eighth choice (34%, n=35). The option "Classes with Portuguese students at IPP" is mentioned by only 17.9% (n=18) respondents, which accounts for the limited representativity of this option at IPP. Activities abroad, either in ERASMUS exchange mobilities or periods of study, are not ranked highly as occasions when lecturers use the English language (30.2% (n=33) and 11.3% (n=12) respectively). One explanation for this rating might be the relatively low involvement of IPP lecturers in mobilities or periods of study abroad, although comparative numbers with other Portuguese Institutions are not here compared. In 2017, IPP official statistics report a total of 25 lecturers (out of a total of 193 lecturers at IPP) involved in ERASMUS exchanges.

In addition to the activities listed as option in the questionnaire, respondents added that they had used English in academic contexts for "elaborating research projects" (n=1), "moderating in international congresses" (n=1) and "service provision" (n=1). Although not statistically significant, but with an informational value *per se*, one respondent choose to answer this question as " none of the above".

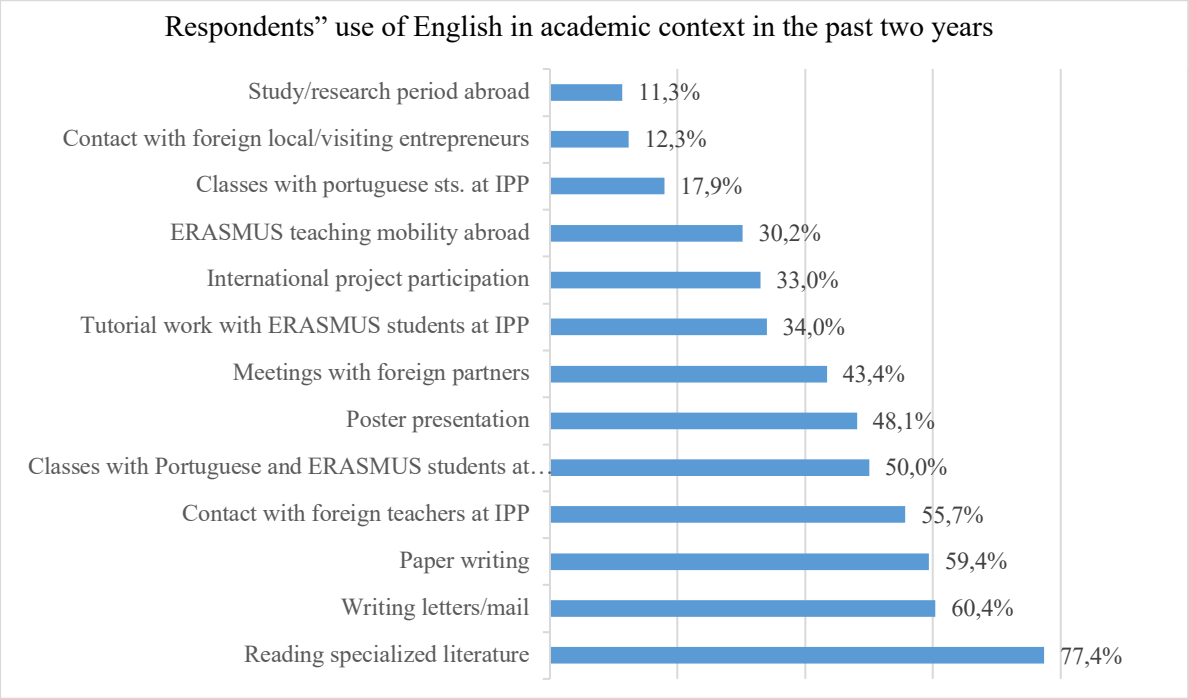



*Figure 4.13.* Respondents use of English in academic context in the last two years.

### *2.5.3. The framed narrative inquiries*

Considering that at the Polytechnic of Portalegre there was no reported experience of undergraduate courses taught in English or in any other FL, except for the situation of those classes specifically for or with the attendance of ERASMUS students, it was considered methodologically adequate and relevant, to inquire and learn about lecturers' particular experiences of FL usage under

these circumstances. So, the list of lecturers who had received ERASMUS students in their classes in the academic year 2016/17 was supplied by the academic services of each school and the International office supplied the list of lecturers who had been in an ERASMUS mobility exchange in the academic year 2016/17. A table with the statistics of respondents' number of answers is available in the appendices section.

The narrative frames were individually sent by email to all IPP teachers who a) participated in an ERASMUS exchange mobility in 2016-14, and b) received ERASMUS students in their classes in 2016-17.

A total of 39 (out of 69) lecturers completed the narrative template. Fifteen lecturers (out of twenty-four) completed the FNI writing about their experience in ERASMUS mobility abroad in 2016-17 (FNI@broad), and twenty-four (out of forty-three) returned the FNIs narrating their experience of teaching ERASMUS students in a FL at the home institution (FNI@home). These numbers correspond to a response rate of 56.6%. Considering the total population inquired through each of the research instruments used, i.e questionnaire (n= 106) and FNIs (n= 69), we can see that proportionally the number of answers is very similar, with a response rate of 54.9% to the questionnaire and a 56.6% to the FNIs.

However, as seven respondents of the FNI@home reported that the language of instructions in class was Portuguese, and it was considered that these inquiries did not comply with the requirements established for our research and they were excluded from our sample (in yellow in Table 4.14). In total of 67 FNIs sent, 39 were returned (response rate of 58.2%), 7 were excluded and 32 were analysed.

Table 4.14

FNI@home Collected with Information about Students" Countries of Origin and Language Spoken in Class

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Students country of origin<br><br>Language spoken in class | S | S | S | L C H T | L | R | M | L | S | B | P | L | L | R | S | P | L | S | P | P | P | P | P | H |
| Portuguese | | x | x | | | x | | | x | | | x | | | x | | | | | | | x | | |
| Spanish | x | | | | | | | | | | | | | | | | | | | | | | | |
| Portuguese/ Spanish | | | | | | | | | | | | | | | | | | x | | | | | | |
| English | | | | x | x | | | | | x | x | | | x | | x | X | | x | | | | | |
| English /Portuguese | | | | | | | x | X1 | | | | | x2 | | | | | | | x | x3 | | x | x4 |
| | 1- Occasionally English<br>2- English to summarize content<br>3- English at first but progressively diminishing as students improved Portuguese language skills<br>4- Portuguese when necessary<br><br>S- Spain; L- Lithuania; C- Cyprus; H- Hungary; T- Turkey; R- Romania; M- Moldavia; B- Bulgaria; P- Poland | | | | | | | | | | | | | | | | | | | | | | | |

The fact that the FNIs were targeted at the lecturers' experience of teaching in a FL when there were ERASMUS students in class at the home Institution, or when they were abroad in an ERASMUS teaching mobility, explains and justifies that some of the instances highlighted by lecturers refer to aspects concerning ERASMUS mobility or ERASMUS students' reception policy, and not specifically or exclusively the experience of teaching in a FL. Despite the inherent limitations of this methodology, the broad scope of data thus collected provided substantial information on the lecturer's perception of different aspects of teaching in a foreign language, and offer a rich explanation of their general attitudes and beliefs towards teaching in a FL, including the preparation and choice of pedagogical materials and teaching strategies and their reflection on their professional development needs to improve the quality of their teaching in a FL.

All the data were then transferred into tables, translated and analysed using a content analysis approach and themes, coding and categorized, patterns in the themes were identified. After an initial reading of all the relevant responses, we drafted a preliminary list of emergent themes following the principles of thematic analysis. We then sorted the responses into three themes and various sub-themes (see Table 4.15).

Lecturers' responses to prompts A and B provide background information about the language spoken in class and about the country where the teaching mobility took place (FNI@broad).

All responses were anonymised and are identified in this dissertation with numbers: Lecturer 1 is mentioned as L. 1.

Table 4.15

Coding FNI@broad example

**1.FNI@broad - Attitude towards Teaching in a FL**

*1. Using a foreign language in the ERASMUS Mobility class made me feel...*

| ID | Raw data | Raw data Translated | Data segmentation by topic | Data coding | Category |
|---|---|---|---|---|---|
| 10 | ansiosa, porque não tenho domínio da língua e isso constituía um fator de preocupação. No entanto, fiz um curso intensivo de Língua Espanhola no Politécnico de Portalegre, que me deu as bases linguísticas para me poder expressar e comunicar os conteúdos da formação de modo a que os estudantes compreendessem a matéria lecionada | '... anxious, because I do not master the language and that was a concern factor. However, I took an intensive Spanish language course at IPP, which gave me the linguistic basis to be able to express myself and communicate the contents, so that the students would understand the subject content taught.' | 1- anxious about speaking in a FL<br>2- concerns about FL proficiency<br>3- FL proficiency obtained trough intensive course/training<br>4- concerns about content teaching efficiency in a FL | - anxiety about teaching in a FL<br>- concerns about FL proficiency<br>- attendance of FL courses for language proficiency<br>- concerns about content effective delivery when teaching in a FL | - Negative attitude towards teaching in a FL (re.anxiety)<br>- Content teachers' FL proficiency<br>- Content teachers' professional development strategies (for increasing FL proficiency)<br>- Content delivery concerns when teaching in a FL (re. efficiency) |

Source: Own elaboration.

The demographic data supplied by the respondents of both the FNI@home and FNI@broad were mostly incomplete and did not allow for reliable or consistent conclusions.

### 2.6. Validity and reliability of the instruments

To ensure that all items of the questionnaire were clear, appropriate, and unambiguous, the initial version of the questionnaire was pre-tested for piloting purposes. The questionnaire was validated with a pre-test conducted with 8 teachers of IPP and as a result of this validation procedure, it was decided to omit item 3 on the teachers' questionnaire and to correct a few words and sentence structure to improve the clarity of the message.

The data collected through the questionnaires were analysed using the computer programmes Microsoft Excel 2016 and the IBM software packages *Statistical Package for the Social Sciences Software* (*SPSS*), version 20. Microsoft Excel 2016 program was mainly used in the descriptive analysis of the data and *SPSS* was used to perform descriptive and inferential analyses. Prior to the analysis, the procedures to prepare and insert the date into the SPSS programme included the translation of the questionnaire into English, the coding of the variables and "closed" and "open" questions, and an accuracy check and correction of duplicates or the minimum and maximum values for each variable (vid. Appendices for more detailed information).

To calculate the reliability index of the questionnaire, the statistic test of internal consistency Cronbach's alpha coefficient was applied, both to test each dimension or thematic block *per se*, and to test all the 56 items of the questionnaire. A summary of the results obtained is presented in Table 4.16 (vid. Appendices for complete results).

Table 4.16

Questionnaires – Cronbach' s alpha coefficient results per dimension and total

| Questionnaire-Dimensions/Blocks | Number of respondents | Number of items | Cronbach's Alpha (CS - Current Situation) | Cronbach's Alpha (TN -Training Needs) |
|---|---|---|---|---|
| **D1-** Linguistic competence level in English | 106 | 7 | .916 | .941 |
| **D2**- Theoretical and methodological knowledge of bilingual education | 106 | 5 | .758 | .902 |
| **D3**- Knowledge about materials and resources for bilingual education | 106 | 3 | .918 | .970 |
| **D4**- Level of professional development in bilingual education | 105 | 6 | .919 | .944 |
| **D5**- Lecturers' perception of their students" linguistic competence level | 44 | 7 | .951 | .977 |
| **Overall** questionnaire | 106 | 28 | .926 | .957 |

The testing of the internal reliability of the questionnaire shows a high reliability, with a Cronbach's Alpha coefficient of $\alpha = 0.926$ for the current situation dimension, and $\alpha = 0.957$ for the lecturers' training needs perceptions. According to Kline (1999), for a scale to be reliable, Cronbach's alpha should be >=.7 to be accepted.

# *Part Four*

# *Study Results, Discussion, and Implications*

# CHAPTER FIVE:
# RESULTS

## 1. Introduction

The aim of this chapter is to present the data collected for this research study through quantitative and qualitative instruments, to gain an in-depth insight into IPP lecturers' perception of their skills for bilingual teaching and their major training needs to teach specialized subjects using the English language.

Following the methodological design established for this study (vid. Part 3, Chapter 4, 2.3.), results from the two different sources will be presented separately. In section 2, we provide the results of the questionnaire addressed to all lecturers of IPP, and in section 3, the data from the two different framed narrative inquiries (FNIs) applied, one addressed to the lecturers who had been in an ERASMUS exchange mobility abroad (FNI@broad) in 2016-17, and the other to those who, in the same year, received ERASMUS students in their classes (FNI@home). Through the analysis of the data collected, we aim to understand results patterns and/or deviations, to highlight and explain trends and patterns which will then support a consolidated discussion of the research questions defined for this study.

## 2. The questionnaire

Descriptive statistics (percentages, mean score (M), and standard deviation (SD)) were used to examine lecturers' views on their current linguistic and methodological skills for bilingual teaching and the training needs they consider most relevant for teaching in English. Independent t tests were used to detect the statistical significance of differences in perception between male and female, full-time or part-time contract independent variables.

Considering that the questionnaire explores two different dimensions concerning lecturers' attitude towards bilingual education and teaching, (namely, 1) their current self-perceived knowledge on bilingual education –Current Situation - CS– and 2) their perceived training needs –Training Needs

- TN), results will be presented separately. Section 2.1 examines the current situation dimension (CS) and section 2.2 the training needs perception (TN). In each of these dimensions (CS or TN), results will be first presented globally for the whole dimension, then each thematic block will be considered, both globally and item per item in each block. In Table 5.1 we present the details of the internal structure of the questionnaire, identifying:

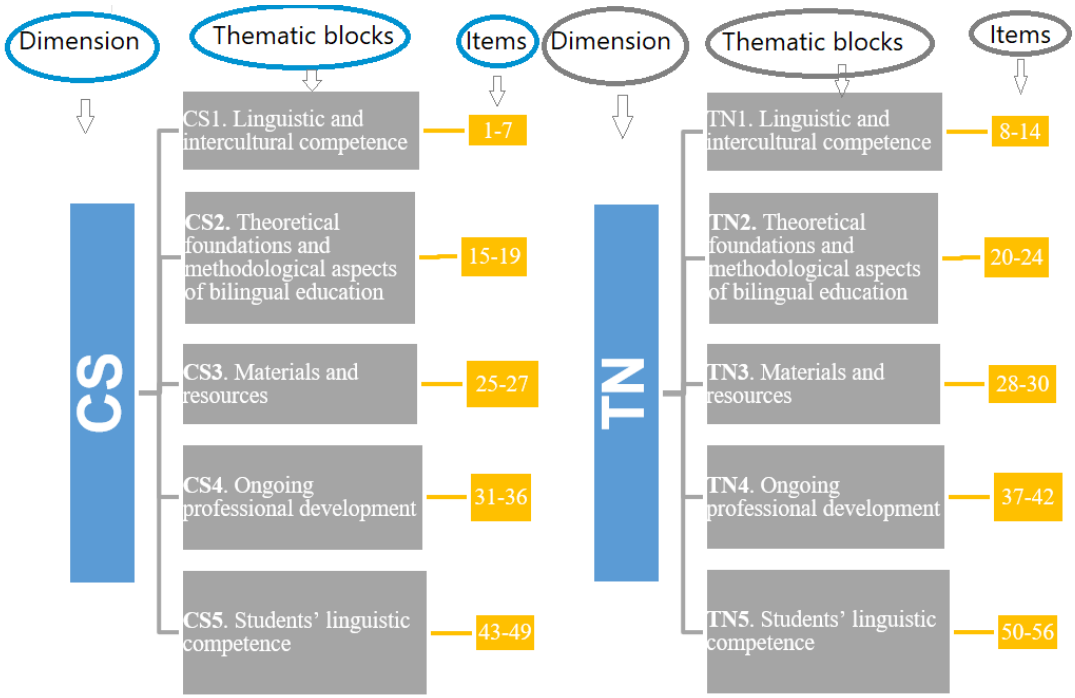
1. the two dimensions under analysis - Current Situation (CS) and Training Needs (TN),
2. the topic headings of each of the 5 thematic blocks (CS1 to CS5 and TN1 to TN5), and
3. the number of questions of each block.

There is a total of 56 items. Individual questions will be identified by the thematic bock number, followed by the item general number (e.g., CS2.18 or TN2.23 for "knowledge of the CEFLR").

To report the results of the FNIs, both @home and @broad, we use absolute frequencies of the respondents that mentioned that particular theme or sub-theme. Despite its usefulness to provide an indication of which aspects of sub-themes were considered more or less important for each group, absolute frequencies should be interpreted cautiously as the number of respondents were not the same in each group and the issues (themes and subthemes) raised in each set of narratives was substantially different (FNI@abroad- 15 respondents, 1816 words, in Portuguese; FNI@home- 24 respondents -3696 words, in Portuguese (7 FNI were excluded later). Numbers refer exclusively to the answers of the respondents and exclude the prompts).

Table 5.1

*Questionnaire's internal structure*



Section 2.4 reports on findings on the correlations between CS and TN and in section 2.5 informants' individual variables (part II of the questionnaire) and the results of CS and DT are analysed for significant correlations.

The option to Present the results of each 165imensión separately is consistent with the needs analysis methodological approach defined for this research, as it aims at providing an in-depth analysis of the current beliefs of the lecturers on bilingual education (Present Situation Analysis – PSA) and then focuses on the training needs they perceive as necessary (Target Situation Analysis – TSA) to be able to embrace bilingual education teaching. For a comprehensive analysis of needs, TSA and PSA are also related to evidence most significant findings.

## 2.1. Lecturers' perceived current situation (CS)

Descriptive statistics were used to report on the results obtained for lecturers' perception of their linguistic and intercultural competence (CS1), their knowledge of theoretical foundations and methodological aspects of bilingual education (CS2), of materials and resources (CS3) and their ongoing professional development for bilingual teaching (CS4). Both central tendency (mean, median and mode) and dispersion measures (range, low-high, standard deviation) were calculated for each dimension. Data concerning lecturers' perceptions of their students' linguistic competences (CS5) is not included and analysed within this group, as it does not supply information on the lecturers, but rather on their evaluation of their students' linguistic competences and the training needs they should invest on. The data concerning this dimension will be dealt with in 2.3, in this chapter.

### *2.1.1. Current situation analysis – an overview (CS1- CS4)*

In general terms, the results of the descriptive statistics tests applied to CS1- CS4 point to lecturers' low median or even negative levels of confidence about their current skills and knowledge for bilingual teaching, with mean values of $\bar{x}$ =2.88, $\bar{x}$ =2.25, $\bar{x}$ =2.43 and $\bar{x}$ =1.75 (see Table 5.2 for more detailed information).

Table 5.2

*Central tendency measures of thematic blocks CS 1 to CS 4*

| | | CS_1 | CS_2 | CS_3 | CS_4 |
|---|---|---|---|---|---|
| N | Valid | 106 | 106 | 106 | 105 |
| | Missing | 0 | 0 | 0 | 1 |
| Mean | | 2.8805 | 2.2547 | 2.4387 | 1.7559 |
| Median | | 3.0000 | 2.2000 | 2.3333 | 1.8333 |
| Mode | | 3.00 | 2.20 | 2.00 | 1.00 |
| Std. Deviation | | .56426 | .49649 | .65921 | .63783 |

The results are diverse for each thematic block, but there are two opposed extreme scores that clearly stand out: on the one hand lecturers have a global positive attitude towards their linguistic skills (CS1: $\bar{x}$ =2.88, *mdn*=3, *mode*=3 and *SD*=0.564), while, on the other hand, their perception of the professional development in bilingual education (CS4) is clearly viewed as weakest competence ($\bar{x}$ =1.75, *mdn*=1.83, *mode*=1 and *SD*=0.637).

The other two dimensions of the questionnaire – "knowledge of theory and methodologies for bilingual education" (CS2) and "knowledge about materials and resources for bilingual education" (CS3) – had low median scores, *mdn*=2.2 and *mdn*=2.3, respectively. These results are corroborated and reinforced by the negative modes values and point to a weak, very critical self-perception of the informants on these issues.

### *2.1.2. Current situation analysis per thematic block (CS1 - CS4)*

#### *2.1.2.1. Linguistic and intercultural competence*

The descriptive statistical results of the first block of statements in the questionnaire (CS1) disclose significant data for the outline of IPP lecturers' perceptions of their strengths and weaknesses concerning their linguistic competence in English and the knowledge of the FL culture (Table 5.3).

Table 5.3

*Central tendency measures of CS1*

| | | Grammatical knowledge of English | Pronunciation in English | Knowledge of specialized vocabulary for academic purposes in English | Oral communication skills in English | Listening comprehension skills in English | Reading comprehension skills for specialized bibliography in English | Knowledge of the foreign language culture(s) |
|---|---|---|---|---|---|---|---|---|
| N | Valid | 105 | 106 | 106 | 106 | 106 | 106 | 106 |
| | Missing | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mean | | 2.70 | 2.75 | 2.86 | 2.76 | 3.03 | 3.18 | 2.65 |
| Median | | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 |
| Mode | | 3 | 3 | 3 | 3 | 3 | 3 | 2 |
| Std. Deviation | | .649 | .691 | .668 | .698 | .668 | .701 | .691 |

The immediate fact to highlight about CS1 is that lecturers globally view their linguistic skills in English as adequate for bilingual teaching, as all questions have mean values above $\bar{x}$ =2.65 and both mode and median are positive (*mdn*=3, *mode*=3). However, a closer scrutiny of the data discloses significant item variation, as depicted in the bar chart (see Figure 5.1), which includes the mean value per item.

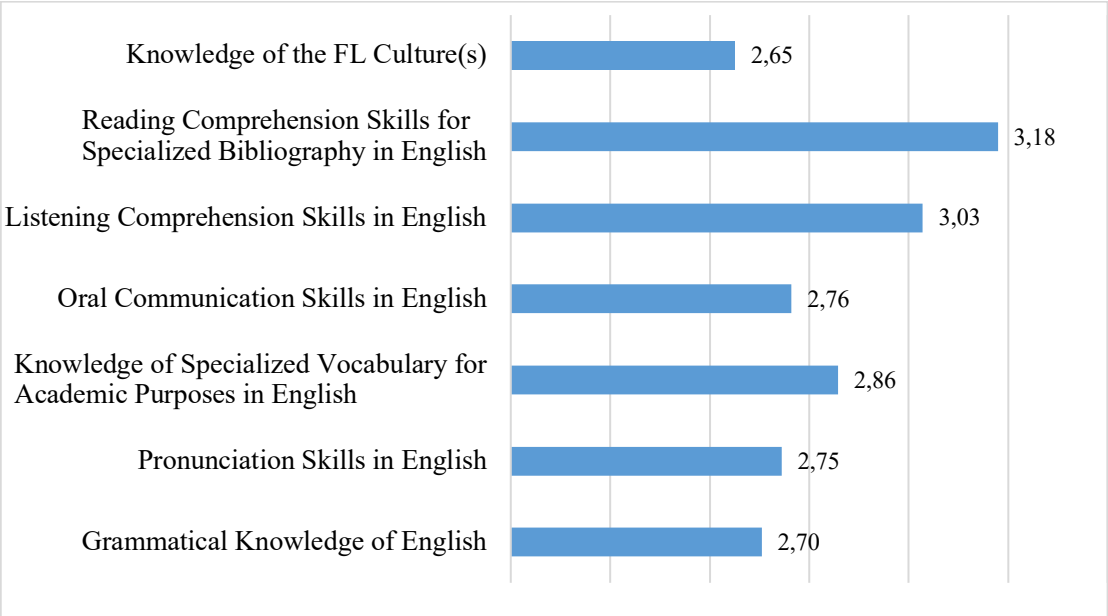



*Figure 5.1. $\bar{x}$ of CS1 thematic block.*

Receptive skills –i.e, listening and reading specialized bibliography- are rated slightly above 3, which identifies these skills as the ones lecturers feel more confident about. All the other aspects of linguistic competence under scrutiny in the questionnaire were ranked below 3, but higher or equal to 2.65, which places these competences at the "adequate" level in the Likert scale (1-4) used. Lecturers' self-perceived "knowledge of specialised vocabulary for academic purposes in English" reached the highest mean score below 3 ($\bar{x}$ =2.86; *SD*=0.668), which allows us to say that content teachers are also fairly at ease with their knowledge of specialized, academic vocabulary skills. Grammar knowledge, pronunciation skills and oral communication skills, with respectively $\bar{x}$ =2.70, $\bar{x}$ =2.75 and $\bar{x}$ =2.76, are identified by lecturers as their weakest competences. The lowest mean value in CS1 is the score of the item related to the perceived knowledge of the foreign language culture ($\bar{x}$ =2.65), which seems to indicate that this area is perceived as weak by lecturers in their current situation.

*2.1.2.2. Theoretical and methodological foundation*

CS2 conveys lecturers' perception of aspects of their knowledge about bilingual education policies and about the theory and methodology for bilingual education. The measures of central tendency calculated (see Table 5.4) indicate that, globally, lecturers' confidence on their knowledge of these items is not very solid, considering the low mean values for items all items. Four out of five statements in this dimension achieved a *mode*=2 and a *mdn*=2 (i.e., "insufficient"). Even lecturers' self-perception of the "knowledge of the principles and practices of student-centred methodologies and collaborative learning", with a *mode*=3, is not very distinct, considering its mean value ($\bar{x}$=2.48; *SD*=0.720). The two highest mean scores, $\bar{x}$=2.48 each, are related to lecturers' knowledge of internationalisation strategies of IPP and to principles and practices of student-centred methodologies and collaborative learning.

Table 5.4

*Central tendency measures of CS2*

| | | Knowledge of the theoretical basis and features of the main Bilingual Education models | Knowledge of the Portuguese policy for Internationalization and bilingual education in HE | Knowledge of the internationalisation strategy of IPP | Knowledge of the CEFRL | Knowledge of theoretical and practical principles of student-centered teaching methodologies and collaborative learning |
|---|---|---|---|---|---|---|
| N | Valid | 106 | 106 | 106 | 106 | 106 |
| | Missing | 0 | 0 | 0 | 0 | 0 |
| Mean | | 2.11 | 2.11 | 2.48 | 2.08 | 2.48 |
| Median | | 2.00 | 2.00 | 2.00 | 2.00 | 2.50 |
| Mode | | 2 | 2 | 2 | 2 | 3 |
| Std. Deviation | | .637 | .652 | .693 | .770 | .720 |

In a closer consideration of the frequency distribution of CS2, and more particularly of item 18, "knowledge of the CEFRL", we can see that it is the item with the lowest mean ($\overline{x}$ = 2.08; *SD*=0.770), which suggests that lecturers find their knowledge about the CEFRL either non-existent (22.6%) or insufficient (49.1%) (Table 5.5). In fact, only 28.3% believe their knowledge about it is positive, i.e., either adequate (25.5%) or excellent (2.8%).

Table 5.5

*Frequency distribution of item 18, CS2*

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | None | 24 | 22.6 | 22.6 | 22.6 |
| | Insufficient | 52 | 49.1 | 49.1 | 71.7 |
| | Adequate | 27 | 25.5 | 25.5 | 97.2 |
| | Excellent | 3 | 2.8 | 2.8 | 100.0 |
| | Total | 106 | 100.0 | 100.0 | |

The presentation of the descriptive statistical results of CS2 as frequency percentages makes it more evident that there is a clear positioning of most respondents' answers at the "insufficient" level (Figure 5.2). This is the case for all five items in this dimension, in which the cumulative percentage of "null" and "insufficient" answers constitute more than 50% of lecturers' answers. Thus, 50% of teachers marked these two categories when answering about their knowledge of student-centred methodologies, 71.7% in the case of their knowledge of the CEFLR, 51.9% in the case of their knowledge about IPP internationalisation strategies, 72.6% in the case of their knowledge about national bilingual policies in HE, and 75.5% in the case of their knowledge of the basis of bilingual education theory. To further refine the response to this dimension, we could say that their general negative outlook becomes more pronounced in the case of aspects more clearly related to language education.

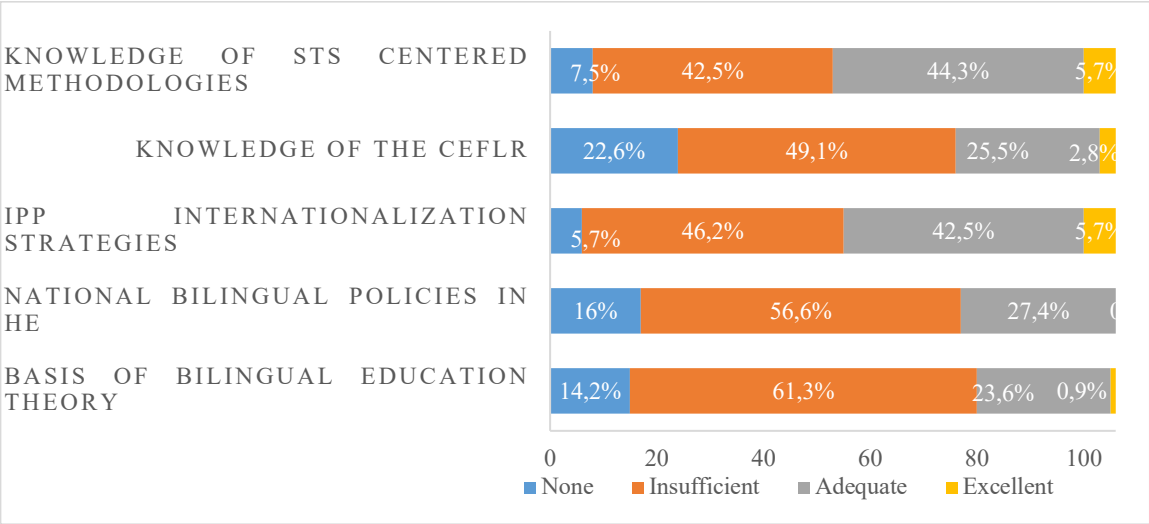



*Figure 5.2.* Descriptive results for dimension CS2 (in percentage data).

### *2.1.2.3. Materials and resources*

The third block in the questionnaire (CS3) enquires about lecturers' use of materials and resources for bilingual teaching. Despite the positive mean scores for the three items under inquiry in CS3 (see table 5.6), the negative scores of both the *mdn=2* and *mode*=2 for all items, point to a more general negative perception of lecturers concerning their current situation on this dimension.

Table 5.6

*Central Tendency measures of CS3*

| | | Principles for adapting authentic materials to the teaching of content through the English language | Principles for producing original materials for the teaching of content through the English language | Use of online reference materials for the teaching of content through the English language |
|---|---|---|---|---|
| N | Valid | 106 | 105 | 106 |
| | Missing | 0 | 1 | 0 |
| Mean | | 2.45 | 2.44 | 2.42 |
| Median | | 2.00 | 2.00 | 2.00 |
| Mode | | 2 | 2 | 2 |
| Std. Deviation | | .706 | .706 | .730 |

As shown in the descriptive statistics results of CS3 (Figure 5.3), each item under inquiry receives more than 50% answers in the category "insufficient" or "inexistent". Lecturers consider their knowledge about the principles for producing authentic materials to the teaching of content through the English language as mostly "inexistent" or insufficient" (a total of 57.13%). They also disclose a mostly negative self-perception on their use of online reference materials for teaching their classes in English ("None"- 7.5% and "Insufficient"- 49%; total 56.56%) and they also perceive their knowledge for adapting materials to teach in English as mostly "existent" or "insufficient" (54.3%). What is different in this dimension, with respect for example to CS2, is the fact that very few lecturers (only about 5%)

actually perceive that their knowledge about material and resources in non-existent and that the percentage of negative answers never surpasses 60%.

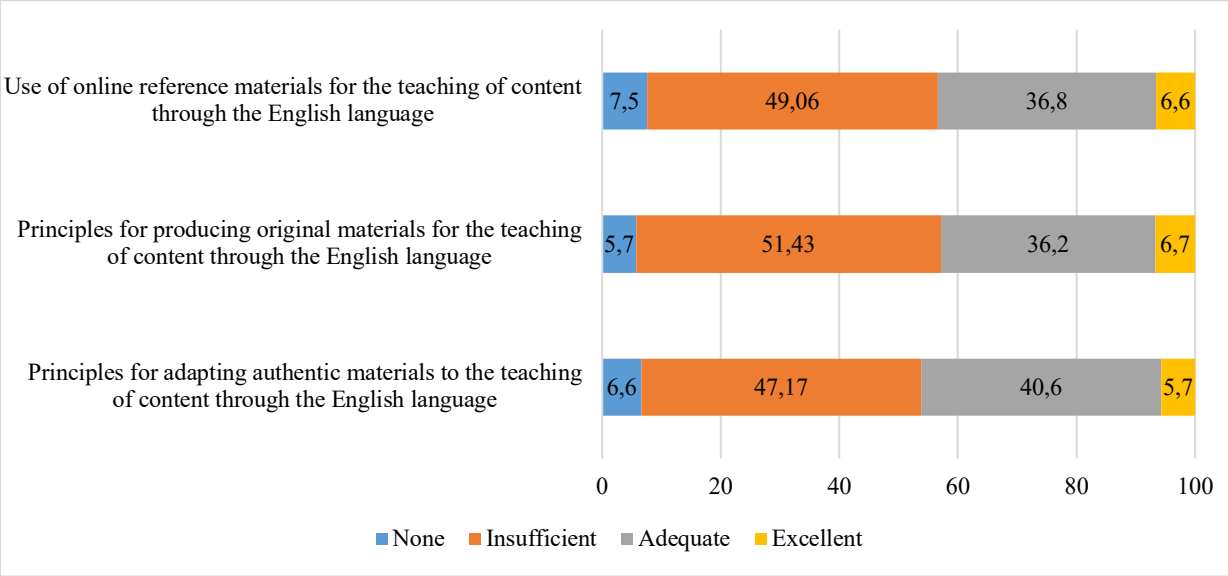



*Figure 5.3.* Descriptive statistics results for CS3 (percentage data).

*2.1.2.4. Professional development*

CS4 included six questions to explore lecturers' self-perception of their current situation in terms of professional development in bilingual education. The descriptive statistical analysis undertaken for the study of these items (Table 5.7) presents very impressive scores in comparison with CS1, CS2 and CS3. Negative mean values range from $\bar{x}$ =1.56 (*SD*= 0.634) to $\bar{x}$ =1.85 (*SD*= 0.769), except for item 34, "the attendance of teaching methodology upgrading courses" ($\bar{x}$= 2.04, *SD*= 0.847). These results single out this dimension as the weakest in lecturers perceived current situation. The two lowest scores for CS4 on item 31, "attendance of online teacher training courses on the use of a foreign language to teach content" ($\bar{x}$ = 1.56, *SD*=0.634), and on item 36, "participation in collaborative support groups (online and F2F) on teaching content in a foreign language" ($\bar{x}$ = 1.63, *SD=0.*724), assert respondents' current inexistent training in these areas.

Table 5.7

*Central tendency measures of CS4*

| | | Attendance of teacher training courses on the use of a foreign language to teach content | Attendance of online teacher training courses on the use of a foreign language to teach content | Attendance of English language (or any other language) upgrading courses | Attendance of teaching methodology upgrading courses | Individualized linguistic and methodological support to teach in a foreign language | Participation in collaborative support groups (online or F2F) on teaching content in a foreign language |
|---|---|---|---|---|---|---|---|
| N | Valid | 105 | 105 | 105 | 104 | 105 | 105 |
| | Missing | 1 | 1 | 1 | 2 | 1 | 1 |
| Mean | | 1.70 | 1.56 | 1.85 | 2.04 | 1.76 | 1.63 |
| Median | | 2.00 | 1.00 | 2.00 | 2.00 | 2.00 | 1.00 |
| Mode | | 1 | 1 | 2 | 2 | 1 | 1 |
| Std. Deviation | | .748 | .634 | .769 | .847 | .803 | .724 |

The results of the distribution of answers per category ("none", "insufficient", "adequate" and "excellent") evidence a very high concentration of answers in the categories "none" and "insufficient", contrasting with the low number of "adequate" answers and the residual numbers of "excellent" (Table 5.8). The highest score of the "adequate" category corresponds to less than one quarter respondents (24/106), who consider that in terms of professional development their "attendance of teaching methodology upgrading courses" is adequate.

Table 5.8

*CS4 distribution of answers per category*

| | *Number of Answers per Category (out of 106 total respondents)* | | | |
|---|---|---|---|---|
| | None | Insufficient | Adequate | Excellent |
| 31. Attendance of teacher training courses on the use of a FL to teach content | 50 | 37 | 18 | 0 |
| 32. Attendance of online teacher training courses on the use of a FL to teach content | 54 | 43 | 8 | 0 |
| 33. Attendance of English language (or any other language) courses | 38 | 47 | 18 | 2 |
| 34. Attendance of teaching methodology upgrading courses | 30 | 45 | 24 | 5 |
| 35. Individualized linguistic and methodological support to teach in a foreign language | 47 | 38 | 18 | 2 |

| | | | | |
|---|---|---|---|---|
| 36. Participation in collaborative support groups (online or F2F) on teaching content in a FL | 53 | 39 | 12 | 1 |

### 2.2. Lecturers' perceived training needs (TN)

This section presents the data collected through the questionnaire, on the lecturers' perceptions of their training needs for bilingual teaching. The issues under inquiry mirror the topics covered in the current situation analysis (CS1- CS4) but the focus is now the respondents' views on their training needs for bilingual teaching on linguistic and intercultural competence (TN1), theoretical foundations and methodological aspects of bilingual education (TN2), materials and resources for bilingual teaching (TN3) and professional development for teaching content using a foreign language (TN4). Similarly to CS1-CS4, respondents were asked to express their opinion using a 4-points Likert scale that categorised their training needs into the categories "none" (1), "reduced" (2), "considerable" (3) and "high" (4). Data were analysed using descriptive statistics to determine central tendency measures (mean, median, mode) and dispersion (*SD*). Respondents' perceptions of their students' linguistic training needs (TND5) will be dealt with separately, in 2.3 of this chapter.

#### *2.2.1. Training needs analysis – an overview (TN1- TN4)*

In general, lecturers view their training needs for bilingual teaching as "considerable", as documented in the central tendency measures of the four thematic blocks of this dimension (Table 5.9). Mean values are all higher than $\bar{x}$ =2.5, the highest being $\bar{x}$ =2.84 (*SD* = 0.71) for "professional development for bilingual teaching" (TN4). This particular area is seen as the one that respondents feel that they are in more need for further training, an inference also drawn from the mode and median values calculated (*mdn= 3; mode*= 3). Comparatively, the thematic area which respondent rate as the one they are least in need of training for bilingual teaching is related to their linguistic and intercultural competence (TN1: $\bar{x}$ = 2.58, *mdn*= 2.58, *mode*= 3 and *SD*= 0.752).

Table 5.9

*Central tendency measures of thematic blocks TN 1 to TN 4*

| | | TN 1 | TN 2 | TN 3 | TN 4 |
|---|---|---|---|---|---|
| N | Valid | 106 | 106 | 106 | 106 |
| | Missing | 0 | 0 | 0 | 0 |
| Mean | | 2.5833 | 2.7307 | 2.7307 | 2.8431 |
| Median | | 2.5833 | 2.8000 | 2.8000 | 3.0000 |
| Mode | | 3.00 | 3.00 | 3.00 | 3.00 |
| Std. Deviation | | .75286 | .62169 | .62169 | .71029 |

*2.2.2 Training needs analysis per thematic block (TN1- TN4)*

*2.2.2.1. Linguistic and Intercultural competence (TN1)*

Despite the trend identified in the global results of this dimension (TN1 to TN4), the analysis of each thematic block brings forward specific aspects in the lecturers' perception of their training needs. When inquired about their training needs in English language competences for bilingual teaching (TN1), lecturers single out "reading comprehension skills for specialized bibliography in English" ($\overline{x}$ = 2.37; *SD* = 0.908; *mdn*= *2* and *mode*= 2) and "listening comprehension skills in English ($\overline{x}$ = 2.50; *SD* = 0.819; *mdn*= 2 and *mode*= 2) as the items they feel they need less training in (Table 5.10). These two items have both a *mdn=2* and *mode*=2, i.e., "reduced" in the Lickert scale level adopted. All the other items in this thematic block have a mean higher than $\overline{x}$ =2.50 and *mdn*=3, i.e. informants feel they have "considerable" training needs in "knowledge of the foreign language culture" ($\overline{x}$ = 2.61; *SD* = 0.788; *mdn*= 3 and *mode*= 3), in "knowledge of specialized vocabulary for academic purposes in English" ($\overline{x}$ = 2.61; *SD* = 0.921; *mdn*= 3 and *mode*=2), in "grammatical knowledge of English ($\overline{x}$ = 2.65; *SD* = 0.756; *mdn*= 3 and *mode*=3)," in "pronunciation in English" ($\overline{x}$ = 2.66; *SD* = 0.838; *mdn*= 3 and *mode*= 3), and in oral communication skills in English" ($\overline{x}$ = 2.71; *SD* = 0.862; *mdn*= 3 and *mode*= 3).

Table 5.10

*Central tendency measures of TN1*

| | | Training Needs - Grammatical knowledge of English | Training Needs - Pronunciation in English | Training Needs - Knowledge of specialized vocabulary for academic purposes in English | Training Needs - Oral communication skills in English | Training Needs - Listening comprehension skills in English | Training Needs - Reading comprehension skills for specialized bibliography in English | Training Needs - Knowledge of the foreign language culture(s) |
|---|---|---|---|---|---|---|---|---|
| N | Valid | 106 | 106 | 106 | 106 | 106 | 106 | 106 |
| | Missing | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mean | | 2.65 | 2.66 | 2.61 | 2.71 | 2.50 | 2.37 | 2.61 |
| Median | | 3.00 | 3.00 | 3.00 | 3.00 | 2.00 | 2.00 | 3.00 |
| Mode | | 3 | 3 | 2 | 3 | 2 | 2 | 3 |
| Std. Deviation | | .756 | .838 | .921 | .862 | .819 | .908 | .788 |

The results of the distribution of answers per item (Figure 5.4) makes it clear that all items in TN1, except for reading and listening comprehension skills, are perceived by lecturers as in need of training. In fact, over 50% of respondents state that they need "considerable" or "high" training in "oral communication skills in English" (61.3%), "grammatical knowledge of English" (59.4%), "pronunciation in English" (57.4%), "knowledge of the foreign language culture" (56.5%), "knowledge of specialized vocabulary for academic purposes in English" (51.8%).

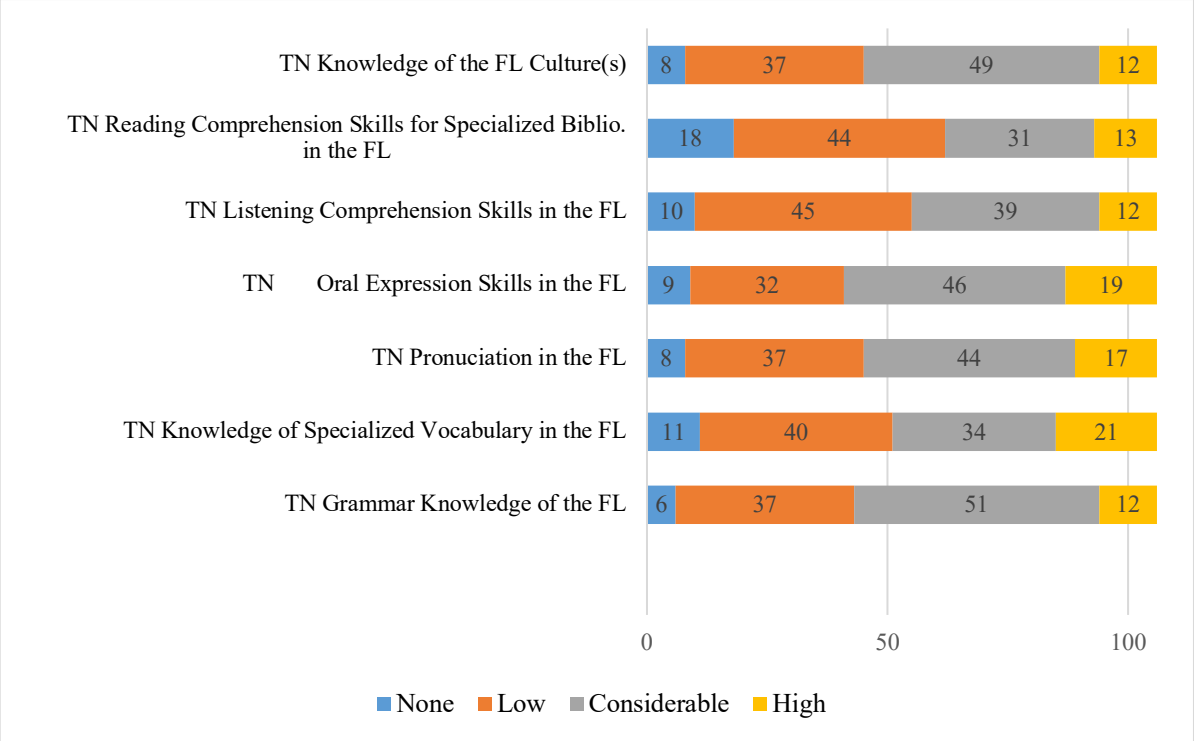



*Figure 5.4*. TN1 distribution of answers per item.

*2.2.2.2. Theoretical and methodological foundation (TN2)*

The central tendency measures calculated for lecturers' perceived training needs in theoretical foundations and methodological aspects of bilingual education (TN2) point to lecturers' clear awareness of the need to learn more about theory and methodology for bilingual teaching (Table 5.11). Mean values for the five items in this thematic block range between $\bar{x}$ =2.66 (*SD* =0.729) and $\bar{x}$ =2.83 (*SD*= 0.669), which correspond respectively to the item in TN2 that respondents feel they have a lower need of training ("knowledge of theoretical and practical principles of student-centred teaching methodologies and collaborative learning") and the item rated as in higher need of training ("knowledge of the theoretical basis and features of the main bilingual models"). All items in this thematic block have a *mdn=3* and *mode*=3, which corresponds to an evaluation of "considerable" need for training.

Table 5.11

*Central tendency measures of TN2*

| | | Training Needs - Knowledge of the theoretical basis and features of the main Bilingual Education models | Training Needs - Knowledge of the Portuguese policy for Internationalisation and bilingual education in HE | Training Needs - Knowledge of the internationalisation strategy of IPP | Training Needs - Knowledge of the CEFLR | Training Needs - Knowledge of theoretical and practical principles of student-centered teaching methodologies and collaborative learning |
|---|---|---|---|---|---|---|
| N | Valid | 106 | 106 | 104 | 105 | 105 |
| | Missing | 0 | 0 | 2 | 1 | 1 |
| Mean | | 2.83 | 2.74 | 2.66 | 2.75 | 2.67 |
| Median | | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 |
| Mode | | 3 | 3 | 3 | 3 | 3 |
| Std. Deviation | | .669 | .721 | .808 | .757 | .729 |

*2.2.2.3. Materials and resources (TN3)*

The three items in TN3 concern "materials and resources for bilingual teaching" and are seen by respondents as areas in which they have considerable training needs (see Table 5.12). The values of $\bar{x}$ =2.77 (*SD*= 0.759) for item 29, "principles for producing original materials for teaching content through English" and $\bar{x}$ =2.73 both for item 28, "principles for adapting authentic materials to the teaching of content through English" and item 30, "use of online reference materials for the teaching of content through English" (28: *SD*= 0.763; 30: *SD*= 0.800) convey respondents' self-perception of a "considerable" need for training.

Table 5.12

*Central tendency measures of TN3*

| | | Training Needs - Principles for adapting authentic materials to the teaching of content through the English language | Training Needs - Principles for producing original materials for the teaching of content through the English language | Training Needs - Use of online reference materials for the teaching of content through the English language |
|---|---|---|---|---|
| N | Valid | 106 | 106 | 105 |
| | Missing | 0 | 0 | 1 |
| Mean | | 2.73 | 2.77 | 2.73 |
| Median | | 3.00 | 3.00 | 3.00 |
| Mode | | 3 | 3 | 3 |
| Std. Deviation | | .763 | .759 | .800 |

Percentage data for TN3 thematic block (Figure 5.5) are significant: most respondents believe their training needs in these items are considerable or high, whereas only a minority (between 25% and 26%) consider it low or have no training needs on these issues (between 6 and 8%).

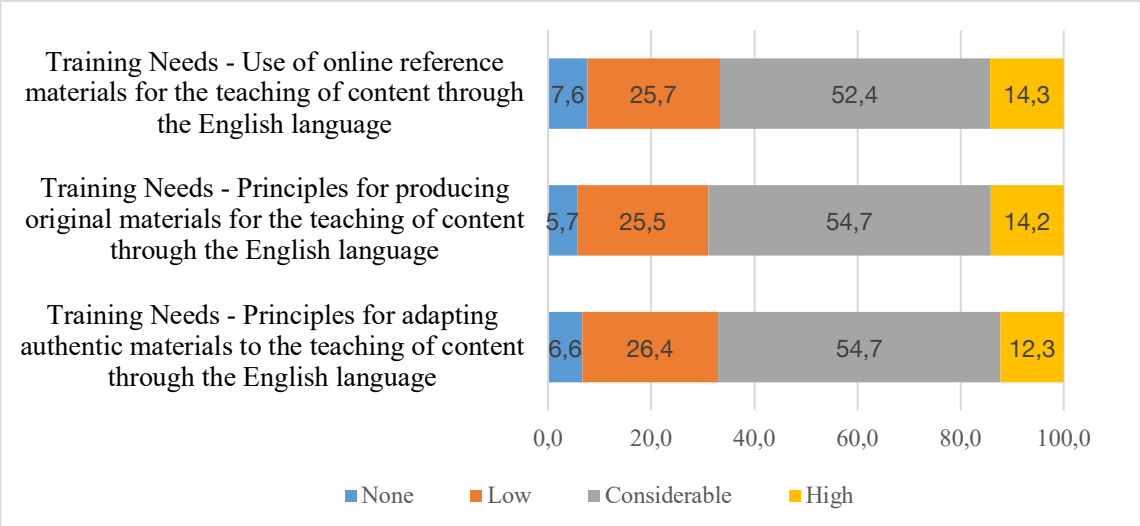



*Figure 5.5.* TN3 percentage distribution of answers per item.

*2.2.2.4. Professional development (TN4)*

Thematic block TN4 concerns lecturers' perceived professional development training needs for teaching content using a FL and it displays consistent and homogenous central tendency measures (Table 5.13), placing respondents" acknowledgement for training needs in the "considerable" category.

Table 5.13

*Central tendency measures of TN4*

| | | Training Needs - Attendance of teacher training courses on the use of a foreign language to teach content | Training Needs - Attendance of online teacher training courses on the use of a foreign language to teach content | Training Needs - Attendance of English language (or any other language) upgrading courses | Training Needs - Attendance of teaching methodology upgrading courses | Training Needs -Individualized linguistic and methodological support to teach in a foreign language | Training Needs - Participation in collaborative support groups (online or F2F) on teaching content in a foreign language |
|---|---|---|---|---|---|---|---|
| N | Valid | 106 | 106 | 105 | 105 | 106 | 105 |
| | Missing | 0 | 0 | 1 | 1 | 0 | 1 |
| Mean | | 2.86 | 2.86 | 2.86 | 2.83 | 2.88 | 2.79 |
| Median | | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 |
| Mode | | 3 | 3 | 3 | 3 | 3 | 3 |
| Std. Deviation | | .774 | .798 | .752 | .814 | .813 | .817 |

All 5 items in TN4 have both *mode*=3 and *mdn*=3 ("considerable") and the value of the lowest mean is $\bar{x}$ =2.79 (*SD* = 0.817) and the highest $\bar{x}$ =2.88 (*SD*= 0.813), a mean variance range of 0.09, with very similar values of SD spread around the mean.

Although the very similar central tendency measures point to lecturers' perception of a general "considerable" need to participate in different professional development actions to improve their knowledge about bilingual teaching, the distribution of the answers per item brings out a few particularities (Figure 5.6). Thus, the "attendance of methodological upgrading courses" and the "participation in collaborative groups in EMI/CLIL" are the two least relevant issues for future training with, respectively, 31.2% and 26.4% of lecturers feeling a low or no training needs on these issues. As for the remaining four items under inquiry, respondents express they need a "considerable" or "high" training (cumulative values presented) of "individualized linguistic and methodological support to teach in a foreign language" (77.4%); "attendance of teacher training courses on EMI/CLIL" (77.3%); "attendance of online teacher training courses on the use of a foreign language to teach content." (75.4%); "attendance of linguistic upgrading courses in the FL" (74.5%).

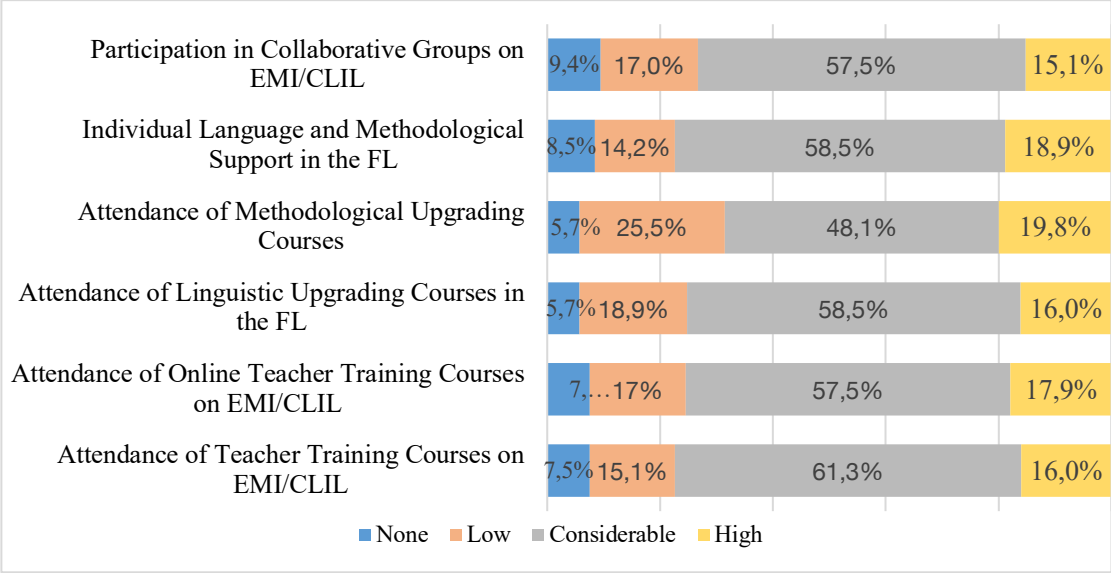



*Figure 5.6.* TN4 percentage distribution of answers per item.

### 2.3. Lecturers' perceptions of their students' linguistic competences and needs (CS5 and TN5)

Section 5 of the questionnaire was exclusively addressed at lecturers who have already taught, either a Curricular Unit, a module or tutorial classes in English at IPP. The respondents who fulfilled this condition were invited to express their perception about their students' linguistic competences by using a four-point scale (1=None; 2=Insufficient; 3=Adequate; 4=Excellent) to rate the level they believed their students have in terms of their linguistic and intercultural competence in English. The statements are similar to the ones lecturers answered about themselves in CS1 of this questionnaire. A thematic block inquiring about students' needs is also included in the questionnaire (TN5).

A total of 44 respondents answered this section of the questionnaire. To be noted, however, that the reference population for this number of respondents is not the total number of lecturers at IPP (106), as not all of them have taught in a FL, but a number that might be closer to the 53 lecturers that have signalled in the biographical data of the questionnaire that they have taught "Regular classes with Portuguese students at IPP", or to the 36 lecturers who have answered that they had developed "tutorial work with Erasmus students at IPP" in the last two years.

In CS5, lecturers were asked to rate their students "grammatical knowledge of the English language", "pronunciation in English language", "knowledge of specialized vocabulary for academic purposes in English language", "oral communication skills in English language", "listening comprehension skills in English language", "reading comprehension skills for specialized bibliography in English language" and "knowledge of the foreign language culture(s)" These same statements were also presented to lecturers' consideration in terms of student's needs (TN5).

*2.3.1. Lecturers' views of students' linguistic competences (CS5)*

Globally, lecturers view their students' linguistic skills in English as barely adequate for bilingual teaching, as statements in CS5 have a mean value ranging between $\bar{x}$ =2.14 (*SD*= 0.566) and $\bar{x}$ =2.47 (*SD*= 0.667), with all mode and median values negative (*mode*=2; *mdn*=2) (Table 5.14).

Table 5.14

*Central tendency measures of CS5 (on students'skills)*

| | | Grammatical knowledge of the English | Pronunciation in English | Knowledge of specialized vocabulary for academic purposes in English | Oral communication skills in English | Listening comprehension skills in English | Reading comprehension skills for specialized bibliography in English | Knowledge of the foreign language culture(s) |
|---|---|---|---|---|---|---|---|---|
| N | Valid | 44 | 43 | 43 | 43 | 43 | 42 | 42 |
| | Missing | 62 | 63 | 63 | 63 | 63 | 64 | 64 |
| Mean | | 2.25 | 2.23 | 2.19 | 2.30 | 2.47 | 2.31 | 2.14 |
| Median | | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Mode | | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Std. Deviation | | .576 | .571 | .588 | .638 | .667 | .715 | .566 |

The analysis of CS5 distribution of answers per item (Figure 5.7) highlights the general negative view lecturers have on students' linguistic skills to attend classes in English, with all statements perceived as mostly "insufficient". Student's knowledge of the FL culture is the item lecturers evaluate as students' weakest skill, with 36 lecturers out of 42 expressing the idea it is "inexistent" or "insufficient". Also poorly perceived by lecturers ("inexistent" or "insufficient") are students' "pronunciation skills in the FL" (33 out of 43), "knowledge of specialized vocabulary in the FL" and "grammar knowledge in the FL" (each with 32 out of 43), and "oral communication skills" (30 out of 43). Comparatively, students' "listening skills" and "reading comprehension skills for specialised

bibliography in the FL" are perceived by lecturers as areas in which students are slightly better prepared (25 and 29 respondents, out of 43, respectively).

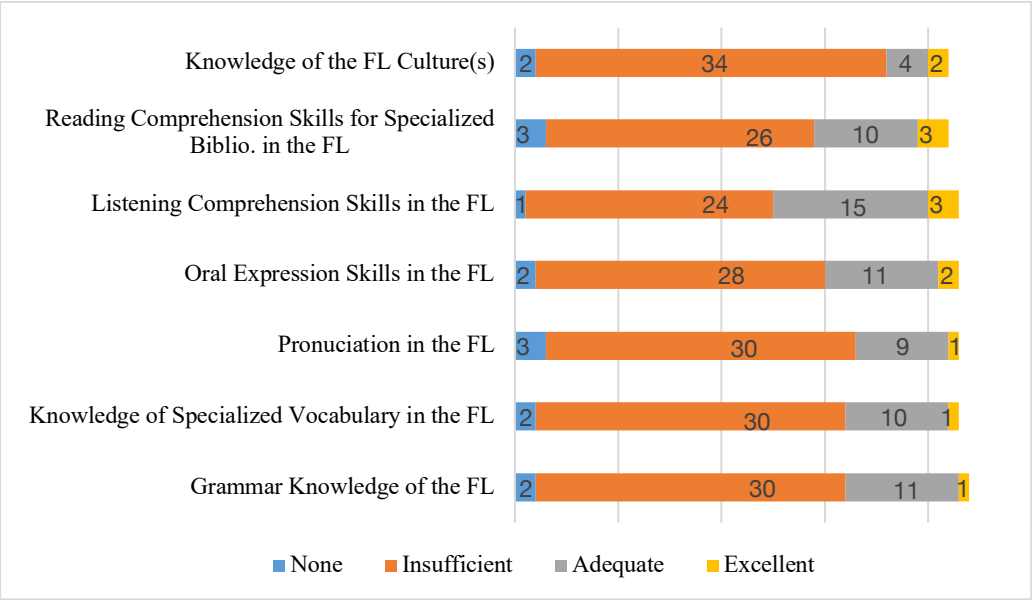



*Figure 5.7.* CS5 distribution of answers per item (on students' skills)

*2.3.2. Lecturers' views of students' linguistic training needs (TN5)*

The results of the central tendency measures for thematic block TN5 (Table 5.15) indicate an overall mean value around $\bar{x}$ =3.00, which expresses lecturers' perception that their students have "considerable" linguistic training needs, to attend classes in a FL. Mean value vary from $\bar{x}$ =3.00 (*SD*= 0.724) for item 54, to $\bar{x}$ =3.14 for items 52 (*SD*= 0.765) and 56 (*SD*= 0.639). All items in this block have *mdn=3* and *mode*=3.

Table 5.15

*TN5 central tendency measures (on students skills)*

| | | Sts Training Needs - Grammatical knowledge of the English | Sts Training Needs - Pronunciation in English | Sts Training Needs - Knowledge of specialized vocabulary for academic purposes in English | Sts Training Needs - Oral communication skills in English | Sts Training Needs - Listening comprehension skills in English | Sts Training Needs - Reading comprehension skills for specialized bibliography in English | Sts Training Needs - Knowledge of the foreign language culture(s) |
|---|---|---|---|---|---|---|---|---|
| N | Valid | 44 | 44 | 44 | 44 | 43 | 43 | 43 |
| | Missing | 62 | 62 | 62 | 62 | 63 | 63 | 63 |
| Mean | | 3.11 | 3.02 | 3.14 | 3.11 | 3.00 | 3.09 | 3.14 |
| Median | | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 |
| Mode | | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Std. Deviation | | .689 | .664 | .765 | .722 | .724 | .684 | .639 |

The descriptive data collected from the responses to TN5 point in more detail to the general perception held by lecturers that their students have a "considerable" or "high" need of linguistic skills training in the FL (Figure 5.8). Lecturers believe their students are in most need of training in "knowledge of the foreign language culture(s)", with 37 lecturers in 43 (86%) stating that students have "considerable" or "high" need of training in the area. Very similar values were obtained for students training needs on "pronunciation" (81.8%), "reading comprehension skills for specialized bibliography in the FL" (81.3%), "grammar knowledge" (81.8%), and "oral communication skills" and "knowledge of specialized vocabulary in the FL", both with 79.5%. Still in the group of skills lecturers find students need "considerable" or "high" training (32 lecturers in 44), but with the lowest percentage (72.7%) are students" "listening comprehension skills.

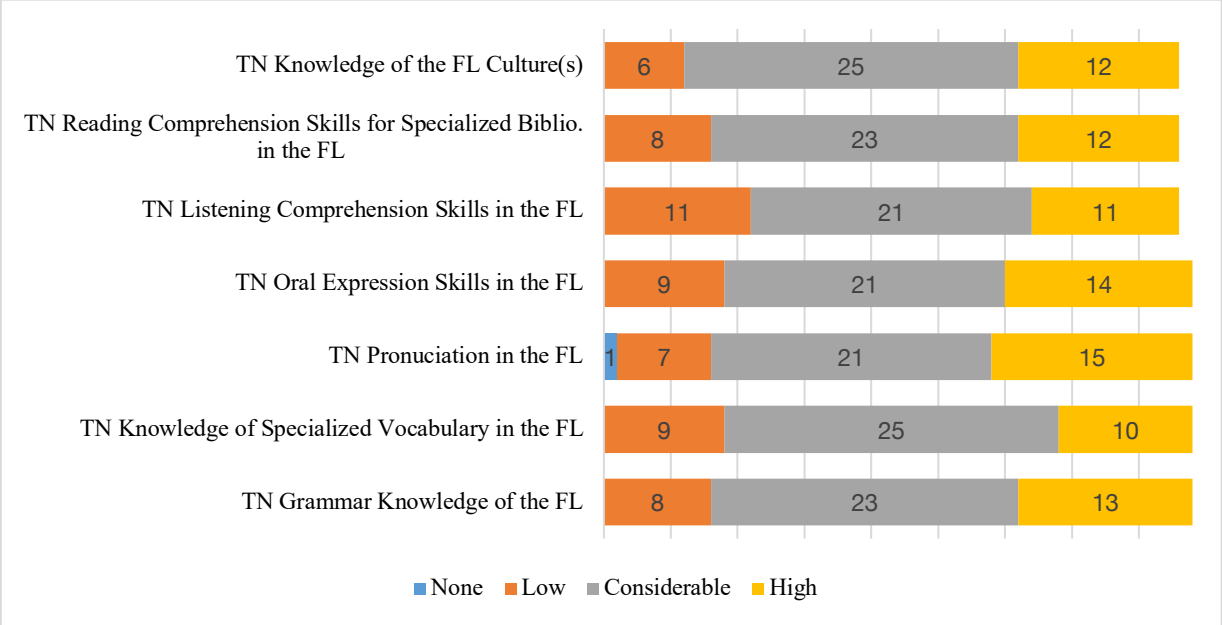



*Figure 5.8.* TN5 distribution of answers per item (on students' skills).

### 2.4. Correlation between CS and TN results

To investigate the correlation between lecturers' perception of their current situation (CS) and the training needs (TN) they believe they have in each of the four different thematic blocks of the questionnaire, a Pearson correlation test was carried out (vid. Appendices for further information).

Overall, there was a strong negative correlation between lecturers' current perceptions of their knowledge towards bilingual teaching, and the training needs they perceive they have to engage in it, that is, the weaker or insufficient they perceive their skills, the higher or more considerable they believe their need for training is.

This negative relationship was confirmed when examining the correlation between each block of CS and its correspondent TN. A Pearson's rho correlation found a strong negative score ($N = 106$, $p < 0.05$) between CS1 and TN1 ($r_s = -0.706$, $p < 0.0004$).

As for lecturers' perception of their knowledge of theoretical foundations and methodological aspects of bilingual education (CS2), and their perception of the training needs to engage in it (TN2), a Pearson' s rho calculation also found a strong negative correlation (N = 106, $p < 0.05$) between (1) lecturers' perception of their current linguistic and intercultural competence to teach in a FL (CS1) and their perception of their training needs to do it (TN1), ($r_s = -0.356$, $p < 0.0004$); (2) lecturers' perception of their knowledge of theoretical foundations and methodological aspects of bilingual education (CS2), and their perception of the training needs to engage in it (TN2), ($r = -0.371$, $p < 0.0004$); (3) lecturers' perception of their knowledge of materials and resources for bilingual teaching (CS3) and the training needs to do it (TN3 ($r_s = -0.502$, $p < 0.0004$) and (4) the knowledge lecturers have about their ongoing professional development for bilingual teaching (CS4) and the training they need to teach in a FL (TN4) ($r_s = -0.441$, $p < 0.0004$).

Similarly, the examination of the lecturers' perception of their students' linguistic skills (CS5) and the training needs they believe they have (TN5) shows a significantly strong negative correlation (N = 44, $p < 0.05$) between both dimensions ($r_s = -0.487$, $p < 0.0004$).

### 2.5. The impact of the identification variables on the CS and TN results

This sub-section presents the findings of the statistical analysis tests used to detect any statistically significant differences between the results of thematic blocks CS and TN of the questionnaire and the identification variables data elicited from the respondents as demographic or background questions, namely, 1. age, 2. gender, 3. type of contract, 4. number of years teaching in HE, 5. scientific area, 6. situations in which the respondent used the English language in an academic context in the previous two years, and 7. availability to teach in English.

Depending on the assumptions of the distributions, independent t-tests, a one-way ANOVA test and post Hoc test, (LSD method) were used.

The analysis of variables is organised into three different sub-sections. Variables 1., 2. and 3. are in sub-section 2.5.1. under the general title of "individual factors". Variables 4. 5. and 6 are analysed in section 2.5.2. and are more directly relate to "teaching factors". Finally, data collected on variable 7., to elicit respondents' openness to the possibility of becoming CLIL/ICLHE teachers, is dealt with in sub-section 2.5.3.

#### *2.5.1. Individual factors*

Independent t-tests were used to detect if there were statistically significant gender differences in terms of each thematic block of CS and TN results, and non-significant differences were found (vid. Appendices for complete results).

Similarly, a t-test was used to determine if there was a significant difference in the thematic blocks of CS and TN scores according to the type of contract lecturers had (full-time vs. part-time), and results showed that there were no significant differences in this respect.

For the variable "age", a one-way ANOVA test was run to determine whether there were significant differences among the different age groups, and the results showed no significant differences.

### *2.5.2. Teaching factors*

#### *2.5.2.1. Years of experience*

For the "years teaching in HEIs" factor, results featured a significant impact on CS2 ("lecturers' knowledge of theoretical foundations and methodological aspects of bilingual education") and CS3 ("lecturers' knowledge of materials and resources for bilingual education") scores, as demonstrated by one-way ANOVA (CS2- F(2.69), $p = 0.035$; CS3- F(3.17), $p = 0.017$). A post Hoc test (LSD method) was carried out to determine which pairs of elements differed statistically. (vid. Appendices for further information).

In the case of CS2, significant differences were found between the results of lecturers with 6-10 years of expertise in HEIs when compared to those of the lecturers with an average teaching experience of 1-5 ($p$ =0.032), 11-15 ($p$= 0.016), and 16-20 ($p$= 0.007) years.

Concerning CS3 differences, they also took place when comparing the results of the lecturers with 6-10 years of experience to those of lectures with 1-5 ($p$ =0.004), 11-15 ($p$ =0.020), 15-20 ($p$= 0.003) and more than 20 ($p$ = 0.002) years of experience. In both cases (CS2 and CS3), the higher scores assigned to lecturers with an experience between 6-10 years indicate a higher level of confidence in their perceived knowledge of methodological aspects of bilingual education and in their knowledge of materials and resources for teaching in a FL. However, it should be noted that although lecturers with 6-10 years of teaching experience score their knowledge of materials and resources for bilingual education (CS3) as soundly "adequate", with $\bar{x} = 3.02$ ($SD$= 0.758), they do not rate their knowledge of methodological aspects for bilingual education (CS2) as confidently. For CS2, this group of lecturers seems to struggle with a few more difficulties ($\bar{x} = 2.58$; $SD$= 0.430).

#### *2.5.2.2. Area of specialisation*

Significant differences were also found among lecturers from different specialization areas in relation to four thematic blocks, namely "lecturers' self-perception of linguistic competence" (CS1), their "knowledge of theoretical foundations and methodological aspects of bilingual education" (CS2), the way they perceived their "linguistic training need" (TN1) and their "ongoing professional development for bilingual teaching" (TN4).

In relation to CS1, the score achieved by lecturers from the area of Languages and Communication Sciences is significantly higher than the ones obtained by lecturers from Social Sciences, Territory and Development ($p$ = 0.004), Economic and Organisational Sciences ($p$= 0.002), Technologies ($p$= 0.004), Health Sciences & Technologies ($p$= 0.001), and Agricultural and Veterinary Sciences ($p$= 0.013). Lecturers from the Languages and Communication Sciences area seem to be comfortably confident about their linguistic competence for teaching in a FL (CS1) ($\bar{x}$ = 3.47; *SD*= 0.632), even manifesting a substantially higher satisfaction with their linguistic competence than the lecturers from the Arts, Design & Animation department ($\bar{x}$ = 3.07; *SD*= 0.579), and those from the Education and Training ($\bar{x}$ = 3.04; *SD*= 0.610), who also had a score above the "adequate" level.

Statistically significant differences were also found in the results from the area of Languages and Communication Sciences and the rest of the groups in terms of the knowledge of methodological aspects for bilingual education (CS2). In this respect, the post Hoc test shows statistically significant differences with the answers of the lecturers from Arts, Design & Animation ($p$ = 0.005), Agricultural and Veterinary Sciences ($p$= 0.003), Economic and Organisational Sciences ($p$= 0.003), Health Sciences & Technologies ($p$= 0.020), Social Sciences, Territory and Development ($p$= 0.002), and Technologies ($p$ = 0.004). Lecturers from the area of Languages and Communication Sciences affirm a more consolidated knowledge of methodological issues for bilingual education (CS2) ($\bar{x}$ = 2.77; *SD*= 0.391), compared to their colleagues from Arts, Design & Animation, Agricultural and Veterinary Sciences, Economic and Organisational Sciences, Health Sciences & Technologies, Social Sciences, Territory and Development, and Technologies, whose perception of their methodological knowledge barely goes above "insufficient".

A significant difference was also found when comparing the results of the lecturers from Education and Training to the ones of the fields of Economic and Organisational Sciences ($p$= 0.05), Social Sciences, Territory and Development ($p$= 0.02), and Agricultural and Veterinary Sciences ($p$= 0.039). Lecturers from the Education and Training area have a fairly positive perception of their knowledge of the methodological aspects to teach in a FL ($\bar{x}$ =2.52; *SD*= 0.402), whereas lecturers in the fields of Economic and Organisational Sciences, Agricultural and Veterinary Sciences and Social Sciences, Territory and Development are considerably less confident (respectively, $\bar{x}$ = 2.16, *SD*=0.424; $\bar{x}$ = 2.13, SD= 0.559 and $\bar{x}$ = 2.02, SD= 0.645).

As for lecturers' perception of their linguistic training needs (TN1), the reported need for training is significantly lower for lecturers from the area of Languages and Communication Sciences ($\bar{x}$ =1.97; *SD*= 0.720), than for the ones in Agricultural and Veterinary Sciences ($p$= 0.028), Economic and Organisational Sciences ($p$= 0.004) and Health Sciences & Technologies ($p$= 0.004*)*, with higher scores that account for a "considerable" need for linguistic training.

Moreover, lecturers from the area of Economic and Organisational Sciences have significantly higher results ($\bar{x}$ = 2.89; *SD*=0.495) than those from Education and Training (*p*= 0.23). The significant differences between Economic and Organization Sciences and other areas only take place in Languages and Communication Sciences and Education and Training, confirming a higher need for linguistic training (TN1), whereas lecturers from Health Science and Technologies ($\bar{x}$ =2.89; *SD=0.*721) also obtained a significantly higher result than those from the area of Education and Training (*p*= 0.026) ($\bar{x}$ =2.25; *SD*=0.895).

Finally, the case of TN4 ("training needs for professional development for bilingual teaching"), the thematic block where the most salient differences were found. The post Hoc test shows statistically significant differences with the answers of the lecturers from Languages and Communication Sciences, Education and Training, and Technologies, respectively with $\bar{x}$ = 2.43 (*SD*=0.366), $\bar{x}$ = 2.48 (*SD*=0.898) and $\bar{x}$ =2.49 (*SD*=0.667). First, lecturers from the area of Agricultural and Veterinary Sciences got $\bar{x}$ =3.10 (*SD*=0.522), which conveys their belief in a "considerable" need for training for professional development. In contrast are the scores from the areas of Languages and Communication Sciences (*p*= 0.027), Education and Training (*p*= 0.23), and Technologies (*p*= 0.013), respectively with $\bar{x}$ =2.43 (*SD*=0.366), $\bar{x}$ =2.48 (*SD*=0.898) and $\bar{x}$ =2.49 (*SD*=0.667). Second, lecturers from the area of Languages and Communication Sciences have significantly lower results ($\bar{x}$=2.43; SD=0.366), which points to lower training needs for professional development in bilingual teaching than those from Health Science & Technologies (*p*= 0.046, $\bar{x}$ =3.01, *SD*=0.658), and Economic and Organisational Sciences (*p*= 0.011, $\bar{x}$ =3.17, *SD*=0.411). Thirdly, the mean score in the area of Economic and Organisational Sciences ($\bar{x}$ =3.17, *SD*=0.411), was significantly higher the one from lecturers of the Technologies (*p*= 0.004; $\bar{x}$ =2.49, *SD*=0.667)), and Education and Training (*p*= 0.009; $\bar{x}$ =2.48, *SD*=0.898) areas. The mean value for lecturers in the areas of Economic and Organisational Sciences ($\bar{x}$ =3.17, *SD*=0.411) was also significantly higher than the one from lecturers of the Technologies (*p*= 0.004; $\bar{x}$ = 2.49, *SD*=0.667), and Education and Training (*p*= 0.009; $\bar{x}$=2.48, SD=0.898) areas. Finally, lecturers from the area of Technologies scored significantly lower ($\bar{x}$ =2.49, *SD*=0.667) than those from the areas of Health Sciences and Technologies (*p*= 0.025; ($\bar{x}$ =3.01, *SD*=0.658).

*2.5.2.3. Use of English in academic contexts in the last two years*

Lecturers were also inquired about the situations in which they used the English language in an academic context in the two previous academic years – variable 6 –, being offered a multiple choice of thirteen different options, namely, (a) writing a paper/book chapter, (b) presenting a paper/poster, (c) reading specialized literature, (d) writing professional correspondence, (e) regular classes with Portuguese students at IPP, (f) receiving foreigner teachers at IPP, (g) regular classes with Portuguese and incoming ERASMUS students at IPP, (h) tutorial work with ERASMUS students, (i) classes in an ERASMUS teaching mobility abroad, (k) study/research period abroad, (j) working for an international

project, (l) meetings with international partners and (m) contact with local foreign business people or foreign business people visiting the region.

Independent t-tests were used to detect if there were statistically significant differences in the thematic blocks CS scores in relation to respondents' use of the English language in the previous two years (variables "a" to "m"). The results showcase statistically significant differences (p-value ≤ 0.05), which are presented in Table 5.16.

Table 5.16

*Sig. value for questionnaire's identification 6 and CS thematic blocks*

| | **CS1** | **CS2** | **CS3** | **CS4** |
|---|---|---|---|---|
| a. writing a paper/book chapter | 0.042 | | 0.010 | |
| b. presenting a paper/poster | 0.041 | | 0.016 | |
| c. reading specialized literature | | | | 0.027 |
| d. writing professional correspondence | <0.004 | | 0.032 | |
| e. regular classes with Portuguese students at IPP | 0.017 | | | 0.024 |
| f. receiving foreigner teachers at IPP | | | 0.039 | |
| g. regular classes with Portuguese and incoming ERASMUS students at IPP | <0.004 | 0.010 | 0.001 | 0.020 |
| h. tutorial work with ERASMUS students | 0.001 | | 0.047 | |
| i. classes in an ERASMUS teaching mobility abroad | | 0.038 | 0.047 | |
| k. study/research period abroad | 0.001 | | | |
| j. working for an international project | < 0.004 | | 0.001 | 0.021 |
| l. meetings with international partners | < 0.004 | 0.001 | 0.009 | |
| m. contact with local foreign businesspeople or foreign business people visiting the region. | 0.006 | | | |

Thematic block CS1 was the most influenced by the different options available to respondents, as the carrying out of 10 out of the 13 activities seemed to have a significant impact on this block (see Table 5.17 for more specific information).

Table 5.17

*Independent T-test results for CS1 and variable 6 of the questionnaire*

| | N | | X | | SD | | |
|---|---|---|---|---|---|---|---|
| | Yes | No | Yes | No | Yes | No | Sig. |
| a. writing a paper/book chapter | 63 | 43 | 2.97 | 2.74 | 0.51 | 0.62 | 0.042 |
| b. presenting a paper/poster | 51 | 55 | 2.99 | 2.77 | 0.53 | 0.57 | 0.041 |
| c. reading specialized literature | - | - | - | - | - | - | - |
| d. writing professional correspondence | 64 | 42 | 3.06 | 2.60 | 0.52 | 0.52 | <0.004 |
| e. regular classes with Portuguese students at IPP | 19 | 87 | 3.15 | 2.82 | 0.62 | 0.53 | 0.017 |
| f. receiving foreigner teachers at IPP | - | - | - | - | - | - | - |
| g. regular classes with Portuguese and incoming ERASMUS students at IPP | 53 | 53 | 3.08 | 2.68 | 0.51 | 0.55 | <0.004 |
| h. tutorial work with ERASMUS students | 36 | 70 | 3.13 | 2.75 | 0.48 | 0.56 | 0.001 |
| i. classes in an ERASMUS teaching mobility abroad | - | - | - | - | - | - | - |
| k. study/research period abroad | 12 | 94 | 3.29 | 2.83 | 0.37 | 0.56 | 0.001 |
| j. working for an international project | 35 | 71 | 3.23 | 2.71 | 0.52 | 0.50 | < 0.004 |
| l. meetings with international partners | 46 | 60 | 3.20 | 2.64 | 0.50 | 0.49 | <0.004 |
| m. contact with local foreign business people or foreign business people visiting the region. | 13 | 93 | 3.28 | 2.82 | 0.46 | 0.56 | 0.006 |

Results show that participants who had used English in situations “a”, “b”, “d”, “e”, “g”, “h”, “k”, “j”, “l” and “m” had statistically significantly higher scores in terms of the self-perception of their linguistic and intercultural competence, compared to those who did not mention having engaged in these activities. In this thematic bock, only the options “reading specialized literature” (N yes 82, No 24; $p$= 0.199; $\bar{x}$=2.91, $\bar{x}$=2.75; SD=0.524, SD=0.679), “receiving foreigner teachers at IPP” (N yes 59, No 47; $p$= 0.091; $\bar{x}$=2.96, $\bar{x}$=2.77; SD=0.542, SD=0.579) and “classes in an ERASMUS teaching mobility abroad” ” (N yes 32, No 74; $p$= 0.053; $\bar{x}$=3.04, $\bar{x}$=2.81; SD=0.506, SD=0.576) were not statistically significant.

As for the factors that seemed to affect respondents’ knowledge of theoretical foundations and methodological aspects of bilingual education (CS2), they are substantially less in comparison to that of CS1. According to the results of the t-test, only the carrying out of three activities (“g”, “i” and “l”) seemed to have a positive impact on this situation (vid. Table 5.18).

Table 5.18

*Independent t-test results for CS2 and variable 6. of the questionnaire*

| | N | | X | | SD | | |
|---|---|---|---|---|---|---|---|
| | Yes | No | Yes | No | Yes | No | Sig. |
| g. regular classes with Portuguese and incoming ERASMUS students at IPP | 53 | 53 | 2.38 | 2.13 | 0.53 | 0.44 | 0.010 |
| i. classes in an ERASMUS teaching mobility abroad | 32 | 74 | 2.41 | 2.19 | 0.46 | 0.50 | 0.038 |
| l. meetings with international partners | 46 | 60 | 2.40 | 2.15 | 0.49 | 0.48 | <0.004 |

Respondent's self-perception of their own knowledge of materials and resources for teaching in a FL (CS3) also seems to be positively impacted by 9 (out of 13) options chosen by respondents, as evidenced by the statistical significance shown in Table 5.19.

Table 5.19

*Independent t-test results for CS3 and variable 6. of the questionnaire*

| | N | | X | | SD | | |
|---|---|---|---|---|---|---|---|
| | Yes | No | Yes | No | Yes | No | Sig. |
| a. writing a paper/book chapter | 63 | 43 | 2.57 | 2.24 | 0.61 | 0.69 | 0.010 |
| b. presenting a paper/poster | 51 | 55 | 2.60 | 2.29 | 0.66 | 0.63 | 0.016 |
| d. writing professional correspondence | 64 | 42 | 2.55 | 2.27 | 0.60 | 0.71 | 0.032 |
| f. receiving foreigner teachers at IPP | 59 | 47 | 2.56 | 2.29 | 0.65 | 0.65 | 0.039 |
| g. regular classes with Portuguese and incoming ERASMUS students at IPP | 53 | 53 | 2.65 | 2.22 | 0.60 | 0.65 | 0.001 |
| h. tutorial work with ERASMUS students | 36 | 70 | 2.61 | 2.35 | 0.62 | 0.67 | 0.047 |
| i. classes in an ERASMUS teaching mobility abroad | 32 | 74 | 2.70 | 2.33 | 0.58 | 0.66 | 0.047 |
| j. working for an international project | 35 | 71 | 2.74 | 2.29 | 0.67 | 0.60 | 0.001 |
| l. meetings with international partners | 46 | 60 | 2.63 | 2.29 | 0.68 | 0.61 | <0.004 |

In terms of the impact of the variable concerning the use of English in the previous two years on respondents' self-perception about their ongoing professional development for bilingual teaching (CS4), there is also evidence of statistical significance and a positive effect on four options in variable 6. as shown in Table 5.20.

Table 5.20

*Independent t-test results for CS4 and variable 6. of the questionnaire*

| | N | | X | | SD | | |
|---|---|---|---|---|---|---|---|
| | Yes | No | Yes | No | Yes | No | Sig. |
| c. reading specialized literature | 18 | 87 | 1.91 | 1.72 | 0.56 | 0.65 | 0.027 |
| e. regular classes with Portuguese students at IPP | 35 | 70 | 1.96 | 1.66 | 0.65 | 0.61 | 0.024 |
| g. regular classes with Portuguese and incoming ERASMUS students at IPP | 53 | 53 | 1.90 | 1.61 | 0.67 | 0.58 | 0.020 |
| j. working for an international project | 81 | 24 | 1.68 | 2.01 | 0.63 | 0.60 | 0.021 |

*2.5.3. Availability to teach in a FL*

Regarding the factor "availability to teach in English/a foreign language", differences were found in five thematic blocks: CS1**,** CS3**,** TN1**,** TN3 and TN4.

In the case of the CS1, significant differences were found among those who reported "yes" and the "no" ($p< 0.004$) and "maybe" ($p< 0.004$) groups, being the most salient group the one of lecturers answering "yes". In other words, lecturers who were willing to teach in English had a more positive perception of their own linguistic and intercultural competence ($\bar{x}$=3.14; SD=0.514) in comparison to those who were uncertain about their willingness to teach in English ($\bar{x} = 2.69$; SD=0.355) or even to those who did not even consider this teaching option ($\bar{x}$=2.38; SD= 0.446). Regarding CS3 differences, i.e., their knowledge about materials and resources for teaching in a FL, they were found between the "no" group and the other two sets: "yes" ($p < 0.004$) and "maybe" ($p= 0.021$). That is, lecturers who did not consider to teach their courses in English had significantly less knowledge about materials and resources for bilingual teaching than those who consider the use of English as a means of instruction in their courses or who were indecisive about this option (No - $\bar{x} = 1.98$; SD= 0.616; Yes - $\bar{x} = 2.61$, SD=0.652; Maybe - $\bar{x}$= 2.42, SD =0.529).

As for TN1 differences, i.e., in linguistic training needs, differences among the three groups were statistically significant according to the post-hoc results. Lecturers who were willing to teach their courses in English showed the lowest training needs ($\bar{x} = 2.33; SD = 0.652$), followed by those who were in two minds about teaching in English ($\bar{x}$ =2.68; SD = 0.638), and those who did not want to teach in English ($\bar{x}$= 3.17; SD = 0.842).

Most of these differences were also found when exploring the differences in TN3 ("materials and resources for teaching in a FL)". In this specific case, scores from lecturers who are decided to teach in English ($\bar{x}$ =2.63; SD = 0.564), and those who are still thinking about it ($\bar{x}$ =2.68; SD= 0.632) are quite similar, being the most outstanding differences the ones with the lecturers who were decided to not use English as a means of instruction in their classes ($\bar{x}$ =3.11; SD = 0.669). When applying

statistical analysis, it is observed that the difference between the "no" group and the other two ones is significant ($p < 0.05$).

To conclude, with regard to the differences in lecturers' training needs for ongoing professional development (TN4), again, significant differences were found when comparing the scores of those lecturers who were available to use English in their lessons ($\bar{x}$ =2.73; SD = 0.665) and those who were not ($\bar{x}$ =3.11, SD= 0.832), in favour of the latter group ($p = 0.37$).

## 3. The framed narrative inquiries (FNIs)

Section three reports the results of the data collected through the FNIs@broad and FNI@home with the finding organised and following the main themes covered in the inquiries (vid. Table 5.28*),* namely, lecturers" (1) attitude towards teaching in a FL, (2) their concerns about teaching in a F, (3) materials and Resources for teaching in a FL, (4) methodologies for teaching in a FL, (5) difficulties of teaching in a FL and strategies to overcome them, (6) successful experiences of teaching in a FL and (7) professional development - expectations and needs for teaching in a FL.

Respondents' narratives in Portuguese were transcribed into table format, translated into English, segmented by topic, coded and categorized into themes and sub-themes (vid. appendices for further information).

### 3.1. FNI@broad

#### *3.1.1. Attitude towards teaching in a FL*

Lecturers' attitudes towards teaching in a FL were collected through the FNI@broad prompt 1, in which respondents were asked to complete the sentence starting "The fact that I was going to use a foreign language in the ERASMUS Mobility classes made me feel…".

Collated responses on the theme can be grouped under 4 main sub-themes: (1) positive attitude; (2) negative attitude; (3) ambivalent attitude, and (4) difficulties about teaching in a FL.

More than 50% of respondents (8 out of 15) have a positive attitude towards teaching in a FL and refer that they "had no problems" with it (e.g., Lecturer 1, L. 1), that they are "motivated" (L. 3), "enthusiastic" (L. 5) and feel "well" (L. 6; L. 12) and "normal" (L. 11; L.15) about using it. One respondent (L. 2) also feels "more prepared" for these classes, which suggests a positive, confident approach to teaching in a FL. One other lecturer (L. 3) acknowledged as positive the fact of having the opportunity to teach in a FL, as there are not many occasions for that.

20% of respondents (3 out of 15) express a more negative attitude towards teaching in a FL saying that they are "anxious" (L. 7; L. 10) and "a little uncomfortable" (L. 9).

About 13% (2 out of 15) lecturers show an ambivalent attitude referring "mixed feelings of motivation, anxiety and satisfaction" (L. 13) or the feeling of being "enthusiastic and, at the same time, apprehensive" (L. 14) with the idea of teaching in a FL.

Respondents also highlighted some specific difficulties felt when teaching in a FL. They focused on the effectiveness of content teaching, namely, being able to transmit content with "accuracy" (L. 7) and "content delivery efficiency" (L. 10). The "need to pay more attention to writing" (L. 4) was also singled out by one of the respondents.

*3.1.2. Concerns about preparing classes in a FL*

Prompt two of the FNI@broad elicited respondents' concerns about "preparing the classes" for the ERASMUS Mobility exchange programs. The coding of lecturers' answers under this item resulted in the identification of four main sub-themes: "content", "materials", "students' needs" and "FL language use".

Most respondents (10 out of 15; 66.6%) point out "content transmission" as their main concern when preparing the classes, and they identify particular issues within the topic, namely content "clarity" (L. 1, L. 6, L. 13 and L. 14), content "adequacy" (L. 3, L. 5, L. 11 and L. 15), the interest it will have for students (L. 1 and L. 4) and its "relevance" (L. 8).

Content "clarity" and content "adequacy" are further elaborated in some of the lecturers" narratives, and it is possible to identify here other layers of concerns. In terms of "content clarity", one respondent introduces the issue of lecturers' mastering classroom language as a specific concern ("clarity in communicating content and in guiding practical work in a workshop" L. 14), and another underlines the "use of communication strategies that in a simple and didactic way would allow for a clear and adequate transmission of content" (L. 13). "Content adequacy" is tackled from three different angles, namely, the adaptation of content (1) to the specific students in the classroom (L. 5 and L. 15), (2) to students' specific areas of knowledge (L. 11) and (3) to the FL ("the correct adaptation of the message of that particular topic to the FL" (L. 3).

26.6% of respondents (4 out of 15) pinpoint "materials" as a topic of concerns in terms of class preparation. Two of these respondents (L. 7 and L.10) mention both the "preparation" and the "accurate translation" of materials as major concerns and the other two (L. 3 and L. 9) focus exclusively on concerns about translation issues.

Although only one respondent explicitly acknowledges concern about "students' needs" (L. 2), we consider that the awareness of this concern is also evident in other answers when they mention, for example, "the need to adapt some technical terms to [the FL], as one of the classes […] had very little knowledge of English" (L. 3) or the use of "scientific language which was probably unknown to the student" (L. 10), or the concern about "the adequacy of the content to the target audience" (L. 15).

One respondent (L. 10) identifies "the use of a FL to communicate content" as a major concern in class preparation.

*3.1.3. Materials and resources for teaching in a FL*

Prompt 3 and 3b of the FNI@abroad ("3. As for the materials to use, I wanted them to be… 3b because…") aimed at learning about respondents' opinions and experiences with the didactic materials and resources they used when teaching in a FL. The data collected can be grouped under two main sub-themes, one dealing with teaching materials' characteristics and the other with the purpose of using those didactic materials.

As regards the characteristics of the materials used, respondents' answers were addressed at two main elements, one focusing on content, the other on form. All fifteen respondents except one (L. 15) highlight a content related aspect in the materials they used (Table 5.21). They prefer materials that are "clear" (40%; 6 out of 15 respondents), "concise" (26.6%; 4 out of 15 respondents), "simple" (20%; 3 out of 15 respondents) and "direct" (13.3%; 2 out of 15 respondents). The attributes "appropriate to the context", "objective", "perceptible", "informative", and "explicit" were also referred to by other respondents. The format and presentation of the materials is mentioned by 33.3% respondents (5 out of 15), with reference to such attributes as "attractive" (13.3%; 2 respondents), "appealing" (13.3%; 2 respondents), "dynamic", "visual" and "well organized" (1 respondent each).

Table 5.21

*FNI@abroad - Characteristics of teaching materials to teach in a FL*

| Characteristics of teaching materials to teach in a FL | | Respondent(s) |
|---|---|---|
| **Content related** | clear | L. 1, L. 2, L. 4, L. 8, L. 9, L. 13 |
| | concise | L. 1, L. 2, L. 5, L.13 |
| | simple | L. 7, L. 12, L. 14 |
| | direct | L. 7, L. 12 |
| | appropriate to the context [of the students and the country] | L. 10 |
| | easy to understand | L. 11 |
| | with the most relevant conclusions | L. 12 |
| | objective | L. 13 |
| | perceptible | L. 6 |
| | informative | L. 8 |
| | explicit | L. 14 |
| **Form related** | attractive [quality of the presentation L. 3] | L. 3, L. 8 |
| | appealing | L. 10, L. 15 |
| | dynamic | L. 5 |
| | visual | L. 13 |
| | well organised | L. 14 |

When reflecting on the reasons for choosing the materials for the classes in a FL, respondents present a range of reasons that encompass issues that are either closely related to the effectiveness and interactivity of the learning process, or to broader aspects linked to students' language proficiency or

the heterogeneity of the students in their classes. In the respondents' words, the materials used in the classes in a FL were intended "to transmit knowledge" (L. 1); "to get the message across" (L. 7); "to pass information across" (L. 9); to facilitate learning ("I knew the content had not been taught", L. 4), "to stimulate reflection and discussion" (L. 8); to assist teacher-student interaction ("to facilitate my interaction with the participating students, as I knew from the start that this way of approaching the subject would help me in the different forms of contact with the students", L. 13), and to keep, guarantee or capture "students' interest" and attention (L. 2, L. 3, L. 5, L. 8 and L. 15). For 13.3% respondents, these materials were also designed to address the problem of heterogeneity in classes (i.e., "[…] in previous experiences I noticed that classes were very homogeneous …, [L. 11]); to deal with the issue of students' different proficiency levels in English (i.e.,"[…] in previous experiences I noticed that classes are […] not always proficient in English", [L. 11]) and to provide support to students' content comprehension, in case of teachers' failure to pass the information in the FL (i.e.,"In case my verbal communication was not clear enough, I would expect the group to be able to follow the content through the visual presentation" [L.14]).

*3.1.4. Methodologies for teaching in a FL*

Prompt 4 of the FNI@broad elicited lecturers' views about the methodologies they favoured when teaching in a foreign language (4. "In terms of methodologies to adopt I preferred…"). Lecturers' reported experiences point to the use of two different and broad types of methodological approaches: on the one hand, teacher-centred and expositive methodologies, and on the other hand a more student-centred approach, with class discussions, case studies and workshops.

A group of lecturers (46.6%; seven out of fifteen) favoured the adoption of teacher-centred methodologies, with two respondents (13.3%) explicitly mentioning "expository" methodologies (L. 5 and L. 15); two others referring to "theoretical lessons" (L. 14) and "verbal transmission" (L. 6) and three of them (20%) specifying aspects like the use of "expository methodology, with the use of practical exercises, which could guarantee the active involvement of students in the teaching and learning process" (L. 3); "expository lectures" with the presentation of materials (seeds) and examples (L. 4); or the "clarification of doubts at the end [of the lesson] and completion of an oral questionnaire" (L. 2).

The other group of respondents (46.6%; seven out of fifteen) indicated the use of methodologies that give the students a more active and central role in the learning process. Two respondents (13.3%) mentioned the adoption of "active" (L. 5) and "participative methodologies" (L. 10), and 33.3% explained that they used the "dialogue with the students with the projection of diagrams and or images" (L. 1), "dialogue and debate of ideas" (L. 11), "oral presentations and class discussion" (L. 8) and "multimedia presentations and case study discussion" (L. 9) or workshops with practical examples (L. 14).

Both groups of respondents mentioned the use of PowerPoint presentations (L. 2, L. 11, L. 12 and L. 14), either "with animations" (L. 15) or in "traditional expository material (slides)" (L. 7).

*3.1.5. Difficulties of teaching in a FL and Strategies to overcome them*

In prompt 5 of the FNI@broad respondents were asked to think about their major difficulty when teaching classes abroad using a FL (5. FNI@broad) and how they overcome that problem (5.b FNI@broad). In their accounts we identify three major themes, namely, "difficulties related with the FL", "difficulties related with content", and a third theme with one respondent expressing concerns about a technical issue.

Content related difficulties are mentioned in 46.6% (seven out of fifteen) of respondents' narratives, whereas 20% (three out of fifteen) of respondents highlight difficulties with the FL itself. Technical difficulties are reported by one lecturer, namely because of "[…] using different experimental resources/ tools than the ones [he/she] usually use[s] […]" (L. 1).

Each theme encompasses references to other related sub-themes (Table 5.22), which provide an expanded outlook of the types of difficulties encountered by these lecturers when teaching in a FL abroad.

Table 5.22

*FNI@broad - Prompt 5 themes and sub-themes*

| | |
|---|---|
| **Theme 1** Difficulties related with content teaching | •1. Adaptation of content to the audience<br>•2. Students' prior knowledge<br>•3. Motivating students to learn content |
| **Theme 2** Difficulties related with the FL | •1. General difficulties with the FL<br>•2. Translation of technical vocabulary |
| **Theme 3** Technical difficulties | • Technical issues |

The reported difficulties related with the FL are either of a general nature, such as "[…] speaking correctly […]" (L. 9) and the acknowledgement that using a FL to impart content is not the same as doing it in the native language ("[…] the moment of theoretical exposition, especially when compared to the way I do it in the classes I teach in Portuguese […]" (L. 13)), or related with the translation of specific terminology ("[…] adapting technical terms to Italian […]" (L. 3)).

As regards difficulties with content, lecturers single out three different sub-topics in their narratives: (1) difficulties in adapting the content to a specific audience; (2) difficulties in determining students" prior knowledge and (3) difficulties in motivating them to learn the content. In a comprehensive way, a lecturer reported problems in adjusting content to the class "[…] due to cultural

differences […]" (L. 7) derived from the specificity of the topics to be dealt with (mental health); another lecturer reported the particular difficulty of "[…] finding Spanish books for children […]" (L. 10), in order to be able to adjust content to the audience, and finally another respondent mentioned the difficulty "[…] to structure the topic, so as to present it to that specific audience […]" (L. 15).

The second sub-topic deals with the issue of determining students' prior academic knowledge to define "[…] the contents and their depth […]" (L. 11). The last "content related" difficulty (sub-topic three) that emerges from the respondents' narratives is the difficulty in motivating students to learn the content. This is openly reported by lecturers when they mention difficulties in "[…] preparing content that was interesting but not boring […]" (L. 4), "[…] getting students to concentrate on the work […]" (L. 2), and "[…] in a first phase, to engage the group of students and teachers in participating (with questions and/or answers) in the theoretical presentation […]" (L. 14).

The third theme - "technical difficulties"- concerns a technical issue stated by a lecturer, who when teaching in a FL abroad had to deal with "[…] using different experimental resources/ tools than the ones [he/she usually used […]" (L. 1).

The second half of prompt five of the FNI@abroad, (5.b) elicits respondents to identify the strategies they used to overcome specific problems encountered when teaching abroad in a FL. Each strategy put forward by the lecturers is a direct answer to a particular difficulty perceived when teaching in a FL (Table 5.23) and both parts of prompt 5 make a problem/solution structure of meaning block on their own.

Table 5.23

*FNI@broad- themes and sub-themes prompt 5. and 5.b*

| | | 5. Difficulties of teaching in a FL | | 5.b Strategies used to overcome the difficulties |
|---|---|---|---|---|
| **Themes** | **Sub-themes** | **Lecturers' narratives** | | **Lecturers' narratives** |
| 1. Language related difficulties | 1. General difficulties with the FL | "[…] speaking correctly […]" (L. 9) | ⇨ | "[…] communicating even if I made linguistic mistakes" (L. 9) |
| | | "[…] at the moment of theoretical exposition, especially when compared to the way I do it in the classes I teach in Portuguese […]" (L. 13) | ⇨ | - |
| | 2. Translation of technical vocabulary | "…adapting technical terms to Italian […]" (L.3) | ⇨ | "[…] with the help of a colleague from the University of Perugia who had better knowledge of English" (L. 3) |
| 2. Content related difficulties | 1. Adaptation of content to the audience | "[…] addressing some contents in my area (mental health) due to cultural differences […]" (L. 7) | ⇨ | "[…] with interactive discussion strategies and consensus building" (L. 7) |
| | | "[…] to structure the content so as to present it to that specific audience […]" (L.15) | ⇨ | "[…] talking to the host teacher" (L. 15) |
| | | "[…] finding Spanish books for children […]" (L. 10) | ⇨ | "[…] spending some time in the library of the University of Las Palmas reading and preparing the sessions with these resources" (L. 10) |
| | 2. Students' prior knowledge | "[…] defining the contents and their depth […]" (L. 11) | ⇨ | "[…] exchanging emails with the international support office of the school" (L. 11) |
| | 3. Motivating students to learn the content | "[…] preparing content that was interesting but not boring […]" (L. 4) | ⇨ | "[…] with the presentation of practical materials (seeds)" (L. 4) |
| | | "[…] getting students to concentrate on the work […]" (L. 2) | ⇨ | "[…] dialogue as the class went on" (L. 2) |
| | | "[…] in a first phase, to engage the group of students and teachers in participating (with questions and/or answers) in the theoretical presentation […]" (L. 14) | ⇨ | "[…] a positive, interactive attitude with the group." (L. 14) |
| 3. Technical difficulties | 1. Technical issues | "[…] using different experimental resources/ tools than the ones I usually use […]" (L. 1) | ⇨ | "[…] support from colleagues on site" (L. 1) |

Despite the direct relation between the two constituent blocks that make prompt 5 of the FNI@broad, it is possible to consider closely the individual strategies identified by lecturers (5.b) and perceive which strategies they most commonly use to handle the difficulties identified in each sub-theme. The aggregate results are presented in Table 5.24 and provide an initial typology of the strategies used by respondents of the FNI@broad to cope with specific problems of teaching in a FL.

Table 5.24

*Typology of strategies used by lecturers to handle the difficulties of teaching in a FL (FNI@abroad 5.b)*

| **FNI@broad** | | |
|---|---|---|
| **5. Difficulties of teaching in a FL** | | **5.b Strategies used to overcome the difficulties** |
| Themes | **Sub-themes** | **Strategies** |
| 1. Language related difficulties | 1. General difficulties with the FL | ⇨ - Communicating in the FL, despite teachers" low proficiency (L. 9)<br>- Support from colleagues (L. 3) |
| 2. Content related difficulties | 1. Adapting the content to the audience | ⇨ - Interactive discussion strategies and consensus building approach (L. 7)<br>⇨ - Dialogue with colleagues (host teacher) (L. 15)<br>⇨ - Materials designed for a specific audience (L. 10) |
| | 2. Students" prior knowledge | ⇨ - Gathering information from teachers about the students" prior academic training (L. 11) |
| | 3. Motivating students to learn the content | ⇨ - Introduction of practical components in the classes (L. 4)<br>⇨ - Dialogue with the students (L. 2)<br>⇨ - Positive, interactive attitude with the students (L. 14) |
| 3. Technical difficulties | 1. Technical issues | ⇨ - Support from colleagues (L. 1) |

*3.1.6. Successful experiences of teaching in a FL*

In prompt 6 of the FNI@broad lecturers were asked to recall a successful experience occurred in the classes they taught in a FL (6. "I remember that in one of the classes taught in a FL I successfully…"). Most respondents (53.3%; eight out of fifteen) reported situations related to the use of particular teaching strategies; three (20%) associate content with a successful experience; 13.3% (two out of fifteen) summon a language related episode and finally one lecturer (L. 4) pointed the collaboration with another teacher as a positive fact.

The successful teaching strategies identified by respondents were

- interactive, practical exercises to motivate students (L. 5; L. 11; L. 12; L. 13. "I presented examples to motivate for the problem" L. 15; "the students were amazed by the books and actively participated in their analysis" L. 10);

- reporting and sharing the lecturer's professional experiences to arouse students' interest (L. 5; L. 9);
- comprehension checks eliciting students' prior knowledge (L. 10; L. 11), with one of the respondents (L.14) using this strategy as a way of creating a safe learning environment in the classroom ("I decided to ask questions to the group, in a relaxed way").

The three lecturers that placed content at the core of the successful experience connected the success with (a) the choice of content (L. 1), (b) the "preparation" of content (L. 6), and (c) content originality (L. 7).

The two lecturers that highlighted circumstances in which language was the source of a positive situation reported an improvement in the students' English language competence (L. 2) and the use of the students" native language to break the ice at the beginning of a class (L. 3).

*3.1.7. Professional development expectations and needs for teaching in a FL*

When asked to complete prompt number 7, "In order to improve the quality of my professional skills in ERASMUS mobility I would like to …", most respondents (53.3%; eight out of fifteen) placed issues related to the IPP internationalisation policy at the top of their list. They raise mainly questions related with the following:

(1) the duration, frequency and scope of their stays in exchanges abroad and teacher mobility, and the support provided by the Institution in terms of material preparation: "have more time in the host location" (L. 1); "go more often in mobility" (L. 6 and L. 5); "go to more schools and countries" (L. 12); "regularly teach abroad" (L. 14); "do a research project following the mobility" (L. 4); "go more often in mobility and increase the days in that country in order to be able to collaborate with colleagues in research" (L. 5) and have "more support in the preparation of the mobility documents" (L. 3);

(2) IPP foreign language policy ("the Polytechnic of Portalegre should provide its teaching staff regular attendance of foreign language courses - preferably taught by a native speaker of the language - that, besides English, are fundamental to facilitate the mobility of teachers for teaching assignments abroad" (L. 13) and "I consider it fundamental to have regular classes, provided free of charge by the IPP, in the main foreign languages with a native-speaking teacher" (L. 14).

Respondents also acknowledged the need to improve their FL skills for ERASMUS mobility through the attendance of FL courses (L. 2; L. 9; L. 10 and L. 11), preferably provided by IPP (L. 13 and L. 14). And although the need to master the English language is explicitly mentioned by three respondents (L. 2, L. 11 and L. 13), other languages, such as Spanish (L. 2 and L.10) and Italian (L.10) are also named.

Finally, one respondent mentioned the topic of materials design and the need for lecturers to train in designing them as a way to improve the quality of their professional skills in ERASMUS mobility ("To be more efficient and effective in building learning materials in English" (L. 7)).

### 3.2. FNI@home

#### *3.2.1. Attitude towards teaching in a FL*

To elicit lecturers' reflection about their own experience of teaching in a FL in classes of or with ERASMUS students at the Polytechnic of Portalegre, the prompt of the FNI@home had the following formulation: "(1.) The fact that there were foreign students in the class made me think about…(1b.) and so I decided to …".

In the 17 validated FNIs analysed, respondents' answers raise various issues that fall into 5 major sub-themes with two broad thematic orientations. On the one hand they address pedagogical aspects related to (1) teaching and learning priorities and strategies; (2) students' language needs and (3) teaching materials. On the other hand, they bring about educational policy matters regarding (1) internationalisation policy in HE and (2) opportunities for professional development.

"Content understanding" emerges in 23.5% (four in seventeen) of the respondents" narratives as a teaching priority (sub-theme 1). One lecturer refers the importance of guaranteeing "that students understand the content and the exercises" (L. 21) and another underlines the relevance of "teaching the content in a way they [students] could understand everything" (L. 23). One other respondent acknowledges personal "difficulties in teaching complex contents in English" (L. 20) and takes the decision to "dedicate more time to the preparation of these contents, translating the practical component" (L. 20). Another lecturer is concerned that "because of difficulties with the language, certain topics are not approached with the desired depth" (L. 17).

Respondents' answers also resulted in a varied list of strategies and approaches they use for teaching in a FL, namely, provide bibliography /reading/support/ material in English (L. 5; L. 20; L. 23); "write notes in English" (L. 4); "translate parts of the lesson" (L. 4); translate handouts, materials (L. 20, L. 24); translate some words into the students native language (Polish) using Google translator (L. 19); "provide practical examples" (L. 14); "summarise content in English" (L. 13, L. 23); promote the "dialogue with students to check understanding" (L. 17; L. 16); promote "integration in a group" (L. 7); individual tutorial coaching (L. 16; L. 17) and "assigning work in English to the students" (L. 8). One other respondent listed the priority aspects to be taken into consideration when teaching in a FL, namely, "interaction, planning, bibliography and assessment" (L. 16). Two respondents out of seventeen (11.7%) pondered on the importance of integrating the cultural dimension into the teaching and learning strategies when teaching in a FL. They expressed their concerns on "how to make use of

cultural diversity to promote learning opportunities" (L. 11) and the possibility of "using cultural diversity to increase [students"] knowledge" (L. 11; L. 18).

The second sub-theme identified within this thematic block refers to students' language needs. Respondents' awareness of the issue is high (52.9%), with 9 out of 17 lecturers mentioning it. Some respondents address the topic in a clear way, particularly to acknowledge Portuguese students' difficulties with English language: "some do not speak English" (L. 5); "students' difficulties in understanding English" (L. 19); "classes where most students don't speak English" (L. 8) and "the difficulty that Portuguese students have in assimilating the lessons in English" (L. 17). Other respondents show their awareness of students' language needs in a more subtle way, when they refer the difficulties of the language and the need to adapt materials and strategies (L. 4; L. 17: L. 21, L. 23); the language skills of the ERASMUS students (L. 7; L. 8) and when they mention Portuguese students' (unwelcoming, we infer) reaction to classes taught in English (L. 13).

Teaching materials, sub-theme number three, are mentioned by 23.5% of respondents (four out of seventeen) to point out the translations they made of the materials used in the lessons taught in a FL (L. 4; L. 19; L. 20; L. 24). L. 20 refers another type of materials that were used, namely materials written in English and ready made for use in class (from Cisco Academy).

On sub-theme "internationalisation of HE", data collected draws mainly on Erasmus students' selection procedures (L. 8); ERASMUS students' knowledge (or not) of the Portuguese language (L. 8) and the integration difficulties that lack of knowledge may cause (L. 8). L. 19 brings to discussion the lack of prior information about ERASMUS students' knowledge of the content to be taught.

In the coding procedure of the FNI@home data, it was also possible to identify two references that let us infer opportunities for lecturers' professional development (another sub-theme identified). Referring to ERASMUS students, L. 18 mentions that "it is as important to learn from them, as it is to teach them" and L.14 reports on the decision "to look for bibliography to support new content production". Both situations potentially constitute opportunities for teacher professional development.

*3.2.2. Concerns about preparing classes in a FL*

In the answers to prompt two of the FNI@home (2. "My main concerns about preparing the classes with ERASMUS students had to do with…") respondents' reflections focused mainly on four areas, or sub-themes: (1) materials, (2) content, (3) FL language use and (4) students' needs.

"Materials" are at the centre of 29.4% (five out of seventeen) of respondent's answers, either directed to a general concern about the need to provide materials in English for the students (L. 11 and L. 24), or focalized on translation issues, such as the quality of the translation (L. 4), its accuracy (L. 23), or broadly on the "translation of classes" (L. 5).

Content related questions are also mentioned by five respondents out of seventeen (29.4%) with each respondent introducing a specific aspect under this sub-theme. One lecturer raises the need to "look for books and papers with adequate content for these students" (L. 5), another gives emphasis to the "communication of contents" (L. 7) and the others are concerned about "the discussion of contents and topics in the syllabus" (L. 16), the language used in most contents ("most of them in Portuguese", L. 17) and the skills needed "to adapt contents to a different [multilingual and multicultural] reality" (L. 18).

Three respondents in seventeen (17.6%) explicitly and exclusively mention "the language" as the source of concern about preparing the classes (L. 10, L. 13, and L. 19).

17.6% of respondents (three out of seventeen) also express a deep awareness and concern about students' specific needs, being it foreign students "difficulty in adapting to the teaching methods; their capacity to follow the rhythm of teaching and learning and the adaptation to the IT used […] "(L. 20), "the needs of the majority of the class (95%), who did not want lessons in English" (L. 8) and the issue of their right not to be taught in a FL, or the need to assure students' access to "the practical component that enabled learning with clarity as well as training to interpret and present ideas in an essentially practical approach" (L. 16).

*3.2.3. Materials and resources for teaching in a FL*

Data collected in prompt 3 and 3.b of the FNI@home provide respondents' opinions on the materials they used in the classes taught in the FL. The findings can be grouped into two broad sub-themes, which deal with the characteristics of the materials and the purpose of their use.

In terms of the characteristics of the materials, most respondents (58.8%; 10 out of 17) pinpoint aspects related to the language in which the materials are written. Four respondents (23.5%) favour materials "in English" (L. 5, L. 17, L. 19 and L. 21), whereas the other six respondents (35.2%) mention the use of translated materials, either material "translated into English" (L. 11, L. 20 and L. 24); materials that were "written in English, because it was easier to translate into Portuguese" (L. 8); materials "that are both in English and Portuguese" (L. 18 and L. 7), or materials translated with "simultaneous translation" (L. 7), as there were two teachers in the room. One lecturer (L. 24) brought to the fore an additional consequence of translating the materials already prepared for the classes, which is the opportunity to revise and improve them.

Besides language, 52.9% of respondents (nine out of seventeen) specify other characteristics of pedagogical materials, namely that they want them to be "up to date" (L. 5 and L. 14); "interactive" (L. 10); "objective" (L. 23), easily understandable (L. 4, L. 11 and L. 13) and of easy use by the students (L. 16), and with more graphical elements (L. 19) and images (L. 13).

Respondents' explanation for the reasons that determined their choice of the materials to use in classes in a FL were threefold:

1) content related matters for 23.5% (to promote understanding through the use of images (L. 13); to "apply the acquired competences and develop them in concrete case studies" (L. 16); to develop students" skills (L. 20) or to obtain "results" (L. 23)).

2) language related issues for 17.6% ("to overcome the language barrier" (L. 5); "because the communication difficulties were obvious […] for students who know very little English" (L.19); the teacher's own level of English - "my English level is not very good" (L. 4) and

3) teaching strategies concerns for 5.8% ("to lend more dynamism [to classes] (L. 10))

*3.2.4. Methodologies for teaching in a FL*

Respondents' reported experiences about the methodologies adopted when teaching in a FL at home (prompt 5. of the FNI@home: "5. As for the methodologies to adopt I preferred to…") indicate a preference for active methodologies. Six respondents out of seventeen (35.2%) refer to the use of practical methodologies, either generally referring to the "practical work" undertaken (L. 11), or highlighting specific formats that practical work can take: "discussion of weekly assignments" (L. 16); practical work with specific assigned requirements (L. 20); "practical activities and study visits with reports and presentations in English" (L. 19); "laboratory work preceded by a theoretical presentation of the contents, often with a practical presentation, allowing the students to evolve, experiment and feel the difficulties associated with the complexity of the contents" (L. 20); "debate and exchange of experience" (L. 10) and students' "sharing of knowledge in class" (L. 14).

17.6% of respondents (L. 5, L. 23, and L. 24) express preference for "expository techniques" and add some specifications such as "expository classes" where they alternated the use of L1 and L2, with slides in L2 (L. 24); referencing students to "support materials", after the expository class (L. 23) or the adoption of "tutoring classes", when it was impossible to use expository techniques (L. 5).

17.6% of respondents (L. 8, L. 21 and L. 24) state that they did not introduce any changes in the methodologies they usually adopt in the classes taught in L1, whereas 17.6% (L. 7, L. 18 and L. 20) single out particular methodological changes related to the use of L2 in classes: one introduced "simultaneous translation" (L. 7); another used the FL as a complement to the use of L1 (L. 18) and another acknowledged personal difficulties in using the L2 when it was necessary to support students in more complex theoretical issues (L. 20).

11.7% of respondents (L. 16 and L. 20) bring about the topic of assessment when reflecting on methodologies used when teaching in a FL: one mentions that practical assignments are a component of the final assessment (L. 20), and the other respondent states that in the classes taught in a FL content is assessed weekly through individual assignments "aimed both for testing the students" acquisition of

competences and for assessment purposes, which allowed the students to clearly understand where they had failed, what they should improve and how they should improve" (L. 16).

*3.2.5. Difficulties of teaching in a FL and Strategies to overcome them*

When elicited to reflect upon their major difficulty in teaching classes in a FL at home (prompt 5. FNI@home) and the ways found to overcome the problem (5.b FNI@home), lecturers' narratives focus on three major themes, namely (1) difficulties related with the FL, (2) difficulties related to content teaching and (3) "time management", a theme introduced by one of the respondents.

Difficulties felt with the use of the FL are more frequently reported by respondents than difficulties related to content issues, with 58.8% of lecturers (ten out of seventeen) focusing on the latter topic, whereas only 17.6% respondents (three out of seventeen) mention content related difficulties. Within these two broader thematic blocks, lecturers' narratives highlight more specific sub-themes as presented in Table 5.25.

Table 5.25

*FNI@home - Prompt 5 themes and sub-themes*

| | |
|---|---|
| **Theme 1** Difficulties related with the FL | •1. General difficulties with the FL<br>•2. Difficulties derived from the use of two languages in class<br>•3. Difficulties in motivating students to use the FL in class |
| **Theme 2** Difficulties related to content teaching | •1. Diversity of students' prior knowledge<br>•2. Contextualizing and illustrating content with examples |
| **Theme 3** Difficulties with time management | • Class time management |

General difficulties with the use of the FL are reported by two lecturers, one acknowledging a difficulty in "transmitting knowledge […] in English" (L. 20), and the other (L. 23) admitting an initial difficulty with the FL, overcome "with conversation classes and practising the technical terms" (L. 23). Eight other respondents (47%) also chose to pinpoint difficulties with very specific language issues, either their own or students related. To put it in detail, L. 11 and L. 13 mention experiencing language difficulties derived from the use of two languages in class ("teaching the class in two languages simultaneously" (L. 11) and "speaking Portuguese and summarising [content] in English" (L. 13)), and respondents L. 4 and L. 21 refer the difficulties felt with the translation of "some technical words" (L. 4) and the inexistence of materials in the FL and the need to translate them (L. 21). Students' attitude to the FL, namely their motivation to use it, is also seen as a difficulty by four lecturers (23.5%), who mention such aspects as "making the [Portuguese] students make an effort to understand [the FL]" (L.

18), "getting the students to speak" (L. 19), motivating them to use English as the language of communication (L. 24) and negotiating with them which "contents to be taught in English" (L. 8).

17.6% of respondents' narratives also identify some difficulties related to content when teaching in a FL. The difficulties mentioned are either associated with the students' prior knowledge (students" diverse levels of knowledge (L. 17) or difficulty in dealing with students' various levels of prior technical content knowledge (L. 5)), or with specific practical situations like "contextualizing and illustrating [content]" (L. 10).

The issue of time management is brought to discussion by a lecturer who mentions a major difficulty in "having time to analyse the weekly assignments and to present and discuss them each week for assessment purposes" (L. 16).

In the second half of prompt five of the FNI@home, (5.b), respondents present the strategies they used to overcome the specific difficulties mentioned (Table 5.26).

Table 5.26.

*FNI@home - themes and sub-themes prompt 5 and 5.b*

| FNI@home | 5. Difficulties of teaching in a FL | | | 5.b Strategies used to overcome the difficulties |
|---|---|---|---|---|
| Themes | **Sub-themes** | **Lecturers' narratives** | | **Lecturers' narratives** |
| 1. Language related difficulties | 1. General difficulties with the FL | "[…] transmitting knowledge […] in English […]" (L. 20) | ⇨ | "[…] repeating, whenever necessary, the presentation given, supporting the students in extra classes; repeating the practical laboratory work; improving the classes" theoretical presentations. Occasionally, it was necessary to resort to content manuals and articles in English to better support students" (L. 20) |
| | | [using the FL] "at the beginning […]" (L. 23) | ⇨ | "[…] with conversation classes and practising the technical terms" (L. 23) |
| | 2. Difficulties derived from the use of two languages in class | "[…] teaching the class in two languages simultaneously […]" (L. 11) | ⇨ | "[…] promoting the interaction between both groups [Portuguese and English-speaking students], making the classes bilingual and a time of mutual exchange of experiences" (L. 11) |
| | | "[…] speaking Portuguese and summarising [content] in English […]" (L. 13) | ⇨ | "[…] staying and working for a while with ERASMUS [non-Portuguese] students" (L. 13) |

| | | | | |
|---|---|---|---|---|
| | 3. Difficulties in motivating students to use the FL in class | "[…] translating some technical words […]" (L. 4) | ⇨ | "[…] elaboration of PowerPoints with images" (L. 4) |
| | | not having "some materials […] in English" (L. 21) | ⇨ | "[…] organization and production of materials in English" (L. 21) |
| | | "[…] making the [Portuguese] students make an effort to understand [the FL] […]" (L. 18] | ⇨ | "[…] pretending that nothing was going on" (L. 18) [disregarding the students" little motivation and lack of effort to interact in the FL and continuing to promote its use in class] |
| | | "[…] getting the students to speak […]" (L. 19) | ⇨ | "[…] talking a lot with them [students] and socializing" (L. 19) |
| | | motivating students to use English as the language of communication (L. 24). | ⇨ | (Difficulty was not overcome) (L. 24) |
| | | "[…] negotiating with students the contents to be taught in English […]" (L. 8) | ⇨ | "[…] reducing to a minimum the number of classes in English." (L. 8) |
| 2. Content related difficulties | 1. Students" prior knowledge | students" various levels of prior technical content knowledge (L. 5) | ⇨ | "[…] observation of their skills and allocating the students to classes of different years, and that allowed the students to continue building/ improving their competences" (L. 5) |
| | | students" diverse levels of knowledge (L. 17) | ⇨ | "[…] some simpler contents that were replaced by others […]" (L. 17) |
| | 2. Explaining content | "[…] contextualizing and illustrating [content] […]" (L. 10) | ⇨ | "[…] support of the Internet and the use of international examples" (L. 10) |
| 3. Time management difficulties | Time management | "[…] having time to analyse the weekly assignments and to present and discuss them each week for assessment purposes […]" (L. 16) | ⇨ | "[…] collaborative planning with the […] students" (L. 16) |

The individual strategies identified by lecturers (5.b) to overcome the difficulties encountered when teaching in a FL at home are presented in Table 5.27. and provide a broad overview of the type of the solutions used by lecturers to handle these specific problems.

Table 5.27

*Typology of strategies used by lecturers to handle the difficulties of teaching in a FL (FNI@home 5.b)*

| **FNI@home** | | |
|---|---|---|
| **5. Difficulties of teaching in a FL** Themes | **Sub-themes** | **5.b Strategies used to overcome the difficulties Strategies** |
| 1. Language related difficulties | 1. General difficulties with the FL | - Adoption of teaching strategies (1) to support students" content learning (repetition of content; repetition of practical classes; extra classes (L. 20) (2) to improve lecturers" teaching practice (improving the classes" theoretical presentations; occasional use of content manuals and articles in English to better support students) (L. 20)<br>- Investment in teachers" professional development (FL conversation classes and practise of technical vocabulary) (L. 23) |
| | 2. Difficulties derived from the use of two languages in class | - Promotion of students" interactions and mutual exchange of experiences in class (L. 11)<br>- After class tutorial support in the FL (L. 13) |
| | 3. Difficulties in motivating students to use the FL in class | - Design of specific teaching/learning materials with visual support (L. 4)<br>- Translation of materials [into English] (L. 21)<br>- Persistence in the promotion of the use of the FL in class (despite students" little motivation and lack of effort to interact in the FL (L. 18))<br>- More teacher – student interaction (L. 19)<br>- Accurate time planning for content teaching in a FL (L. 8)<br>- (Difficulty was not overcome) (L. 24) |
| 2. Content related difficulties | 1. Students' prior knowledge | - Adaptation of content by making it simpler or even replacing content topics covered (L. 17)<br>- Attention to students" prior content knowledge with the resulting allocation to different level groups to better support the development of students" competences (L. 5) |
| | 2. Illustrating content | - Attention to material selection with the provision of online support and international examples (L. 10) |
| 3. Time management difficulties | Time management | - Teacher-student collaboration (L. 16) |

To face general difficulties with the language when teaching in a FL, lecturers adopt two different types of strategies: on the one hand they implement teaching strategies that aim to support students" content learning (e.g. repetition of content; repetition of practical classes; extra classes) (L. 20); on the other hand, they invest in their own professional development to enhance their teaching

skills and practice (e.g. improve their theoretical presentations, use content manuals and articles in English to better support students and devote time for improving their proficiency in the FL with conversation classes) (L. 23).

Respondents (L.11 and L. 13) fight the difficulties of using two languages in class with strategies that promote students' interactions and mutual exchange of experiences in class and through class tutorial support in the FL in extra class hours.

To counter the difficulties of motivating students to use the FL in class, six respondents out of seventeen (29.4%) use strategies of different order that can be classified as

(1) pedagogical (design of specific teaching/learning materials with visual support and the translation of materials into the FL) (L. 4 and L.21)

(2) organizational (focus on more accurate time planning for content teaching in a FL) (L. 8) and

(3) motivational, with increased teacher-student interaction and a conscious deliberate persistence (sometimes not succeeding (L. 24)) in the promotion of the use of the FL in class, despite students' little motivation and lack of effort to interact in the FL (L. 18 and L. 19)

To cope with the students' unbalanced prior knowledge and the difficulties that situation brings to content teaching in a FL, respondents use both the adaptation of content (making it simpler or even replacing content topics covered (L. 17)) and the relocation of students in different level groups to better support the development of their competences (L. 5). The difficulties felt by lecturers to illustrate content are solved with the provision of online support and international examples (L. 10).

Finally, to cope with time management issues lecturers invest more in teacher – student collaboration strategies.

*3.2.6. Successful experiences of teaching in a FL*

To complete prompt number six of the FNI@home, lecturers were asked to consider their experience of teaching in a FL and remember a situation they would describe as successful ("6. I remember a situation when I successfully …").

47% of respondents (eight out of seventeen) chose not to complete this prompt, either stating that they could not identify a situation that would fit the request (L. 21, L. 24) or just leaving the prompt blank (L. 1, L. 8, L. 10, L. 13, L. 16, L. 17).

Four of the remaining respondents (23.5%) elected the "content" as the justification for the successful situation: a work presented by ERASMUS students about their country of origin, which was very interesting for the national students (L. 11; L. 14); an interesting topic developed by ERASMUS students (L. 18) and a particular final presentation where the students "shined" (L. 23).

Situations that are directly related to the use of the FL were tagged as successful by three lecturers out of seventeen (17.6%): one lecturer (L. 4) gave the example of a situation when Portuguese students highly proficient in English supported him/her to overcome translation issues in class; another lecturer stated that due to the Portuguese students' fluency in the FL it was possible to teach in English, which "created a different dynamic as [they] could also count on experiences from other cultures and bring the ERASMUS students closer to the Portuguese students, thus promoting the mobility of our students" (L. 5), and a third lecturer (L. 7) mentioned the successful situation of an oral work presented by a student and the help received from colleagues to translate it into Portuguese.

Finally, two lecturers (11.7%; two out of seventeen respondents) reported the promotion of student-student interaction as a successful aspect. Both L. 19 and L. 20 selected different instances of the promotion of student- student interaction, as a successful teaching strategy.

*3.2.7. Professional development expectations and needs for teaching in a FL*

Prompt seven of the FNI@home (7. In order to improve the quality of my professional skills in classes with ERASMUS students, I would like to …) aimed at learning about respondents" personal development expectations and needs for better teaching when using a FL. Their reflections focused mainly on four general topics: (1) IPP's internationalisation policy and practices; (2) teaching materials and resources; (3) their own FL skills and (4) the students" FL skills.

Internationalisation related issues are pinpointed by 10 lecturers out of seventeen (58.8%) mostly to raise practical aspects related to the coordination and organisation of ERASMUS programmes (in-coming students) at the Polytechnic of Portalegre. In more detail, lecturers would like to know in advance the number of ERASMUS students who are going to attend their classes, where they come from and the curricular plan they are going to follow at the institution (L. 11; L. 24; L. 20), so as to have more time to better prepare classes and teaching materials (L. 11; L. 13), even "be able to translate into English not only the practical, but also the theoretical components" (L. 20). For one respondent, data about "these students" skills and what precisely is intended with their ERASMUS experience" (L. 5) would also be a relevant factor. Two lecturers feel very strongly about the need to provide Portuguese language classes to these students in advance (L. 19), otherwise, according to one of them (L. 8) "what is done is done badly and generates discontent on all side". Respondents also take position on IPP's internationalisation policy when they state that they would like to have training in FL provided free of charge by IPP (L. 23) and that the number of ERASMUs students in the classes should be higher (L. 14), unveiling a certain criticism to IPP inability to attract more ERASMUS students to the institution. One respondent (L. 16) suggests "a specific timetable for these students separately from the other students, since pedagogically speaking, there are no conditions to teach the class only in the English language".

The topic "materials and resources" is referred to directly by two lecturers, one mentioning the importance of having didactic materials in English "to support the classes of all the Curricular Units in English, because this does not harm the Portuguese students and facilitates the coming of ERASMUS students" (L. 21), and the other requesting technological support to be able to teach in a FL. L. 19 states that it would be important "to find a tool that would help students and teachers to improve their English while the class sessions are taking place, since today with cell phones it would not be difficult to have an online dictionary that would cross between Portuguese, English and the student's native language".

Training and improving FL/English skills is considered relevant for 23.5% of lecturers (L. 4, L. 20, L. 21, L. 23), although they acknowledge personal problems to do it ("it has not been easy for me to attend language training, as other training priorities always arise" L. 20) or lack of institutional support ("to have free classes offered by the Polytechnic of Portalegre" L. 23).

Students' low language skills in English is also mentioned as an impediment to teach in English and hinted by a lecturer (L. 18) as a missed opportunity for professional development.

Table 5.28

*Summary of FNIs Themes and Sub-themes coding*

| **Themes** | **Sub-themes** | |
|---|---|---|
| | **FNI@broad** | **FNI@home** |
| 1- Attitude towards teaching in a FL | 1- Positive attitude<br>2- Negative attitude<br>3- Ambivalent attitude<br>4- Difficulties about teaching in a FL | A- Pedagogical aspects<br>1- Teaching and learning priorities and strategies:<br>a. priorities<br>b. strategies<br>2- Students' language needs<br>3- Teaching materials<br><br>B- Educational Policy matters<br>1- Internationalisation policies in HE<br>2- Professional development opportunities |
| 2- Concerns about preparing classes in a FL | 1- Content<br>2- Materials<br>3- Students' needs<br>4- FL use | 1- Materials<br>2- Content<br>3- FL use<br>4- Students' needs |
| 3- Materials and resources for teaching in a FL | 1- Characteristics of teaching materials:<br>Focus A: Content<br>Focus B: Form<br><br>2- Reasons for choosing the didactic materials: | 1- Characteristics of teaching materials:<br>Focus A: Language<br>Focus B: Form /characteristics<br><br>2- Reasons for choosing the didactic materials: |

| | | |
|---|---|---|
| | a. Related to the effectiveness and interactivity of the learning process<br>b. Related to broader aspects (e.g., students' different language proficiency levels in English) | a. Content related matters<br>b. Language related issues<br>c. Teaching strategies |
| 4- Methodologies for teaching in a FL | 1- Teacher-centred methodologies<br><br>2- Student-centred methodologies | 1- Teacher-centred methodologies<br>2- Student-centred methodologies<br>3- Assessment<br><br>Introduction of changes in the methodology because of using a FL to teach |
| 5- Difficulties of teaching in a FL [and strategies to overcome them] | 1- Difficulties related with the FL<br>a. General difficulties with the FL<br>b. Translation of technical vocabulary<br>2- Difficulties related with content teaching<br>a. Adapting the content to the audience<br>b. Determining students' prior knowledge<br>c. Motivating students to learn the content<br><br>3-Technical difficulties<br>a. Technical issues | 1- Difficulties related with the FL<br>a. General difficulties with the FL<br>b. Difficulties derived from the use of two languages in class<br>c. Difficulties in motivating students to use the FL in class<br>2- Difficulties related to content teaching<br>a. Diversity of students' prior knowledge<br>b. Contextualizing and illustrating content with examples<br><br>3- Class time management<br>a.Time management |
| 6- Successful strategies used to teach in a FL | Situations related to<br><br>a. The use of teaching strategies<br>b. Content<br>c. The use of FL<br>d. Collaboration with another teacher | Situations related to<br><br>a. Content<br>b. The use of FL<br>c. Promotion of student-student interaction |
| 7- Professional development - expectations and needs for teaching in a FL | 1- IPP internationalisation policy<br>a. Duration, frequency and scope of the stays in exchanges abroad and teacher mobility<br>b. The support provided by the Institution in terms of material<br><br>2- IPP foreign language policy | 1- IPP internationalisation policy and practices (eg., coordination and organisation of ERASMUS programmes (in-coming students))<br><br>2- Teaching materials and resources<br>3- Lecturers' own FL skills<br><br>4- The students' FL skills |

# CHAPTER SIX:
# DISCUSSION

## 1. Introduction

In chapter six of this dissertation, at the stage of discussion of the research findings, the results obtained with the questionnaire and the framed narrative inquiries are related to the relevant literature reviewed, so as to provide explanations for the research questions that have encompassed all this study. The two general research questions, together with the sub-questions that detail them, and the within-cohort comparisons that further investigate the information to achieve, will continue to be used at this discussion stage, now becoming themselves the organising framework of the discussion.

Thus, this chapter will be divided into three main sections, each focusing on discussing the research questions of this study, namely,

1. IPP lecturers' views on their current linguistic and methodological skills for teaching content subjects in English (RQ1);
2. IPP lecturers' views on their most relevant training needs for teaching in English (RQ2), and
3. Within-cohort comparison (RSQ5, 6 and 7).

Each section is further divided into sub-sections, to accommodate the discussion of specific aspects. Section 2 starts with a broad overview of IPP lecturers' self-perceived linguistic, methodological, and ongoing professional development for teaching their content subjects in English (RQ1) (RQ8), further detailed into section 2.1, on lecturers' attitude towards their own FL/English language competence; section 2.2. about their knowledge of theoretical and methodological aspects of bilingual education; section 2.3. on their knowledge of materials and resources used for bilingual teaching, and section 2.4. focusing on their ongoing professional development for using English as a medium of instruction. The focal point will then change and move to analyse the way lecturers perceive their students' linguistic skills in English (2.5), which corresponds to RSQ3.

Section 3 will discuss within-cohort results, namely, the impact of personal variables (age, gender, number of years teaching in HE, type of contract, specialisation area or situation in which the teacher has used the English language in academic context in the last two years availability to teach in English/a foreign language) on lecturers' perception of their current linguistic and methodological skills for teaching content subjects in English and on their training needs to engage in it (3.1.); how the perceptions held by IPP lecturers towards teaching through English relates to the training needs they identify (3.2.), and, finally, how IPP lecturers perception of their students' linguistic competences in English and the need they consider students have for further training on these issues relate (3.3.). This section answers RSQ5 to RSQ7.

RQ8, which explores the comparison of qualitative and quantitative data, is present, in an applied approach, throughout all the discussion phase of this dissertation, and it will be addressed in the conclusion, to broadly consider the issue of how the qualitative data (FNIs) contradict, confirm, expand, or provide context to the quantitative data (questionnaire) on IPP lecturers' perception of their skills for bilingual teaching and their major training needs to engage in it.

To present the discussion of the findings, the concurrent triangulation design (Creswell, 2003) which has been established as methodology for this dissertation will be followed. The quantitative results and the qualitative findings are now brought together and merged into one overall interpretation which will relate, contradict, confirm, or expand the findings and thus provide answers to understand IPP lecturers' perception of their skills for bilingual teaching, and to their major training needs to teach through English or any other foreign language, that is, our main, broad research questions.

Finally, in section 4 within-cohorts comparisons are discussed. Although some of the areas of intersection between lecturers' ongoing situation and their training needs have already been addressed, now the focus is the influence that such variables as age, gender, number of years teaching in HE, type of contract, specialisation area or situation in which they have used the English language in academic context in the last two years may have on lecturers' perceptions of their current situation (CS) and their training needs that (4.1). The way lecturers perceive their current situation for teaching in a FL/English and how it relates to the way they view their training needs for bilingual teaching in general is the topic of 4.2. Finally, 4.3 aims to discuss how lecturers' perception about their students' current situation in terms of language proficiency is related to the training needs they have identified.

## 2. IPP lecturers' self-perceived linguistic, methodological, and ongoing professional development for teaching their content subjects in English (RQ1) (RQ8)

Based on the questionnaire's findings, a comprehensive snapshot of IPP lecturers' current beliefs about their skills to engage in bilingual teaching gives back a weak and very critical global image, with lecturers' self- perceived linguistic skills at the level of "adequate" and the perception of a

lower knowledge of methodological issues and materials, and even lower ("insufficient") on-going professional development for teaching in a FL. This overview is generally corroborated by the findings of the FNIs in our research. When asked how they felt when teaching in a FL, lecturers do not frequently mention the concern of using a FL to teach. Their top priority worries are mostly related with the way they convey content and with pedagogical materials. IPP lecturers' generally weak belief about their global skills for teaching in a FL/English, despite a more optimistic view of their FL skills, is aligned with other research studies that have presented similar results (Pérez Cañado, 2016a, 2016b, 2020a; Dafouz 2018; Macaro et al. 2019; Piquer-Píriz & Castellano-Risco, 2021).

The overview of IPP lecturers' perception of their present situation is particularly bleak in terms of ongoing professional development for teaching in a FL, which they see as mostly insufficient or inexistent. Their "attendance of online teacher training courses on the use of FL to teach content" is nearly inexistent, although the "attendance of teaching methodology courses" and of "English language (or any other language) upgrading courses" is perceived as at a slightly higher level (but not "adequate" yet). These low results may derive from the lecturers' lack of interest in these courses or from the fact that this type of offer is not available to them, a possibility that, taken the situation of IPP and the lack of training offer in this area, should be considered. In this matter, research on the relevance of HEIs role in the provision of teacher training for CLIL teaching should be recalled (O'Dowd, 2018; Dafouz et al. 2019), moreover, when respondents' narratives in the FNI@home and FNI@broad (vid. chapter five 3.1.7 and 3.2.7), indicate that IPP lecturers seem to be open to engage into different opportunities for professional development.

Lecturers' self-perception of their knowledge about theory, methodology, material design and resources for teaching in a FL (CS2 and CS3) is also low, although their familiarity with materials and resources for teaching in a FL/English presents slightly higher values, consistently at the level of $\overline{x}$=2.45. The FNIs also provided data on lecturers' views on materials and resources used in classes taught in a FL. Interestingly, whereas the results of the questionnaires convey the idea that lecturers are not very skilled in the theorizing principles for adapting, producing, or using materials for teaching in a FL, the FNIs conveyed the image of professionals who clearly know the objectives and characteristics of the materials and resources they choose to use in the classes they teach in a FL, as well as the type of strategies they want and need to use in those classes. Lecturers may lack the knowledge of theory, as shown in the results of the questionnaires, but they know they want teaching materials to be attractive, appealing, dynamic, visual, well organised, up to date, interactive, easy to understand and easy to use, to present content in a clear, concise, simple, direct, appropriate to context, objective, perceptible, informative and explicit way (FNI@broad and @home). Moreover, when asked about future professional development expectations and needs for teaching in a FL, both FNI@home and FNI@broad narratives bring up the topic of teaching materials and resources design as a relevant skill. Our findings on lecturers' lack of theoretical knowledge on bilingual education methodologies for

creating or adapting materials and resources for CLIL teaching, have already been identified in previous research studies on CLIL in HE (Johnson, 2012; Pérez Cañado, 2016a, 2016b, 2020a), and are often an argument for the introduction of CLIL teacher training in HE. In terms of the needs analysis study of the present situation, the rich contribution provided by IPP lecturers in the FNIs describing the purpose and characteristics of the didactic materials and resources they want to use in classes in English/FL (vid. chapter five - 3.1.3 and 3.2.3) should be accounted for and integrated into a future CLIL training programme to be provided (Banegas, 2012).

The questionnaire results also portray respondents' not very solid confidence in their knowledge about bilingual education policies and about the theory and methodology for bilingual education (CS2). In the same way as with CS3, these findings are, in general, corroborated by the FNIs, and the topics further expanded as in the case, for example, of IPP internationalisation policies, with a very active and critical stance taken by lecturers about internationalisation policy matters in general, and about IPP in particular. Such issues are raised by lecturers in different prompts of the FNIs and approached from a very practical perspective. The mismatch between respondent's perceived lack of knowledge about theory and the rich practical experience they have is again evident and it should be taken into account in CLIL training actions.

### 2.1. FL/English language competence (RSQ1.a)

As already detailed in the descriptive statistical report of CS1 in the questionnaire (Chapter 5, 2.1.), from a global perspective, lecturers view their linguistic skills in English as adequate, and they rate their receptive production skills - listening, reading specialized bibliography and knowledge of specialised academic vocabulary - as the ones they feel more confident about. Grammar knowledge, pronunciation skills, oral communication skills and the knowledge of the foreign language culture are self-perceived by lecturers as their weakest competences in this broad thematic area. Similar general findings have been reported in Pérez Cañado's research (2016a, 2016b), who finds that respondents' view of their current level of linguistic and intercultural competence is "quite complacent" (2016a, p. 276); in Ball and Lindsay's (2013), who reported on university teachers concerns about pronunciation; in Fernández Costales and González Riaño (2015), whose study concluded that "lecturers' self-perception concerning their level of English shows a relatively positive set of results" (p. 99); in Aguilar (2015), who found that "a recurrent topic […] is English proficiency, which is a positive outcome and a challenge at the same time" (p. 11). More recently Pérez Cañado (2020a) refers teachers' trend to view their linguistic skills in a fairly positive way as a tendency to "harbor a quite self-complacent view of their own language skills" (p. 8).

Lecturers' views conveyed through the questionnaire are validated by the FNIs, as language competence issues are not given priority in the lecturers' written narratives. In fact, when asked to consider their experience of teaching in a FL in general terms, neither FNI@broad nor FNI@home

respondents choose to point out their own FL language skills as an issue, although questions related to FL language emerge throughout the FNIs.

Most FNI@broad respondents express a positive attitude towards teaching in a FL and when asked about the difficulties of teaching in a FL only one respondent in 15 indicates "the use of a FL to communicate content". The top priority concern for FNI@broad respondents is "content", either its effectiveness, accuracy, efficiency, adequacy or clarity, and language issues are only mentioned in case they interfere with content transmission, as, for example, the concern stated by a lecturer about "the correct adaptation of the message of that particular topic to the FL" (L. 3). This same focus of concern on content has been pointed out in other studies (Airey, 2012; Aguilar, 2015; Costa, 2012; Dafouz, 2011; Dearden & Macaro, 2016; Lasagabaster, 2018; Pecorari & Malmstrom, 2018, Roothooft, 2019). Interestingly, in the FNI@home, lecturers' major concern when teaching in a multilingual and multicultural environment is not content, but rather pedagogical issues and educational policy matters. A possible explanation for the divergency of approaches that separate the respondents of the FNI@home and FNI@broad on this matter was found in Barbosa et al. (2017), one of the few studies on lecturers' mobility experiences encountered (with some points of contact in this still under-researched area also found Kahn and Misiaszek [2019] and Toraman et al. [2020]). In a qualitative study with five teachers from the University of Aveiro, Barbosa et al. (2017) concluded that for lecturers teaching abroad in a mobility exchange "the ability to capture students' interest is directly related to the way content is lectured" (p. 7557). Thus, IPP lecturers' concern with content when they are teaching in English abroad, might be seen within the broader context of "student motivation", which in fact one of the lecturers in the FNI@abroad mentions in the following way: "My main concerns in preparing these classes had to do with being clear and arouse students' interest" (L. 1).

Productive skills in the FL do not seem to be a problem for respondents teaching in a FL abroad either. When asked about the methodologies they prefer using when teaching in a FL, lecturers favour dialogues with the students, debates, class discussions and case studies work. Only 20% of FNI@broad respondents mention having some difficulties with the language (compared to the 46.6% who refer content related problems), and the problems acknowledged are of a general nature, such as "speaking correctly" or the statement that "using a FL to impart content is not the same thing as doing it in the native language". There are even the testimonies of a few successful situations related to the use of the FL (improving the students' FL language skills and the use of the students' native language to break the ice at the beginning of the class), which reinforce the idea of a positive attitude related to teaching in a FL.

As for the findings of the FNI@home, they introduce some doubts into the trend that emerged from the questionnaire and the FNI@broad of a fairly positive self-perception of IPP lecturers about their English language skills for teaching. Contrariwise, the FNI@home unfolds problems related to

respondents' linguistic skills in the FL in all prompts of the FNI. Here are some of the answers that helped us reach this conclusion:

- One lecturer refers to "personal difficulties in teaching complex contents in English and the fact that not all the contents are translated into English" (L. 20) (prompt 1 and 1b);
- Three respondents in seventeen mention "the language" as the source of concern when preparing their classes (prompt 2);
- In terms of the materials and resources they use to teach in a FL (prompt 3. and 3b.) most respondents (10 out of 17) refer that they prioritise the language in which the materials are written (not the content, as in the FNI@abroad), because they wanted to, for example, "overcome language barriers" (L. 5) or because of the lecturers' low English proficiency ("my English level is not very good" (L. 4));
- When reflecting about the methodologies for teaching in a FL (prompt 4) a lecturer acknowledges using simultaneous translation, another uses L2 as a complement to the use of L1, another lecturer mentions "teaching in English, changing sometimes to Portuguese, with the slides in English" (L. 24) and another one points out personal difficulties in using the L2 when it was necessary to support students in more complex theoretical issues.
- To discuss the difficulties of teaching in a FL and strategies to overcome them (prompt 5. and 5b.) lecturers point out both general difficulties with the use of the FL ("transmitting knowledge […] in English" (L. 20), and difficulties with conversation and technical terms), and difficulties with very specific language issues, such as using two languages in class, and the translation of "some technical words" (L. 4).
- An example of a successful situation (prompt 6) was the linguistic support given by students to a lecturer to overcome translation problems in class, which indicates the lecturer's struggle with the FL;
- Finally, in terms of professional development (prompt 7), training and improving FL/English skills is considered relevant by four lecturers.

Some aspects in these results require a further comment. First, the fact that difficulties related to lecturers' FL language skills are reported more often in the FNI@home than in the FNI@broad is a strong indicator that lecturers who engage in ERASMUS teaching mobilities abroad have less concerns about their proficiency in the FL than their counterparts who teach in English at home. In a way, their voluntary application for a teaching mobility abroad, where they know that they will most probably use a FL, is already an indication about their confidence in using the language.

A topic that emerges from these results is the relevance of linguistic proficiency for teaching when using a CLIL approach. This finding perfectly fits the research that claims that there is a need to

provide lecturers with appropriate language skills when considering any CLIL teacher training action or any plans for the implementation of CLIL in HE (Pérez Cañado, 2020; Lasagabaster & Ruiz de Zarobe, 2010, among others).

Another aspect to discuss is the pervasiveness of issues related to language competence, which seem to be intertwined, more or less deeply, within all the key areas of bilingual education teaching enunciated in the FNIs, namely methodology, materials, resources, and professional development. Besides reinforcing the relevance of linguistic proficiency in bilingual teaching, and the need to attend to this factor when supporting lecturers, this evidence constitutes a good indicator that the support to be given to lecturers to teach in a FL using a CLIL approach must also go beyond language proficiency and be worked from the perspective of the attitudes, knowledge, and skills necessary to engage into and master effective CLIL teaching. In a mixed methods study about classroom practices in EMI and L1, Aguilar-Pérez and Arnó-Macià (2020) discuss what characterizes effective EMI lecturing and they argue that [EMI/CLIL] teaching quality encompasses "pedagogy, language proficiency and content expertise" (p. 154). They conclude, and I agree, that "effective EMI teaching resides in different key components that go beyond language proficiency, such as effective lecturing behaviour and personal attitude (Tatzl, 2011); or academic skills and motivation (Rose, Curle, Aizawa & Thompson, 2019)" (p.154).

Finally, in relation to the use of codeswitching/translanguaging between the native language and the language of instruction, an issue raised by lecturers who mention having used both L1 and FL/L2 in class, the testimony of one respondent who used L2/FL as a complement to the use of L1 and varied reported situations of translation of materials or resources are reported. Although this may not be a generalized practice, it was assumed by respondents to the FNI@home to find support on L1, particularly when there is a possibility of misunderstanding (e.g., technical vocabulary and more complex theoretical issues), or when they need to explain a word or expression, and they decide to translate it. Either we use the concept of "codeswitching" (Costa, 2012), in the sense of going and returning between the L1 and the L2, or "translanguaging", as a pedagogical practice used to teach and to learn (García & Wei, 2014; Mazak & Carroll, 2017; Lin, 2019) and, according to Moncada-Comas and Block (2019) "the currently more widespread term of use to refer to multilingual acts of communication and meaning making" (p.12), this is an issue that is now coming to the fore of discussion in bilingual education in general and, although not so frequently, in HE settings. The data collected in our research through the FNIs provides plenty of examples of dynamic classroom interactions, either among students or between students and the lecturer, where translation and code-switching seem to be used as strategies to foster communication, to promote the effective learning of content or even as a means to counter students' and lecturers' own language proficiency handicaps (Karabassova & San Isidro, 2020; Beltrán-Palanques, 2021). So, although research reports about some HEIs lecturers who still prefer the monolingual CLIL/EMI class (Doiz & Lasagabaster, 2017; Roothooft, 2019; Breeze and

Roothooft, 2021), it seems that the exclusiveness of the unique language in the multilingual class is at stake, and the door open to further research on the potential of translanguaging as yet another pedagogical opportunity that lecturers can capitalize on, to promote the learning and teaching process in the CLIL class. Genesee (2018), in line with Mazak and Carroll (2017), Palfreyman and Van Der Walt (2017) and Muguruza et al (2020), among others, have used data from research on bilingual education programs in HE and argue for the full use of students' and lecturers' linguistic and sociocultural repertories and for the unlocking of the potential value of translanguaging in CLIL.

### 2.2. Theoretical and methodological aspects (RSQ1.b)

As detailed in chapter five, section 2.1.2.2., respondents to the questionnaire believe that their knowledge of bilingual education policies, theories, and methodologies for bilingual education (CS2) is quite low. In fact, most respondents' answers are at the "insufficient" level (median and mode 2) for all the items, except for "principles and practices of student-centred methodologies and collaborative learning", whose scoring is comparatively higher than all the other items ($\overline{x}$=2.48, *SD*=0.720, Mdn=2.5 and mode=3).

Data related to the questionnaire's CS2 thematic block was collected in prompts 4., 5., 5b., 6. and 7. of the FNIs, which constitute half of the whole FNIs' prompts. Thus, under the umbrella theme of "theoretical and methodological aspects of bilingual education", it was possible to collect both respondents' views on bilingual education policies, theories, and methodologies for bilingual education, and also their perception of a few closely related sub-themes that cut across respondents' individual narratives and that could not have been detected through the quantitative research instrument used. A frequently mentioned sub-theme related to RSQ1.b concerns "teacher-teacher collaboration", but other topics, such as "attention to students' prior knowledge", "motivating students' participation", "time management" and "assessment" also pop into the FNI@home narratives, which suggests the participants high awareness of the some of the key issues of bilingual teaching.

The most general comment on teaching methodology that emerges from the FNIs refers to the type of approach lecturers' mainly use in the classes they teach in a FL and the two groups of respondents, teaching at home and abroad, have distinct opinions on the matter. FNI@abroad respondents seem divided between the use of teacher-centred and student-centred approaches, with part of the lecturers saying they prefer "expository" methodologies and techniques, "theoretical lessons" or the "verbal transmission", whereas the other half declares to adopt "active" and "participative methodologies" (vid. chapter five, 3.1.4. for a detailed account of respondents' narratives). As for the lecturers at home, they tend to favour the use of practical methodologies with a few respondents accounting to have introduced some changes in the methodologies they usually adopt in the classes taught in L1. (vid. chapter five, 3.2.4). This fact, on its own, may be a good indicator of lecturers'

awareness of the need to change methodologies when using a different language and eventually of their availability to engage in a CLIL/ICLHE programme.

As for respondents self-reported classroom practices, both at home and abroad, the types of activities they report to have used are very similar (vid. Table 6.1).

Table 6.1

*List of activities developed in class (FNI@home and FNI@broad, prompt 4.)*

| FNI@broad | FNI@home |
|---|---|
| • practical exercises<br>• dialogue with the students and projection of diagrams and/ or images<br>• dialogue and debate of ideas<br>• oral presentations and class discussion<br>• multimedia presentations<br>• case study discussion<br>• workshops with practical examples | • practical work/activities<br>• discussion of weekly assignments<br>• practical work with specific assigned requirements<br>• debate and exchange of experience<br>• students' sharing of knowledge in class<br>• study visits with reports and presentations in English<br>• laboratory work preceded by a theoretical presentation of the contents, often with a practical presentation. |

Overall, the examples provided showcase lecturers' effort to engage their students in interactive student-oriented activities, being it discussions and dialogues, practical exercises, comprehension checks, student-student interaction, oral and multimedia presentations, case studies discussion and workshops, laboratory work or study visits. It is to be noted that, when teaching abroad, lecturers enlarge the scope of possibilities and add "multimedia presentations", "case study discussion" and "workshops" to their list of elected activities, excluding the options of "study visits" and "laboratory work".

Respondents' preference for the use of collaborative learning methodologies and active strategies is further confirmed by their description of problematic and successful activities and strategies already used in the classes taught in a FL (prompts 5., 5b. and 6.). To the first inventory are now added other strategies and activities to support students' content learning, like "repetition of content", "extra classes/tutorial", "interactive practical exercises and real life examples to motivate students", "comprehension checks to elicit students prior knowledge", "provision of a safe learning environment in the classroom", "originality of content choice", "careful preparation of content" and "use of icebreaking strategies at the beginning of the class". A list comparable to this one is reported by Rubio-Cuenca and Perea-Barberá (2021) in the presentation of the results of a longitudinal research study (2012-2020) undertaken at the School of Engineering, University of Cádiz, in Spain, and reporting on the potential and the impact of monitoring sessions with teachers using EMI. In the report of these EMI trained teachers, the "activities they used to make lessons more dynamic [consisted in] pair work, group

work, active learning, peer feedback, cooperative work, listening, reading writing activities, projects, etc" (Rubio-Cuenca & Perea-Barberá, 2021, p. 146). Mehisto et al. (2008) also stated that the CLIL approach "involves an extra focus on student interests, peer co-operative work and the fostering of critical thinking, among other methodological strategies. These foster the learning of content and provide increased forums for discussing and otherwise communicating about content" (p. 105). Moreover, much of the support to language learning in CLIL classes has "little to do with specific language-learning activities or support materials" (Mehisto et al., 2008, p. 105). The support provided by lecturers to students may come in different guise and forms, and it can be the creation of a psychologically and physically safe environment; the consistent use of one language; the acceptance of the use of students first language at an initial stage of learning; speaking slowly and articulating clearly; using an appropriate level of language; using facial expressions, gestures and pictures to reinforce meaning; repeating; making language, themes and content relevant and of interest to the student; providing a variety of language models; creating a wealth of opportunities to use the language; communicating; creating a variety of opportunities to develop all foreign language skills - listening speaking reading and writing; working systematically to build equal status for the language used in the school; setting high but realistic expectations and finding ways to recognise students effort and success (Marsh et al., 2008, pp. 105-109).

Thus, considering Marsh et al. (2008) listing, it seems that, despite IPP lecturers' lack of training in methodologies for bilingual education, their self-reported classroom practices already point to a considerable use and practice of "student-centred methodologies" and language support strategies. This finding is consistent with the results of the questionnaire as item "principles and practices of student-centred methodologies and collaborative learning", got the highest score in CS2 thematic block, and indicates a reasonable confidence of lecturers in this area.

But, although respondents' high confidence in their knowledge about the "*practices* of student-centred methodologies" appears to be confirmed, there might be some doubts on what concerns their knowledge about "*the principles*" guiding these methodologies. For example, a lecturer refers the adoption of "expository methodology, with the use of practical exercises, which could guarantee the active involvement of students in the teaching and learning process" (FNI@broad, prompt 3., L. 3), and another mentions "expository lectures" with the presentation of materials and examples (FNI@broad, prompt 3. L. 4). The seemingly lack of theoretical knowledge about the principles of *expository methodologies* and the passive/receptive pedagogical practices usually associated with them (and not 'active practices', as the ones they describe), pinpoints the knowledge of theoretical and methodological aspects of bilingual education as one of the weaknesses of lecturers' current situation and a need to be supplied by adequate training. This evidence endorses the general findings of the questionnaire, which indicated IPP lecturers' overall weak self-perception of their knowledge of theories and methodologies for bilingual education (CS2).

Prompts 5. and 5b. of the FNIs also provide significant contribution to answer RSQ1.b and expand our understanding of IPP lecturers' present knowledge of the principles and methods for bilingual teaching. The trend observed in respondents' answers to prompts 1.,1b, and 2. (vid. Chapter six, 1.1.), remains consistent and the narratives of the FNI@home are mostly focused on difficulties related with the FL, whereas the narratives of the FNI@broad are predominantly focused on content issues (vid. Table 6.2 for details).

Table 6.2

*Distribution of the typology of difficulties encountered by respondents to the FNI@home and FNI@broad*

| **Prompt 5: "difficulties in teaching classes in a FL"** | | | | |
|---|---|---|---|---|
| | Difficulties related with the FL | Difficulties related to content teaching | Difficulties with time management | Technical difficulties |
| FNI@home | 58.8% (10/17 respondents) | 17.6% (3/17 respondents) | (1/17 respondents) | X |
| FNI@broad | 20% (3/15 respondents) | 46.6% (7/15 respondents) | x | (1/15 respondents) |

Paradoxically, the difficulties experienced by lecturers when teaching in a FL, both at home and abroad, which indicate their lack of theoretical training in bilingual teaching (vid. Table 6.3), these difficulties are simultaneously the evidence of these lecturers' accurate understanding of their current situation and of their needs in terms of methodological training for bilingual education. The list of difficulties pinpoints some of the key issues of bilingual teaching, and it anticipates some of the topics that could be dealt with in a CLIL training programme for HE lecturers.

Table 6.3

*Inventory of themes in prompts 5 and 5.b (FNI@home and *FNI@broad)*

| | **Difficulties of teaching in a FL** | **Strategy used to overcome the problem** |
|---|---|---|
| **Content related difficulties** | - *difficulty in adapting content to the audience** | - *interactive discussion*<br>- *consensus building approach*<br>- *collaborative work with host lecturer*<br>- *materials designed for a specific audience* |
| | - *lack of information about students' prior (content) knowledge* | - *collaborative work with host lecturer*<br>- adaptation of content through simplification or even replacement of content topic |

| | | |
|---|---|---|
| | - difficulty in dealing with the diversity of students' prior knowledge | - allocating students to different level groups to better support the development of competences |
| | - *difficulty in motivating students to learn content* | - *practical exercises*<br>- *dialogue with the students*<br>- *positive, interactive attitude with the students* |
| | - difficulty in contextualizing and illustrating content with examples | - attention to material selection with the provision of online support and international examples |
| **Language related difficulties** | - *general difficulties*<br>- general difficulties<br>- *difficulty in the translation of technical vocabulary*<br>- difficulty in "transmitting knowledge […] in English"<br>- initial difficulty with the FL | - *communicating in the FL, despite teachers' low proficiency in the FL*<br>- *asking for support from other lecturers*<br>- implementing teaching strategies to support students' content learning: repetition of content; repetition of practical classes; extra classes<br>- implementing teaching strategies to improve and support lecturers' teaching practice: improving the PowerPoints of the theoretical presentations; occasional use of content manuals and articles in English to better support students<br>- investing in teachers' professional development: FL private conversation classes and practice of technical vocabulary |
| | - difficulties derived from the use of two languages in class<br>- difficulties because of the inexistence of materials in the FL and the need to translate them | - design of specific teaching/learning materials with visual support<br>- translation of materials [into English] |
| | - difficulties in motivating students to use the FL in class and "getting the students to speak" | - motivating students to use English as the language of communication in class<br>- negotiating with students, which contents to be taught in English<br>- more teacher – student interaction<br>- persistence in the promotion of the use of the FL in class (despite students' little motivation and lack of effort to interact in the FL) |
| **Class time management** | - difficulty in managing and planning class time because of more time-consuming tasks: analyse weekly assignments; present and discuss them each week for assessment purposes | - more accurate time planning for content teaching in a FL<br>- teacher-student collaboration |
| **Technical issues** | - *difficulties with unknown software and laboratory materials* | - *asking for support from other lecturers* |

* In italics: data from FNI@broad; regular text: data from FNI@home

In general, and considering the different contexts, no significant disparities or novelties were found in the confrontation of the various types of difficulties encountered by IPP lecturers when teaching in a FL and the issues or concerns identified in the already significant literature which has examined teachers' attitudes, experiences, and challenges, aiming at facilitating the introduction of CLIL or English-taught programmes in HEIs (Aguilar & Rodríguez, 2012; Aguilar, 2015; Ball & Lindsay, 2013; Cots, 2013; Dafouz et al., 2007; Dafouz et al., 2014; Fernández-Costales & González-Riaño, 2015; Fortanet-Gómez, 2012; Guarda & Helm, 2016; Macaro, 2018; Morgado & Coelho, 2013;

Pérez Cañado, 2021; Piquer-Píriz & Castellano-Risco, 2021; Roothooft, 2019; Rowland & Murray, 2019; Tatzl, 2011; Werther et al., 2014).

Respondents' narratives of successful experiences of teaching in a FL (prompt 6) add a few analogous activities to the list in (vid. also Table 6.1.) (e.g., real life examples to motivate students; comprehension checks to elicit students' prior knowledge; careful preparation of innovative content; creation of a safe learning environment in the classroom using icebreaking strategies at the beginning of the class), though with substantially less examples, as many lecturers decided to leave the prompt blank. The report of more cases of difficulties than successful ones, might, eventually, indicate respondents' strong perception of the high demands required for teaching in a FL.

In this study, it was possible to benefit from the high potential of FNIs that were used as research instrument, and learn simultaneously about lecturers' attitudes, experiences, and challenges when teaching in a FL and about the strategies they used to tackle those problems. The possibility of pairing, as a block, the pair *problem/solution* of teaching in a FL (vid. also Table 6.1. List of activities developed in class (FNI@home and FNI@broad, prompt 4) may provide, in my opinion, a rich insight into these lecturers' current situation, into their beliefs about general teaching and educational principles, and it may contribute with abundant data and examples to the planning and design of future CLIL training programs. A fine-grained analysis of this data also provided a deeper understanding into respondents' beliefs about the theories and methodologies they favour when teaching in a FL (RSQ1.b). In general, in their FL classroom self-reported practices, IPP lecturers seem to lean towards the use of pedagogical and methodological approaches that are mainly focused on students and their needs, as exemplified in the following listing of reported situations (vid. also Table 6.1. List of activities developed in class (FNI@home and FNI@broad, prompt 4):

- they use practical exercises and active learning strategies that promote discussions and dialogue;
- they want to make sure content is learned, so they repeat content or give extra classes, they collect information about students' prior knowledge, allocate them to different level groups as needed, to better support the development of their competences and, when necessary, adapt content to their needs;
- they motivate students to learn using a positive, interactive attitude, sometimes negotiate with them the contents to be taught in English and persist in the promotion of the use of the FL in class;
- they scaffold students' difficulties with the FL by customizing teaching materials, through the design of specific teaching/learning materials with visual support, and by providing online support and international examples to students;

- they invest in their own professional development to improve the quality of their teaching practice, both in terms of the FL proficiency (e.g., they attend private conversation classes and practice technical vocabulary) and in terms of materials design (improve their own PowerPoints and use of content manuals and articles in English).

Interestingly, only the respondents to the FNI@broad bring in the topic "collaboration among colleagues", reporting a very productive use of this strategy. In fact, they describe to have used it to solve four different types of situations, namely, difficulties in adapting content to a group of students they don't know; need to collect information about students' prior content knowledge; difficulty in translating technical vocabulary and in the cases they were not familiar with the software or the laboratory materials they are going to use. The fact that respondents to the FNI@home never mention this type of dialogue and collaboration can be seen as a sign of a certain resistance from these lecturers to engage in the different forms of collaborative work that frequently occurs within a CLIL approach framework in HEIs. Lo (2020) lists, for example, peer coaching, partnership teaching, collaboration between mainstream teachers and special education consultants, and reminds that "teaching has long been regarded as an individualistic, isolated profession, in that teachers tend to preserve their power, autonomy and privacy in their own classrooms" (p. 29) but, she argues, ""teacher collaboration", has been encouraged because it is believed to be an important element for implementing education innovations, enhancing school effectiveness, facilitating student learning and promoting professional development" (Lo, 2020, p. 29). Pavón Vázquez & Ellison (2013) also argue that "the success of programmes involving the teaching of content through another language does not rest solely on whether the teachers responsible have a high level of linguistic and subject competence, but also on the collaboration between those teaching content subjects and languages" (p.70). Thus, the silence about this topic in the narratives of the FNI@home does not only go counter one of the key tenets for the successful CLIL approach implementation in HE (Lyster, 2007, 2017; Wallace et al., 2020), but it is not aligned with the findings from other studies, which report very positive feedback from teachers, who "appreciate the opportunity to get together with colleagues from other disciplines and to discuss and practise issues that combine discourse awareness with their own language improvement and an increased awareness of methodological possibilities" (Ball & Lindsay, 2012, p. 59; Macaro et al. 2016; Lasagabaster, 2018; Doiz et al., 2019). This finding is relevant for this needs analysis study, as it highlights this topic as significant for future CLIL training programs.

A high percentage of respondents (46.6%) who have been teaching in a FL abroad express "difficulty in adapting content to the audience", either because of cultural differences, or because of the specificity of the topic to be covered (mental health), or because of difficulties in finding the right materials for that audience. This type of problem, here solved through "interactive discussion", "consensus building approach", "collaborative work with host lecturer" and with "materials designed for a specific audience", reveals lecturers' lack of tools and lack of preparation to deal with multicultural

audiences. Barbosa et al.'s study (2017) reports a similar situation of difficulty in adapting and using flexibility skills to overcome the situation.

The thematic block CS2 of the questionnaire includes two items on internationalisation policies of HEIs, namely, one about the Portuguese policy for internationalisation and bilingual education in HE, and the other on IPP internationalisation strategies. Lecturers' self-perceived knowledge about IPP internationalisation strategy is significantly higher ($\overline{x}$=2.48) than the information they believe they have about the Portuguese policy for internationalisation and bilingual education in HE ($\overline{x}$=2.11). However, both scores have a mode and median of two, which does not indicate much familiarity with the topics. In fact, 56.6% of respondents say they have an "insufficient" knowledge of the Portuguese policy for internationalisation and bilingual education in HE, and 16% say they have no knowledge about it. In terms of IPP internationalisation strategies, there are 46.2% lecturers who say they have "insufficient" information about it and 5.7% who have no information about it. In the FNIs, both at home and abroad, these issues are brought about under prompt 7, on "professional development". Globally, the narratives evidence lecturer's basic knowledge about the issues, considering that their focus is almost exclusively on the ERASMUS programme, particularly the duration, frequency, and scope of the stays abroad, during teachers' mobility. Respondents are also critical about such issues as the lack of support provided by IPP to the lecturers who participate in Exchange Mobilities (FNI@abroad), and about the coordination of the ERASMUS programme and organisational issues, particularly the lack of information flow about incoming students (FNI@home). In general, respondents also take stand about IPP language policy, when they regret not to be offered (for free) the opportunity to attend FL courses, or when they refer that there should be more incoming ERASMUs students at IPP and indirectly point to the apparent weak attractiveness of IPP for incoming students.

### 2.3. Materials and resources (RSQ1.c)

Materials and resources for teaching in a FL seem to be a challenge and a difficulty for IPP lecturers. The three items in CS3 block of the questionnaire inquired lecturers about the use of materials and resources for bilingual teaching and the results for all the items are very similar, with mean scores around $\overline{x}$=2.50 and all the items with median and mode scores of "2". These scores show that, in general, IPP lecturers are not very confident about their knowledge of the principles for producing authentic materials to teach content in English/ FL, for adapting materials to teach in English and for using online reference materials for teaching their content specialised classes in English. In percentage terms, more than half of the total respondents feel they are not adequately prepared to accomplish this key teaching practice, when teaching in a FL.

The FNIs also included 2 prompts (3. and 3.b), which inquired directly about respondents' opinions and experiences with materials and resources for teaching in a FL, but the issue is also brought

about by lecturers in the FNI@home and in the FNI@broad under other topics, namely, attitudes towards teaching in a FL and concerns related with it, difficulties of teaching in a FL, successful strategies used and professional development for bilingual teaching. The pervasiveness of the topic suggests its relevance for the lecturers and its centrality in bilingual teaching practice. Pérez Cañado (2016a), among others (Aguilar, 2017; Dafouz et al., 2007; Airey, 2012) had already pinpointed the lack of CLIL materials and the poor access to materials in English and Information and Communications Technology (ICT) availability as some of "the main hurdles teachers currently have to face" (Pérez Cañado, 2016a, p. 269).

Supported by their classroom practice, FNIs' respondents seem to have a very clear opinion about the characteristics of ideal pedagogic materials for bilingual teaching, particularly in terms of content presentation and form. According to FNIs@broad respondents, the ideal materials for teaching in a FL would be clear, concise, simple, appropriate to the context, objective, perceptible, informative, and explicit in terms of content information and with an attractive, appealing, dynamic, visual and well-organized format. Respondents at home also mention specific attributes of good pedagogic materials (up to date, interactive, objective, easily understandable, of easy use by the students and with more graphical elements and images), but for most of them the key issue is the language in which the materials are written. Lecturers favour materials in English, either translated into English, already written in English or accessible in both languages (L1 and the FL).

Interestingly, lecturers teaching in a FL at the home institution raise more questions related with materials and resources than respondents teaching abroad. Maybe an explanation for this finding is that, when teaching in a FL at home, lecturers are dealing with a whole semester teaching and with all the problems and situations that can come up during that period, whereas lecturers abroad only have to think about preparing a class or a unit, and their priorities when doing it are different.

Lecturers at IPP (FNI@home) mention that when they think about teaching in a FL, they are aware of the need to adapt materials to the language level of the students and of the need to translate those materials. When preparing a class in English, one of lecturers' top concerns are the materials, particularly the need to provide materials in English for the students and the concern about the quality of the translation and its accuracy. Pérez Cañado et al. (2021) have recently signposted again the lack of materials for bilingual teaching as "one of the major roadblocks to successful differentiation in CLIL" (p.5) and they also conclude that "teachers feel deterred by the challenge inherent in having to find, create, design, or adapt diversity-sensitive teaching materials and this consequently becomes a major niche to be filled" (Pérez Cañado et al., 2021, p. 5). IPP lecturers' opinions also resonate in Lourenco and Pinto's (2019) study in which the inquired lecturers underlined the extra effort needed to teach in a FL, "as there is often a need to translate concepts from English to Portuguese, which is 'exhausting and reduces effective class time [,,,]. Furthermore, as another teacher adds, 'the cognitive and communicative processes and the construction of resources for teaching, among others, take more time

and may be flawed'" (p. 262). The many different types of problems lecturers need to overcome in order to produce or adapt materials for teaching in a FL, may thus be an important detrimental factor for bilingual teaching implementation in HEIs. All the more so, when, as in the case on IPP lecturers, the list of attributes for the design of ideal bilingual teaching materials is already so extensive and demanding. Doiz et al.'s (2019), have also identified the problem of lecturers self- perceived inability to deal with language problems and the acknowledgement, among other issues, of the greater amount of effort demanded by having to prepare the lessons in English, which, as concluded in their study, seem to lessen their self-confidence.

The theme "materials and resources" for bilingual teaching was also approached in the FNIs from the perspective of the criteria adopted for their selection. The range of reasons and the rationales presented is broad and it is certainly also revealing of the concerns and high involvement of the lecturers in the teaching process. In the FNI@broad, lecturers consider that materials and resources for bilingual teaching must enhance the effectiveness and interactivity of the learning process and be adapted to the class or student's language proficiency. Moreover, the materials selected for bilingual teaching should transmit knowledge, facilitate learning, stimulate reflection and discussion, assist teacher-student interaction, keep, guarantee or capture "students' interest", cater for the problems of heterogeneity in classes and provide support to students' content comprehension, in case of teachers' failure to pass the information in the FL. In the FNI@home, lecturers select materials firstly because of the content presented (with images; to apply acquired competences; to develop skills); then because of the language used (adapted to the lecturer's and student's level of English) and finally because of the teaching strategies adopted. The more theoretical and philosophical approach presented by the FNI@abroad respondents, gives place to a very practical and focused list of material selection criteria for teaching in a FL presented by the lecturers who teach in a FL at the home institution. All these lecturers, either privileging one approach or the other, would certainly benefit from learning about a methodological and pedagogical framework for material design and production. Pimentel-Velázquez and Pavón-Vázquez (2020) reflect on the pedagogical dimension related to the use of materials and resources in English-Taught Programs in HE and express the idea that

> perhaps one of the most relevant aspects in relation to the materials required for this type of education is the need for teachers to acquire the necessary knowledge to develop their own teaching materials, which would also include the ability to adapt existing materials, a fact that frequently occurs in early nursery and primary education.
>
> Pimentel-Velázquez and Pavón-Vázquez, 2020, p. 325

### 2.4. Ongoing professional development (RSQ1.d)

Lecturers' perception about their current situation concerning professional development for bilingual teaching is very pessimistic and their "weakness", when compared to the other thematic blocks of the questionnaire. The mean values of the items in CN4 thematic block range from $\overline{x}$ =1.56 to $\overline{x}$ =1.85 and convey lecturers' perception that their ongoing professional development in bilingual education is clearly 'insufficient'. The only item that lecturers seem fairly more confident in ($\overline{x}$ =2.04) is "the attendance of teaching methodology upgrading courses". This is probably already the consequence of a few local institutional initiatives – workshops, seminars – for the promotion of innovative educational approaches such as "Task-based Learning", "Problem-based learning", CLIL and "Flipped classroom", among others.

FNIs findings reinforce the results of the questionnaire with some respondents (both abroad and at home) pointing out the lack of FL training courses offered by IPP, while highlighting the relevance of attending FL training courses (not only English courses) to improve their FL skills. Besides the lack of language training courses, data collected through the FNIs also made it possible to identify respondent's lack and need of training in pedagogic materials design for bilingual teaching and in technological media support to classes.

Moreover, some malfunctioning situations and flaws identified by lecturers in IPP's internationalisation policy and practices (disorganisation, lack of support to prepare materials, IPP inability to attract more ERASMUS students to the institution) may also justify the apparent non provision of ongoing professional development for lecturers. This is certainly a problem, because, as noticed by Beltrán-Palanques (2021, p.65) "predictably, the lack of both appropriate EMI support and opportunities for professional development may result in lecturers feeling ill-prepared to engage in this phenomenon".

Although teachers' professional development depends much on their own initiative and will to engage in the training, it is the responsibility of the HEIs to make the offers available to lecturers, Recently, different authors have identified a dearth of offer of courses, either at pre-service or in-service levels, aimed at assisting lecturers teaching in a FL on how to implement effective courses (Lasagabaster 2018; Farrel, 2020; Hartle, 2020). Farrel describes the problem acknowledging that "a gap exists between the top-down pressure to incorporate EMI programs and the bottom-up EMI teacher implementation of these programs without any real institutional support or clear pedagogical guidelines to follow" (Farrell, 2020, pp. 277-278).

Dang et al. (2021) in a systematic review of published articles focusing on professional development or learning opportunities for lecturers teaching in English in HE found "evidence of misalignments between EMI educators' needs, stemming from complex EMI demands and challenges, and PL [Professional Learning] opportunities available to support them […]" (p. 13). The authors'

review underlines some key findings on professional development for lecturers teaching in a FL in HE, namely, that lecturers would benefit from English language professional development courses to become more confident with their English or to meet certification requirements; that non-language-related aspects of EMI teaching should be addressed and there should be a focus on improving EMI lecturers' pedagogy as key to EMI success, together with language-related programmes; that most EMI lecturers prioritise content teaching over language support, and do not consider it their role to help EMI students develop English language proficiency; that the complex demands and responsibilities placed on EMI lecturers points to the need to provide support to those who engage in the task of implementing it.

In the same line of thought, Dafouz (2018) presents three suggestions for what she calls a "transformative" teacher education (p. 550), in which the planning of professional development programmes should: (1) enhance lecturers' language proficiency and simultaneously "incorporat[e] pedagogical strategies and reflective practice closely contingent on the specific Academic Disciplines they teach" (p. 550); (2) support lecturers "in reshaping their identities as *users* rather than as 'perpetual' learners of the foreign language" (Dafouz 2018, p. 550, emphasis in the original); and (3) should be "fully integrated in the institutional structure" (Dafouz 2018, p. 550), and thus be in a position to take its specific contextual demands—linguistic, cultural, academic— into account.

Other research studies have pointed out that lecturers teaching content in a FL would benefit from multifaceted professional development programmes, rather than programmes exclusively based on language learning (Wilkinson 2005; Ball and Lindsay 2013; Doiz et al. 2014; Costa 2016, 2017; Dearden 2014; Borsetto & Bier, 2021).

### 2.5. Lecturer's views of their students' language skills in English (RSQ3)

Overall, lecturers view their students' linguistic skills in English as barely adequate for attending classes taught in English. The items in CS5 thematic block of the questionnaire have a mean value ranging between $\overline{x}$ =2.14 and $\overline{x}$ =2.47, with negative mode and median values (i.e., 2). Students' "knowledge of the FL culture" is the item lecturers perceive as the students' weakest skill, and "listening comprehension skills in the FL" is the item lecturers believe students are slightly better prepared.

Lecturers' views on students' language needs constitute one of the sub-themes identified in the FNI@home and, in alignment with the findings of the questionnaire, the general attitude of lecturers is pointing to Portuguese students' serious linguistic difficulties in English ("most students cannot speak English" or "the difficulty that Portuguese students have in assimilating the lessons in English"). Eventually, students' lack of English language proficiency, as perceived by the lecturers, may be the cause for some students to reject speaking English ("the needs of the majority of the class (95%), who

did not want lessons in English" (L. 8)). The right not to be taught in a FL is even brought up by a lecturer.

Lecturers' awareness of and difficulty with different levels of students' language proficiency in class is frequently mentioned in the FNIs and voiced as challenges for respondents. This same type of problem has been reported in other studies (Tatzl, 2011; Aguilar & Muñoz, 2014). In Doiz et al.'s (2019) study on lecturers' beliefs and practices, the authors report that "the differences in the 'students' English proficiency' level also condition and hinder the development of the classes. Lecturers observe significant differences among their students' competences and skills in English, complicating their teaching practice" (p. 159).

In an indirect way, the issue of student's language proficiency is also raised when students' attitude to the FL, namely their motivation to use it, is seen as a difficulty by some lecturers ("making the [Portuguese] students make an effort to understand [the FL]" (L. 18), "getting the students to speak" (L. 19)). Lecturers' answer to this difficulty is persisting in the use of the language, despite students' little motivation and lack of effort to interact in the FL. On the other hand, there are other statements by lecturers that refer "students' (good) level of English", materials "written in English because that is the universal language, and that Portuguese students can usually understand as well", or even a situation when a lecturer acknowledges the difficulties with the English language and states that he/she "asked our Portuguese students, who are fluent in English, for support in translating what I wanted to convey".

Students' limited English proficiency has been identified in other studies on a type of bilingual education (Dearden, 2014; Doiz et al., 2013; Fortanet-Gómez, 2012) and this factor is said to be one of the most recurrent obstacles to the implementation of bilingual teaching (Costa & Coleman, 2013). Doiz et al. (2019) found that "with respect to *the impact of English on the development of the classes*, our participants clearly established a direct relationship between the students' command of the language and the quality of the lessons: the lower this proficiency is, the harder it is for the lecturers to perform comfortably." (p. 30).

### 3. IPP lecturers' self-perceived training needs for teaching in FL/English (RQ2) (RQ8)

The general focus of this section is the discussion of the findings related to lecturers' self-reported training needs for teaching content in English/FL. The results of the TN dimension of the questionnaire have been presented (Chap. 5, 1.2), both in an overall perspective and *per* thematic block. Now, the results of the TN dimension of the questionnaire will be discussed together with the findings of the FNIs related to lecturers' perceived training needs. It should be noted, however, that except for prompt seven of the FNIs, which elicited lecturers' opinion on their future professional development wants, and that some lecturers used to mention their own training needs, in the other prompts of the FNIs only occasionally and incidentally are found references to training needs, although some

inferences can be made about it from the narratives. Thus, the contribution derived from the FNIs to most of the themes here under analysis will be scarcer in this section.

The key idea in this respect (RQ2) (RQ8) is an across-the-board demand for increased training, which, in view of our research, can be a promising anticipation of IPP lecturers' possible willingness to engage in future CLIL/ICLHE training. Overall, a strong negative correlation between respondents' perception of their current situation and their training needs was found with slight variations within the four thematic blocks: TN4 (professional development for bilingual teaching) is the area perceived by lecturers as the one they need further training, and TN1 ("linguistic and intercultural competence") the one in which they feel more confident, and in need of less training.

Taking into account the results of all items of the four thematic TN blocks, it is possible to compile a preliminary catalogue finely tuned to the areas in which lecturers feel more deeply the need for training and to which priority should be given in future CLIL/ICLHE training development programmes. This idea endorses one of Pérez Cañado's (2021) key findings when she says that "adequately tailored courses are the lynchpin for successful EMI teacher education" (p. 188). The key areas in need of training are:

- pronunciation in English and oral communication skills in English;
- knowledge of the theoretical basis and features of the main bilingual models and knowledge of the CEFRL;
- principles for producing original materials for teaching content through English and principles for adapting authentic materials to the teaching of content through English and
- individualized linguistic and methodological support to teach in a foreign language, courses on EMI/CLIL, online teacher training courses on the use of a foreign language to teach content and linguistic upgrading courses (the last three items all with the same value $\bar{x}$ =2.86).

Pérez Cañado (2021) draws a broader programme of the main areas to be considered for an adequately resourced professional development programme which would

> involve familiarising teachers with the theoretical underpinnings of bilingual education, escalating the language focus (i.e., CLIL-ising EMI, as there is a need especially for EAP, BICS, or updated vocabulary for communicative interaction in the EMI classroom). This includes guidelines to step up student-centred methodologies and materials design (particularly for diverse learners), providing micro-teaching scenarios to learn from the best practices of others, and enhancing support in the form of feedback and counselling.

Pérez Cañado, 2021, p.186.

In contrast, "reading comprehension skills for specialized bibliography in English" ($\bar{x}$ =2.37) and "listening comprehension skills in English" ($\bar{x}$ =2.50), in TN1, are competences which lecturers do not see as in need of much further training. In fact, these are the only two items out of the twenty-one in the TN dimension whose mean score was equal or below $\bar{x}$ =2.50.

These general results are consistent with studies on teachers' beliefs in HE (Fernández Costales & González Riaño (2015), Pérez Cañado, 2016a; 2016b; Piquer-Píriz, & Castellano-Risco, 2021), but do not fit another strand of studies which found evidence that lecturers' interest is in their linguistic rather than methodological training (Aguilar, 2015; Aguilar & Rodríguez, 2012; Fortanet-Gómez, 2013). Ellison et al. (2017), for example, found that when considering their training needs, university teachers tend to prioritise linguistic problems despite the on-going efforts to raise consciousness of methodological issues in those engaged in teaching in a FL. Ellison et al. point out that, "in fact, there was a sense among teachers that better language proficiency meant better teaching in English" (Ellison et al., 2017, p.73), which suggests that they believe that their teaching experience in L1 validates their methodological skills for teaching in another language, too. Contero et al. (2018) refer that "the transition from L1 monolingual teaching to CLIL teaching tends to be interpreted by teachers as a process of translation rather than adaptation" (p. 123). An already consolidated number of research studies point differently and stress that despite linguistic competence relevance, developing lecturers' pedagogical competence is fundamental for teaching content in a FL (Dafouz 2011; Sánchez Pérez & Ramiro, 2017; Pérez Cañado, 2018; O'Dowd, 2018; Macaro et al., 2019).

### 3.1. FL/English language training needs (RSQ2.a)

Globally, in view of the questionnaire results, lecturers' self-perception of their language training needs for teaching in a FL/English are seen as "considerable". Singled out from the seven items under question in TN1, there are two which have a mode of "2" and a mean score of or below $\bar{x}$ =2.50, namely "reading comprehension skills for specialized bibliography in English" ($\bar{x}$ =2.37) and "listening comprehension skills in English" ($\bar{x}$ =2.50). Reading specialized bibliography and general listening skill are competences that lecturers feel they already master, and for which training needs are not so pressing. This result is totally coherent with lecturers' opinion about their current situation (questionnaire's CS1 thematic block), where they pinpointed these two items as the areas that they felt more comfortable with (i.e., $\bar{x}$ =3.18 and $\bar{x}$ =3.03), at "adequate" level. However, it is in the contrast between lecturers' general self-perception of their language competence for teaching in a FL/English, and their view of their training needs to teach in it, that a more thorough perspective can be achieved. Figure 6.1. presents a radar graph that makes more visual this comparison by depicting the contrast between the mean scores of each item in CS1 and TN1, while offering a global perspective of all the items of both dimensions:

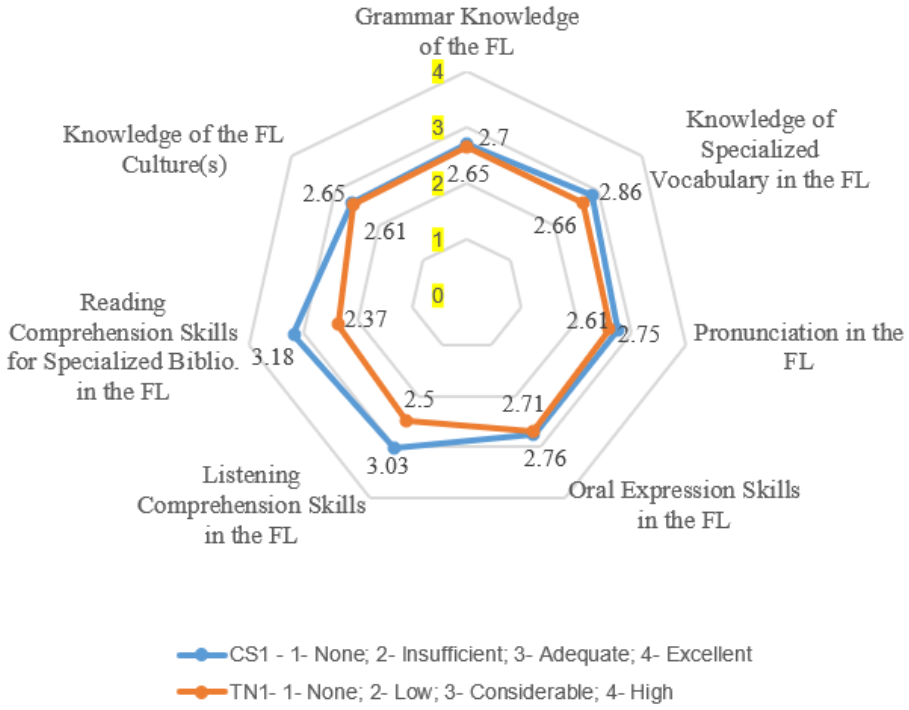



*Figure 6.1.* Radar Graph – CS1 vs TN1 ($\bar{x}$)

There is almost a perfect overlap between lecturers' perception of the current situation and the acknowledgement of their training needs on it, suggesting that linguistic skills are not seen as a top priority in a future training for teaching in a FL/English. As noted before, receptive production skills, i.e., reading and listening, stand out in this picture because lecturers believe they have mastered them and the need to receive training on them is significantly lower.

However, lecturers' apparent substantial confidence in their language skills for teaching in a FL, to the point of considering two skills as in no pressing need for training, is to some extent disputed by the following:

a) the lecturers' own expressive demand, when questioned about professional development needs (CS4), for online teacher training courses on the use of a foreign language to teach content (75.4%) and for linguistic upgrading courses in the FL (74.5%); and

b) lecturers' many references, in the FNIs, to difficulties about using a FL to teach content; about FL use in class and the issues of proficiency, adequacy, terminology that are raised; translation problems and language issues in the preparation of teaching materials and the request to IPP for (free) language upgrading courses to overcome linguistic hurdles (vid. chapter 5, 2.1. and 2.2.).

Teachers' tendency to "harbor a quite self-complacent view of their own language skills", mentioned by Pérez Cañado (2020, p. 8), seems here evident in the contrast between lecturers' awareness of their language skills and their perceived training needs on them, approached from a broad perspective. This

conclusion can also justify a different framework, to the preparation and implementation of any FL language support to be included in a teacher training programme on bilingual teaching.

### 3.2. Theoretical and methodological training needs (RSQ2.b)

Globally, respondents' self-perceived needs on theoretical and methodological training for teaching in a FL are scored as "considerable". These results seem to be consistent with the lecturers' self-perceived low knowledge about bilingual education policies, theories, and methodologies for bilingual education (CS2). The significant negative correlation found between CS2 and TN2 thematic blocks (vid. chapter 5, 1.4) suggests that lecturers, in coherence with the general low self-perceived experience on these topics, acknowledge the need for training on them (Figure 6.2.).

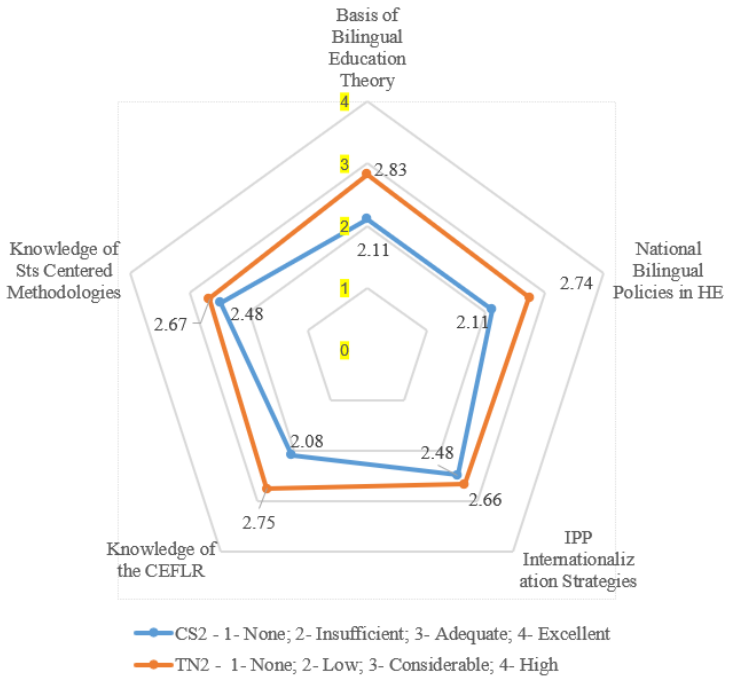



*Figure 6.2*. Radar graph - CS2/TN2 ($\bar{x}$)

Out of the five items under scrutiny, there are two topics that lecturers seem to be more confident in and in less need of training, namely, "principles and practices of student-centred methodologies and collaborative learning" and the "internationalisation strategy of IPP". These results do not come as a surprise, because in the FNIs, both at home and abroad, lecturers extensively recounted about their current teaching practices with different methodologies (student-centred and more teacher centred) in classes taught in a FL/English and they voiced out their opinions about various aspects of IPP internationalisation policy, mostly about ERASMUS programme (vid. Chapter 5, 2.1. and 2.2. and Chapter 6, 1.2). Lecturers' evidenced familiarity with these matters is probably the reason for the lower training need acknowledged in these two areas.

These results are on par with findings of other studies highlighting the general idea that training needs on methodological aspects, and theoretical foundations of CLIL/EMI are considerable (Ball & Lindsay, 2013; Pérez Cañado, 2016a; O'Dowd, 2018; San Isidro, 2021).

In this regard, Pérez Cañado (2016a) reasons that these results are "clearly one to which enhanced attention needs to be accorded in future teacher training courses" (p. 278). More recently, reporting on the findings of another study on EMI at tertiary level, Pérez Cañado (2020a) also concludes that there is a lack of knowledge about the theoretical underpinnings of EMI and, considering a specific teacher education proposal to address the chief areas in need of attention, she underlines that "methodology equally needs to be a focal point, particularly in terms of the gamut of student-centred methodologies and types of groupings which should be fully integrated into EMI teaching." (p.20). The implications taken from these studies by Pérez Cañado for future teacher education proposals are relevant for this research, considering the similarities found with some of the results of this research.

### 3.3. Materials and resources training needs (RSQ2.c)

For the most part, IPP lecturers perceive their need for training on "materials and resources" for teaching in a FL/English as considerable or high, with only a minority (between 25% and 26%) considering it low or expressing no training needs whatsoever on these issues (between 6 and 8%). The strong negative correlation found between the perceived knowledge about the topic and the need for training on it is quite consistent in relation to all the items of this thematic block. It seems, however, that lecturers feel the need for training on how to produce original materials for the teaching of content through a FL/English as sharper than the need for training on how to adapt authentic materials, or on to use online reference materials for the teaching of content through a FL/English (Figure: 6.3.). However, the difference between the results of the 3 items is so small that it should not be deemed as relevant.

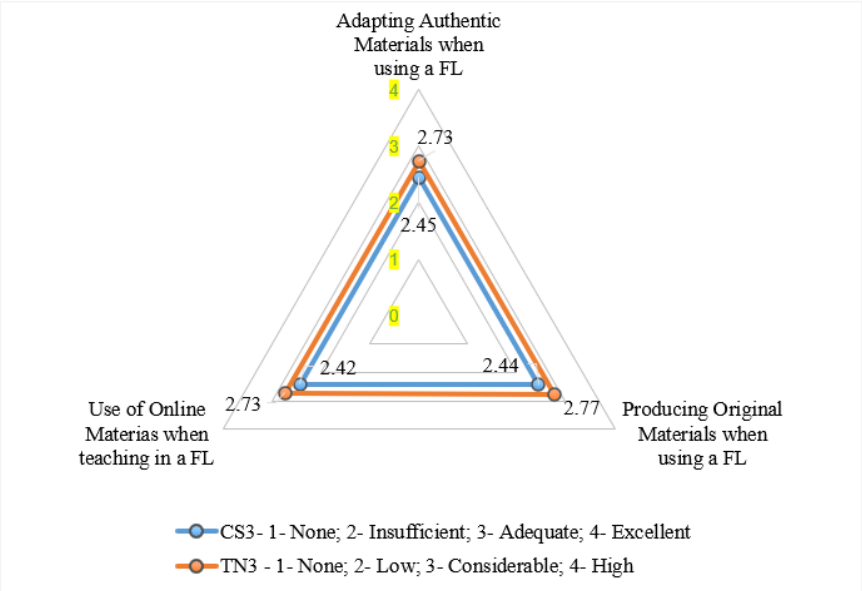


*Figure 6.3*. Radar graph CS3/TN3 (Đ).

Considering that the design and development of didactic materials for teaching in a FL/English is yet another relevant component of the high linguistic and pedagogical demands now falling on the content lecturer teaching in a FL/English, it is understandable that the training need on how to properly design and develop didactic materials is here acknowledged by lecturers as considerable. Ball (2018) argues that "one of the greatest hurdles facing CLIL implementation involves materials provision and design" (p. 222) and points to "the lack of availability or practicality of CLIL materials [which] has often been documented throughout Europe, together with the absence of clear-cut guidelines for the oftentimes daunting task of original material preparation" (p. 222).

In the FNIs, some lecturers mention that they have used materials taken from authentic sources, and many have resorted to the translation of materials they had already used in class. Lecturers' narratives also report difficulties to adapt content to the audience; difficulties to cater for the diversity of students' prior knowledge and the attempt to contextualise and illustrate content with examples (vid. Chapter 5, 2.1.3 and 2.2.3). These concerns or difficulties are certainly also related and extended to materials design and development, considering lecturers' concern with the need to adapt existing materials, or to design original ones that would fit the needs of the students both across the diversity of the different contexts and while trying to cater for the diverse types of learners.

In this thematic block, the results of this study continue to accompany the results reported by Pérez Cañado (2016a) and are also in line with Piquer-Píriz and Castellano-Risco (2021), who reported that "most respondents agreed that they needed more training on EMI materials design and that they would also welcome expert advice and training on EMI, as they felt that they lacked training on theoretical aspects of EMI education" (p. 96).

### 3.4. Professional development training needs (RSQ2.d)

The results of the questionnaire concerning IPP lecturers' training needs on professional development for teaching content using a FL are strongly marked. Each of the six items of TN4 has a mean score close to $\bar{x}$=3.00, which means lecturers perceive they have a "considerable" need of training in each of the six programmes or courses for professional development. Lecturers' need for training is substantial in all items presented, namely, individualized support, linguistic and methodological support to teach in a FL, face-to-face and online training courses on EMI/CLIL, methodological upgrading courses and collaborative work in EMI/CLIL (Figure 6.4.).

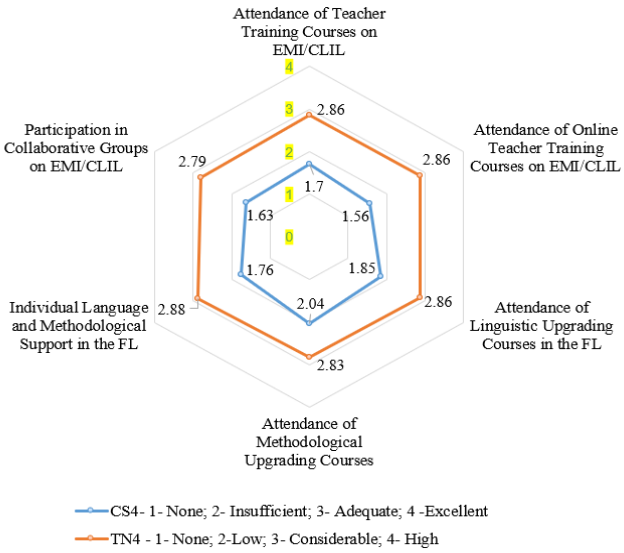



*Figure 6.4.* Radar graph CS4/TN4 ($\bar{x}$).

The most salient training need selected by lecturers is "individual language and methodological support in the FL", and the one they perceive as having the least need is "participation in collaborative groups in EMI/CLIL". The fact that these two formats – individualized and collaborative – are the most and the least selected training need, may suggest there is a preference for independent, more individualised work, rather than the involvement in collaborative work. Considering the relevance of collaborative work in the CLIL approach, this subtle sign should be taken into consideration in the planning of CLIL/ICLHE development programmes. However, given the importance assigned in the FNIs to collaborative work as a tool to overcome problems of teaching in a FL/English, this might not become an issue.

The FNIs also provided relevant data on lecturers' training needs in view of future professional development programmes. FL training courses to improve language skills in English, but also in Spanish and Italian, are mentioned as a necessity in both FNI@broad and FNI@home. Respondents of the FNI@home find the FL training courses necessary but acknowledge personal problems to attend them or lack of institutional support as they are either not provided, or they are not free (a factor also mentioned by the lecturers teaching abroad). Training to design didactic materials for teaching in a FL and training in Information and Communications Technology (ICT) resources for teaching in a FL/English are also mentioned as needed. A similar finding was reported by Pérez Cañado (2016a), who concluded that teachers "lack sufficient grounding on ICT options, (except for interactive whiteboards), materials design and adaptation, and collaborative work for integrated curriculum design" (p. 281). Interestingly, one lecturer mentions that the possibility of teaching in English at the home institution is itself an opportunity to improve the quality of professional skills and a chance for professional development; however, students' low level of English is seen as an impediment for that.

In particular, the training that IPP lecturers perceive they need in terms of professional development for teaching in a FL/English encompasses FL training; methodological training, both online and face to face; didactic materials design training and training in ICT resources. Individualized language and methodological support in the FL and participation in collaborative groups on EMI/CLIL are also seen as training needs. Moreover, intertwined into the process, there are other factors which lecturers have brought to the forefront and that must be taken into consideration, namely individual issues (sometimes a schedule can be an impediment), institutional support, the use of other foreign languages besides English, and students' FL proficiency.

Among the complex factors that come into play for the provision of CLIL/ICLHE teachers' professional development programmes based on and attuned to a needs analysis study are the needs and wants of lecturers, students, curricula and institutional demands, which must all be brought together in a challenging and demanding process. Thus, "The diverse ground that needs to be covered" (McDougald, 2019, p. 198) in the endeavour of providing professional development for CLIL teachers is, according to research, fundamental for providing quality classes in a FL/English using a CLIL approach (Briggs et al. 2018; McDougald, 2019; Macaro et al., 2020; Lo, 2020).

### 3.5. Lecturer's views on their students' language training needs (RSQ4)

Lecturers's perception of their students linguistic training needs is, in all items under scrutiny, equal or above $\bar{x}$ =3.00, that is, they find that their students have "considerable" linguistic training needs to attend classes in a FL. The two items that lecturers believe students have the most need of training are "knowledge of the FL culture" and "pronunciation in the FL", both with $\bar{x}$ =3.14. The two items perceived as in the least need of training are "linguistic comprehension skills in the FL" ($\bar{x}$ =3.00) and "knowledge of specialised vocabulary in the FL" ($\bar{x}$ =3.02).

In the FNIs, lecturers imparted a deep awareness and concern about students' specific language needs, being it the capacity to follow the rhythm of teaching and learning or their very little knowledge of English.

Lecturers' perceptions of students' proficiency in the FL have been analysed in previous studies, which also presented lecturers' derogatory perceptions of students' language skills (Cots, 2013). Doiz et al. (2019) have also examined lecturers' beliefs towards EMI teaching at two universities in Spain and as regards the students' linguistic skills, lecturers highlighted students' low language skills in the English language, particularly problems with oral production. Moreover, these lecturers elect this fact as the reason for "slowing down the pace of their lessons", having to interrupt the "smooth flow of lessons […] by having to introduce frequent instruments to check students' understanding, such as paraphrasing" (Doiz et al, 2019, p.170).

In the same study, Doiz et al. (2019) refer students' difficulties with oral production and explain it because students feel embarrassed or inhibited to make mistakes in front of other students. To overcome this problem, lecturers found that

> one of the keys to promoting a relaxed atmosphere is to help students lose their fear of making mistakes, and they also stressed that one of the lecturer's main roles should be to behave as a linguistic facilitator who tries to support students when they face linguistic problems rather than as an instructor (focused on linguistic accuracy)
>
> Doiz et al., 2019, p 170

In the FNIs, a few respondents also mentioned that they did more comprehension checks in classes and one of the respondents reported that he used the strategy as a way of creating a safe learning environment in the classroom ("I decided to ask questions to the group, in a relaxed way", L. 14).

## 4. Within-cohort comparisons

### 4.1. The impact of personal variables on CS and TN (RSQ5)

In our study, no significant statistically impact was found of lecturers' age, gender and type of professional contract on CS and TN thematic blocks, which, considering other similar research studies which observed some impact to be considered (Pérez Cañado, 2017, 2020a, 2021; Macaro et al. 2020), was not to be expected.

However, considering that statistically significant differences were found in relation to the number of years teaching in HE, the specialisation area of origin, the use of English in academic context in the last two years, and the availability to teach in English/a foreign language, the most salient findings on these aspects will be here discussed.

Statistically significant differences were found between lecturers with 6-10 years of experience, (compared to lectures with 1-5, 11-15, 15-20 and more than 20 years of experience) and the results of CS2 and CS3. This group of lecturers seems to have a reasonably "adequate" level of confidence on materials and resources for bilingual education (CS3) and a high level of confidence in their perceived knowledge of methodological aspects of bilingual education (CS2), although not as confident as towards CS3. Interestingly, the group of respondents with 6-10 years of experience only accounts for 11% of the total of respondents, but its noticeable confidence on the knowledge of materials, resources and methodological aspects of bilingual education singles them out both from the experienced group of lecturers with more than 20 years of service and that constitutes 35% of the respondents, or even from less experienced group (1-5 years of experience), who might lack the professional experience, but who

might have had pedagogical training. In a recent study, Pérez Cañado (2020a) also found statistically significant differences in the respondents overall teaching experience, but in her study the difference was with those lecturers with more than 30 years of experience, who had a more positive view of their students' language proficiency and materials and ICTs. Thus, more information should be found on this group of professionals, and their already comfortable level of knowledge on these two subjects should be considered, prior to any CLIL/ICLHE teacher training to be implemented, so as not to defraud them in their expectations.

Significant differences were also found among lecturers from different specialization areas in relation to CS1, CS2, TN1 and TN4. The most significant findings point to the not surprising fact that lecturers from the area of Language & Communication Science are comfortably more confident about their linguistic competence for teaching in a FL than all the other departments, even above the Lecturers from the Arts, Design & Animation department and those from the Education and Training, who are above the "adequate" level. It seems predictable, that lecturers from the area of Languages and Communication are better prepared in terms of FL language proficiency. The same group of lecturers from the department of Language & Communication Science, compared to their colleagues from all the other departments, except for Education and Training, whose perception of methodological knowledge barely goes above "insufficient", seem to have a more consolidated knowledge of methodological issues for bilingual education. Once again, this seems an easily explainable phenomenon, as knowledge about teaching methodologies is at the basis of the Language & Communication Science area. As for the Education and Training department little confidence on their knowledge of methodological matters for bilingual education, it must be a case of over critical view about themselves, as this department is responsible for the methodological training of teachers.

As far as training needs are concerned, and considering the results for CS, it should be expected that the lecturers from the area of Language & Communication Sciences have a significantly lower need for training in linguistic skills (TN1) than lecturers from the Agricultural and Veterinary Sciences, Economic and Organisational Sciences and Sciences and Health Technologies, all in need of a "considerable" need for linguistic training, with the area of Economic and Organisational Sciences comparatively stating significantly higher needs for training. The reasons why the Economic and Organisational Sciences department comparatively expressed such a significantly higher needs for training are not clear, but that is again important data for the future implementation of CLIL/ICLHE training to accommodate such a need into the programme. Finally, in terms of "training needs for professional development for bilingual teaching" (TN4), it was found statistical significance in lecturers' from the areas of Agricultural and Veterinary Sciences, Economic and Organisational Sciences, Social Sciences, Territory and Development and Sciences and Health Technologies having a "considerable" need for training for professional development for bilingual education and, in contrast, the areas of Language & Communication Science, Education and Training, Technologies and Arts,

Design & Animation, the 4 departments that expressed the least need for training. The lesser need of training of these particular departments does not come as a surprise, as the previous results of the Language & Communication Science department anticipated it; the inclusion of the Education and Training department in this group also seems natural and it re-adjusts the previous idea that they were being too critical about having great need of methodological training.

Variable 6 inquired about the situations in which lecturers had used the English language in an academic context in the two previous academic years. A choice of thirteen different options were offered and the results of the independent t-tests used to analyse the impact of this variable found many statistically significant differences (p-value $\leq 0.05$) in both thematic blocks. The statistically significant cases of positive impact on CS dimension are displayed in Table 5.16 in chapter 5.

Firstly, it should be underlined that all situations listed in variable 6 had a statistically significant positive impact on at least one thematic block, although some situations have a higher impact than others. For example, having "g, regular classes with Portuguese and incoming ERASMUS students at IPP" had a statistically positive impact on all four thematic blocks, which indicates the importance of this activity for the improvement of linguistic competence in a FL, the knowledge of teaching methodologies for bilingual teaching, for the elaboration of resources and materials and even as an opportunity for professional development. This last impact was also suggested by one of the respondents of the FNI@home.

Two other situations also had a significant statistical impact on four thematic blocks. It seems that," j. working for an international project" impacted positively on CS1, CS3 and CS4 and "l. meetings with international partners" had a significant statistical positive impact on lecturers' linguistic competence (CS1), methodological knowledge (CS2) and materials and resources (CS3). The significant positive impact thus statistical demonstrated, accounts for the relevance of participating and being involved in international projects and mostly for the positive aspects that can derive from those activities into the teaching practice, which is not very often statistically accounted for. This finding should also constitute relevant information for the HEIs internationalisation policy.

There are six situations, which impacted positively on at least two thematic blocks. Engaging in "a. writing a paper/book chapter", "b. presenting a paper/poster", "d. writing professional correspondence" and having "h. tutorial work with ERASMUS students" has a positive impact on lecturers' language competence (CS1) and on their knowledge about materials and resources (CS3). The teaching of classes in a FL/English in "e. regular classes with Portuguese students at IPP" has a positive impact on lecturers' linguistic competence (CS1) and professional development (CS4). There is also a positive statistical significance between the fact of having been in "i. classes in an ERASMUS teaching mobility abroad" and lecturers' current knowledge about methodology for bilingual teaching (CS2) and materials and resources (CS3).

Finally, there are only three situations that had a positive impact on only one thematic block, and they were "c. reading specialized literature", "k. study/research period abroad" and "m. contact with local foreign businesspeople or foreign businesspeople visiting the region".

Fortanet-Gómez (2012), in a paper in which she reports the results of a study about lecturers' self-reported language competence presents some arguments on the relation between FL proficiency and academic activities involving the language that can fit in this study;

> For example, a good command in reading literature or writing academic papers can be very useful when preparing classes in English, since these lecturers already know the terminology in their field and can easily prepare good materials in English. Along similar lines, being able to present papers in English at academic conferences can be a basis to start lecturing in that language.
>
> Fortanet-Gómez, 2012, p.55

### 4.2. Relating IPP lecturers' self-perceived CS and TN (RSQ6)

The aim of research sub-question six is to understand how the perceptions held by IPP lecturers towards teaching through English (RSQ1) relate to the training needs they identify (RSQ2). Along this discussion (Chapter six, subsection 2 and 3), the findings collected from the investigation have been presented and they point towards a globally weak self-perception of lecturers' knowledge in the 4 thematic areas inquired for teaching in English/FL, despite the more positive idea about their language skills to do it. Overall, the training needs they require, although with variations within the four thematic blocks, are considerable across all topics. Lecturers signal "professional development" as the area they are in most need of training, and also simultaneously the one they currently perceive as their weakest - "insufficient"- knowledge for bilingual teaching. The FNIs findings tend to corroborate these findings, although lecturers' practices in class seem much richer in terms of the diversity of strategies used, than lecturers' let infer through the questionnaire.

The details of the relationship between the perceptions held by IPP lecturers about their knowledge for teaching in FL/English and their training needs to deal with the situation, have been presented in subsections two and three of this chapter. The main purpose here is to give a broad perspective of the whole, which is the main purpose of graphs in Figures 6.5 and 6.6.

Figure 6.5 calls immediate attention to the only thematic block (CS1) in which lecturers' training needs are lower than their perceived knowledge of the situation (mean values). The second focus is the pronounced distance between CS4 knowledge of their current situation and the perception of their training needs in that same thematic block. Finally, there is the balance in lecturers' perception between the present situation analysis and the needs analysis of block 2 and block 3.

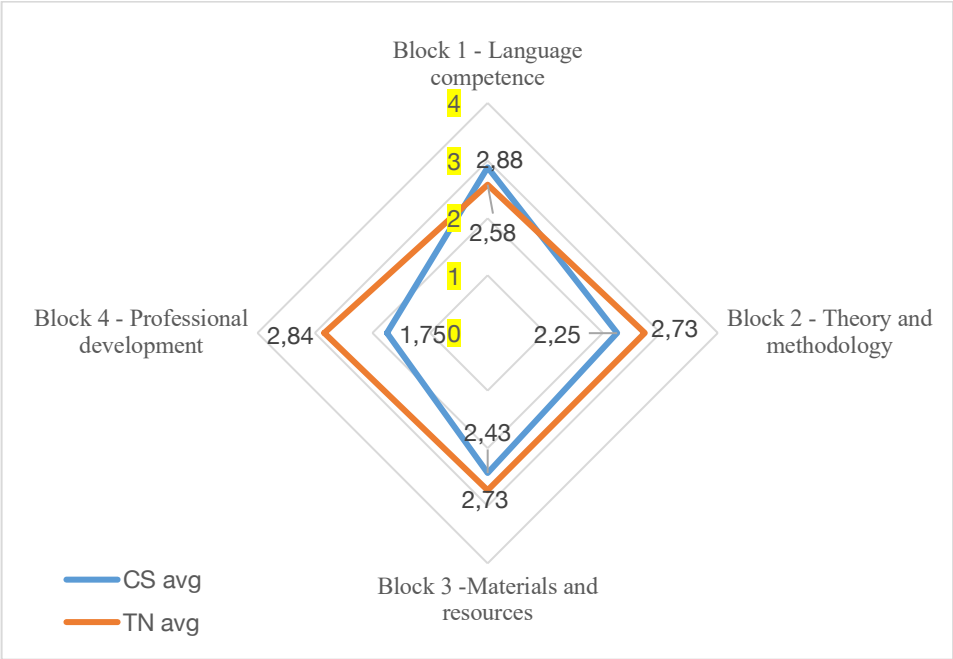



*Figure 6.5* Radar graph CS1, CS2, CS3, CS4 vs TN1, TN2, TN3, TN4 ($\bar{x}$)

Figure 6.6 gives a broad overview of all the items under each dimension and how each item relates individually with its counterpart. (CS vs TN). The main idea is that, again, that lecturers have a high, generalised perception of their training needs, displayed graphically as an almost round ball, whereas the perception of their current situation is more heterogeneous, and very precise in terms of indicating where they are.

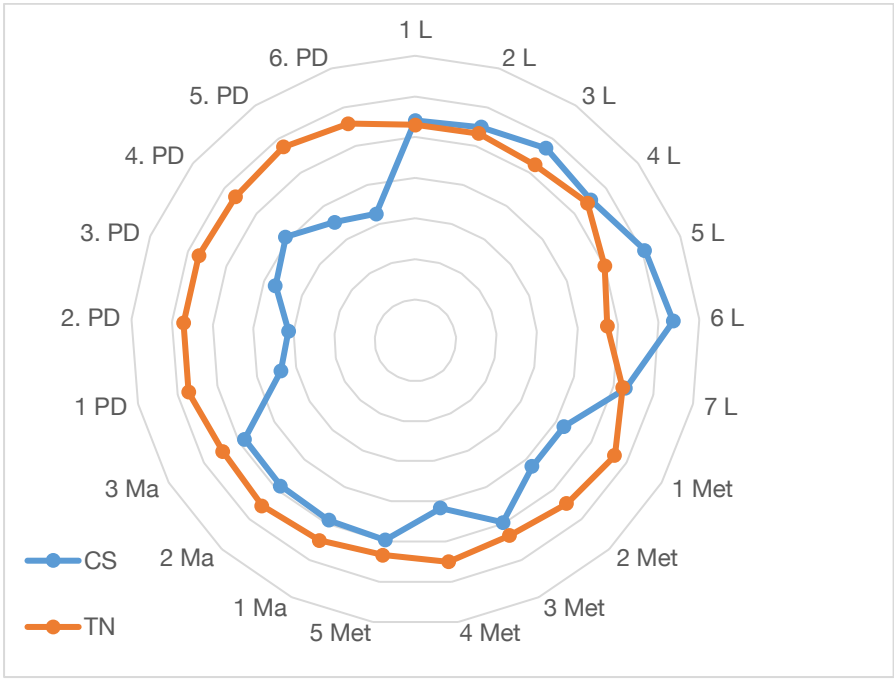



*Figure 6.6.* Radar graph CS1, CS2, CS3, CS4 vs TN1, TN2, TN3, TN4 ($\bar{x}$)

### 4.3. Relating lecturers' perception of their students' linguistic skills and training needs in English (RSQ7)

In general, IPP lecturers believe their students have a limited English proficiency and a "considerable" linguistic training needs to attend classes in a FL. They believe they are particularly in need of training in the "knowledge of the FL culture" and "pronunciation in the FL, however they consider that students most problematic areas in terms of language competence is "listening comprehension skills in the FL" (Figure 6.7).

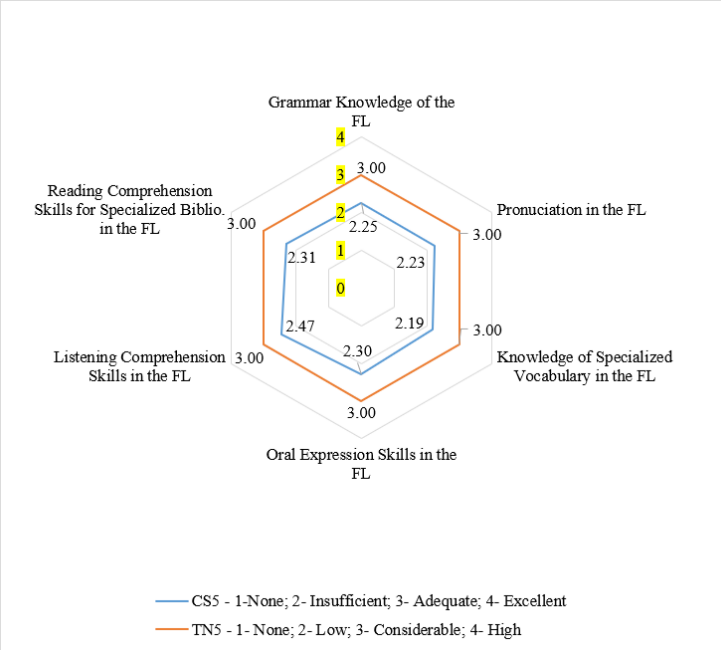



*Figure 6.7.* Radar graph CS5 vs TN5 ($\bar{x}$) (related to students).

FNI@home respondents also expressed a general concern about students' language skill in the FL, but they also evidenced a deep awareness and concern about students' specific language needs, which can constitute a motivation for engaging in CLIL/ICLHE training and find solutions to support the students' difficulties.

# CHAPTER SEVEN:
# CONCLUSION

## 1. Conclusión

La motivación para iniciar este proyecto de investigación derivó, principalmente, de mi implicación profesional en un grupo de investigación sobre AICLE, y la convicción de que el enfoque AICLE podría constituir un instrumento relevante e innovador tanto para apoyar a mis compañeros del Instituto Politécnico de Portalegre (IPP) a abordar sus deseos y necesidades específicas a la hora de impartir sus materias de contenido en inglés, como para potenciar el posicionamiento de internacionalización del IPP.

Desde la concepción hasta la conclusión de este proyecto de investigación doctoral han transcurrido muchas fases, pero el objetivo general del estudio de investigación se definió y estableció en una etapa temprana del proceso, y se puede resumir de la siguiente forma:

> examinar las percepciones de los profesores del Instituto Politécnico de Portalegre sobre el uso del inglés/LE como medio de instrucción y las necesidades de formación percibidas para avanzar hacia un modelo educativo AICLE /ICLES.

Esta decisión sobre el objetivo general del estudio de investigación, que fue fácil de adoptar, dio paso a una fase de cierta dispersión e intensa lectura de la literatura especializada, consecuencia del descubrimiento de la amplia gama de cuestiones que giran en torno a los temas de EMI, AICLE/ICLES y AICLE en la formación de docentes en ES, y que hacen que estos temas sean complejos y entrañen desafíos (Doiz et al., 2013a; Dimova et al., 2015; Dimova, & Kling, 2020). La revisión de la literatura especializada es la base de los marcos contextuales, conceptuales y metodológicos de esta tesis doctoral

y proporciona el entorno de fondo para comprender mejor los resultados del estudio de investigación de análisis de necesidades realizado en este trabajo de tesis doctoral para explorar el potencial del enfoque AICLE/ICLES en el IPP.

Durante las últimas tres décadas, la participación activa y el compromiso de las IES europeas en la provisión de entornos internacionales y oportunidades de aprendizaje multicultural para estudiantes, personal e investigadores ha aportado una dinámica muy diferente a las instituciones y ha creado un nuevo contexto de trabajo para todas las partes interesadas. Mediante la implementación de políticas y estrategias de internacionalización institucional, a menudo como reacción a las estrategias y la agenda de la UE en estos asuntos, las IES se están reposicionando en el mundo globalizado y están aprovechando estas oportunidades para innovar y mejorar los estándares de calidad. El papel de la UE ha sido primordial en este proceso, sobre todo en lo que se refiere a la promoción de la diversidad lingüística determinante para el uso creciente del inglés o de cualquier otra segunda lengua (L2) en contextos académicos, ya sea para la investigación, para la comunicación con especialistas o para la enseñanza de contenidos especializados, es decir, para la su utilización como idioma de instrucción.

Sin embargo, la introducción y el uso de una LE como medio de instrucción en la enseñanza superior plantea problemas complejos tanto para los profesores especialistas en contenido como para los estudiantes. Se trata de cuestiones como el impacto cultural que supone ofrecer asignaturas a través de una lengua franca, el nivel de inglés tanto de profesores como de los estudiantes, las habilidades metodológicas involucradas en la enseñanza en otro idioma, o la formación de profesores para la enseñanza de contenidos en inglés, entre otros aspectos.

El enfoque educativo AICLE/ICLES, que había ido ganando impulso en Europa desde principios del siglo XXI especialmente en los niveles de educación primaria y secundaria, comenzó a consolidar su trayectoria hacia el nivel universitario, en el que la ventaja de tener un enfoque dual ("*dual-focus*") que, por su capacidad de promover simultáneamente el aprendizaje y la enseñanza tanto del contenido como de la lengua en un idioma extranjero (Coyle et al., 2010, p. 1), se consideró una herramienta adecuada para fomentar el multilingüismo y promover el cambio y la innovación en la ES mientras se mejora la competencia en la lengua extranjera de los estudiantes, sin tener que introducir más horas de enseñanza.

Para el éxito de la implementación de AICLE/ICLES son vitales los actores clave, que son los promotores del proceso y tienen un papel clave que desempeñar (Piquer-Píriz y Castellano-Risco, 2021), así como la formación docente, pilar fundamental que puede brindar el apoyo necesario para el exigente esfuerzo de enseñar en una LE/Inglés utilizando un enfoque AICLE/ICLES.

Considerando la escasez de estudios en la formación de docentes AICLE, la idea de continuar replicando estudios en diferentes contextos para basar las decisiones sobre los programas AICLE en necesidades reales y pertinentes (Pérez Cañado et al., 2021, p. 2) parecía un paso necesario y constituye el hueco de investigación especializada que esta tesis quiere cubrir.

El propósito de esta tesis doctoral es investigar el potencial que puede tener el enfoque AICLE/ICLES para el profesorado de educación superior en Portugal a través de un análisis de las necesidades, empleando métodos mixtos de investigación, llevado a cabo en el Instituto Politécnico de Portalegre (IPP), en Portugal. Dentro de este objetivo general se establecieron objetivos específicos, a saber, el análisis de la autopercepción de los profesores sobre su situación actual y sus necesidades de formación respecto de (1) la competencia lingüística propia y la de sus alumnos en lo que se refiere al inglés/LE, (2) las políticas de educación bilingüe, y las teorías y metodologías para la educación bilingüe, (3) los materiales y recursos para la educación bilingüe y (4) el desarrollo profesional necesario para llevar a cabo la educación bilingüe.

Para la realización del estudio de análisis de necesidades se utilizaron, como herramientas de investigación, un cuestionario (adaptado del proyecto NALTT, Pérez Cañado, 2016a) y la 'indagación narrativa enmarcada' (por su nombre en inglés, *Frame Narrative Inquiries, FNI*). La adopción de esta herramienta de investigación innovadora, la investigación a través de las FNIs, para documentar las experiencias de los docentes e incorporarla en un tipo de investigación de estudio de caso, hizo posible obtener una gran cantidad de datos y reveló una instantánea de múltiples capas de las creencias de los docentes del IPP sobre educación bilingüe. La adopción del modelo de indagación narrativa enmarcada como herramienta de recopilación de datos en esta investigación ha permitido al investigador aprender más sobre la autopercepción de los profesores sobre su situación actual y sobre sus necesidades de formación cuando enseñan en una LE/inglés. El uso de la indagación narrativa en la formación del profesorado da acceso a la experiencia de los profesores en contextos particulares y se ha adoptado previamente para obtener la comprensión personal y la experiencia de los profesores sobre aspectos del desarrollo profesional (Barkhuizen y Wette, 2008). La utilización, dentro del marco metodológico de un estudio de caso, del análisis cuantitativo y cualitativo, a través de cuestionarios e indagaciones narrativas enmarcadas, para conocer las experiencias de los profesores del IPP, ofrece un enfoque aún novedoso en AICLE, y su potencial se ha tratado de explorar en este estudio.

Esta investigación tiene como objetivo contribuir al conocimiento existente en los campos del enfoque AICLE/ICLES con especial atención a la formación del profesorado AICLE/ICLES. Desde un punto de vista más amplio, este estudio se suma a la escasa investigación basada en datos y en un sólido análisis de necesidades diagnosticadas con el objetivo de proporcionar una formación más eficaz de los profesores universitarios AICLE/ICLES; a nivel nacional, este estudio espera contribuir a la aún escasa investigación portuguesa sobre EMI y AICLE/ICLES en ES.

A lo largo de esta tesis doctoral, los datos recopilados fueron examinados y presentados con el mayor detalle posible. Se exploraron y discutieron conexiones, relaciones, posibilidades de interpretación. Por lo tanto, en esta conclusión, solo se presentarán los hallazgos principales utilizando las preguntas de investigación como pautas.

El análisis de las respuestas de los profesores en relación con la PI1 con respecto a las opiniones de los profesores del IPP sobre su situación actual lingüística, metodológica y de desarrollo profesional continuo para enseñar sus materias de contenido en inglés/LE revela que:

- De manera global, los profesores de IPP tienen una imagen débil y muy crítica de sus habilidades para participar en la enseñanza bilingüe. Aunque parecen tener bastante confianza en sus habilidades lingüísticas, que consideran generalmente adecuadas, la percepción de su conocimiento de las políticas, teorías y metodologías de educación bilingüe para la educación bilingüe no es tan sólida y apenas alcanza el nivel adecuado. También tienen una percepción generalmente negativa sobre su conocimiento de los materiales y recursos para la enseñanza bilingüe, y una idea aún más baja - "insuficiente" – sobre su desarrollo profesional a la hora de enseñar en una LE/inglés. Es de destacar:
    - La razonable confianza de los docentes en sus habilidades lingüísticas para enseñar en una lengua extranjera/inglés;
    - la autopercepción muy pesimista de los profesores sobre su desarrollo profesional continuo para la docencia en un FL, que encuentran en su mayoría en un nivel insuficiente o inexistente.
    - La baja autopercepción de los profesores sobre sus conocimientos de teoría, metodología, diseño de materiales y recursos para la enseñanza en una LE, con una actitud algo más segura de sus conocimientos de materiales y recursos para la enseñanza en una LE/inglés.
- La autopercepción de los docentes en lo que se refiere a un escaso conocimiento sobre teorías y metodologías para la educación bilingüe y sobre materiales y recursos para la enseñanza en una LE, lo que se contradice con los informes de las FNI sobre el uso de materiales variados y estrategias de enseñanza diversas. En su práctica de aula, los profesores conocen claramente los objetivos y características de los materiales y recursos que eligen, así como el tipo de estrategias que quieren y necesitan utilizar en las clases que se imparten en una LE/inglés. Es de destacar:
    - el desajuste entre el conocimiento autopercibido de los profesores sobre estos dos temas y el informe elaborado sobre su práctica actual;
    - el hecho de que a pesar de la autopercibida falta de confianza en sus conocimientos sobre metodologías y sobre materiales y recursos, eso no les impidió utilizar materiales y estrategias variados y ricos en las clases que imparten en inglés;
    - que, aunque los profesores parecen carecer del conocimiento de la teoría, algo que reconocen de forma sustancial en sus respuestas, parecen tener ya un amplio repertorio de estrategias y utilizar materiales variados en las clases que imparten en una LE/inglés;

- y que la obtención del conocimiento previo sobre teorías, metodologías, materiales y recursos para la enseñanza bilingüe es de suma importancia en cualquier programa de formación AICLE/ ICLES.

El análisis de las respuestas de los profesores en la pregunta de investigación 2 sobre las necesidades de formación que los profesores de IPP perciben como más relevantes para la enseñanza en inglés / FL revela que:

- Existe una demanda generalizada de una mayor formación, con la autopercepción de los profesores de que necesitan una formación considerable en todas las áreas analizadas (lenguaje, metodología, recursos y desarrollo profesional).

El análisis de las respuestas de los profesores (cuestionario y FNI) en las sub-preguntas de investigación 1a / 2a (Área focal 1: habilidades y necesidades autopercibidas) sobre cómo los profesores de IPP perciben sus propias competencias en el idioma inglés / LE revela que:

- Globalmente, los profesores ven sus habilidades lingüísticas en inglés como adecuadas para la enseñanza bilingüe, visión corroborada por la investigación a través de la narrativa enmarcada, en la que los profesores no destacan la competencia lingüística como una dificultad mayor. Las habilidades de producción receptiva - escuchar, leer bibliografía especializada y conocimiento de vocabulario académico especializado- son los aspectos en los que los profesores se sienten más seguros y el conocimiento gramatical, las habilidades de pronunciación, las habilidades de comunicación oral y el conocimiento de la cultura de la lengua extranjera son percibidos por los profesores como sus competencias más débiles.
- También se identificaron otros aspectos relevantes relacionados con la autopercepción de los encuestados sobre el lenguaje, tales como:
  a) la principal preocupación prioritaria para los encuestados amplios de FNI @ es el "contenido" (su efectividad, precisión, eficiencia, adecuación o claridad), mientras que la indagación narrativa enmarcada de los profesores que imparten docencia en la propia universidad -*FNI@home*- demuestra que la principal preocupación de los profesores cuando se enseña en una LE son cuestiones pedagógicas y de política educativa. La razón de la diferencia debe explorarse más a fondo, pero una posible explicación podría residir en la urgencia de aprobar el contenido cuando solo hay una clase para enseñar (en el extranjero) y el intento de centrarse en un marco de apoyo más cuando el programa es para un semestre completo.
  b) un alto porcentaje de profesores manifiesta dificultades con el LE en el *FNI@home*, lo que parece contradecir la autopercepción de su propio dominio del inglés que se expresa tanto en el cuestionario como en el *FNI@home*.
  c) Los profesores de *FNI@home* informan sobre las dificultades en la lengua extranjera con más frecuencia que los de *FNI@broad*, lo que parece confirmar que los

profesores que participan en movilidades de enseñanza ERASMUS en el extranjero tienen menos preocupaciones sobre su competencia en la LE.

d) los temas relacionados con la competencia lingüística parecen estar entrelazados, más o menos profundamente, dentro de todas las áreas clave de la enseñanza de la educación bilingüe enunciadas en las FNI, a saber, metodología, materiales, recursos y desarrollo profesional. Este resultado atestigua la relevancia del dominio lingüístico en la enseñanza bilingüe y la necesidad de prestar atención a este factor a la hora de apoyar a los profesores, y es un buen indicador de que el apoyo a los profesores para que enseñen en una LE con un enfoque AICLE también debe ir más allá de la competencia lingüística y debe ser trabajado desde la perspectiva de las actitudes, el conocimiento y las habilidades necesarias para participar y dominar la enseñanza AICLE efectiva.

e) los encuestados de *FNI@home* reconocen encontrar apoyo en la L1 - "translanguaging"- particularmente cuando hay la posibilidad de malentendidos o cuando necesitan explicar una palabra o expresión y deciden traducirla. La traducción y el *code-switching* parecen utilizarse como estrategias para fomentar la comunicación, para promover el aprendizaje eficaz de los contenidos o incluso como un medio para contrarrestar los problemas lingüísticos de los propios estudiantes y profesores.

- A nivel global, la percepción que tienen los profesores de sus necesidades de formación lingüística para enseñar en una LE/inglés se puede catalogar como "considerable". Los aspectos "habilidad de comunicación oral" y "pronunciación en inglés" son los señalados como aquellos que determinan más necesidades formativas, mientras que la lectura de bibliografía especializada y la habilidad de escucha general son competencias con las que los profesores se sienten más cómodos y no están tan necesitados de formación.

El análisis de las respuestas de los profesores (cuestionario y FNI) a las sub-preguntas de investigación 1b / 2b (Área focal 1: habilidades y necesidades autopercibidas) sobre su conocimiento de los aspectos teóricos y metodológicos de la educación bilingüe revela que:

- Globalmente, los encuestados creen que su conocimiento de las políticas, teorías y metodologías para la educación bilingüe es "insuficiente" en todos los ítems, excepto en los "principios y prácticas de las metodologías centradas en el estudiante y el aprendizaje colaborativo", con los que ellos parecen estar más cómodos.
- La narrativa enmarcada *FNI@home* destaca algunos temas no incluidos en los cuestionarios, a saber, "colaboración profesor-profesor", "atención al conocimiento previo de los estudiantes", "motivar la participación de los estudiantes", "gestión del tiempo" y "evaluación", lo que sugiere que los participantes tienen una alta conciencia de algunos de

los temas clave de la enseñanza bilingüe. A continuación, se enumeran algunos de los resultados más relevantes sobre estos temas:

a) Los encuestados de *FNI@broad* prefieren centrarse en la figura del profesor, mientras que los profesores que enseñan en una LE en casa, favorecen el uso de metodologías prácticas, con varios encuestados que consideran que han introducido algunos cambios en las metodologías que suelen adoptar en las clases impartidas en L1.
b) En general, los profesores se esfuerzan por involucrar a sus estudiantes en actividades interactivas orientadas a la comunicación.
c) Las FNIs informan de un uso extensivo de metodologías de aprendizaje colaborativo y estrategias activas.
d) Solo los encuestados del *FNI@broad* traen a colación el tema "colaboración entre colegas", reportando un uso muy productivo de esta estrategia.
e) El conocimiento autopercibido de los profesores sobre la estrategia de internacionalización del IPP es significativamente mayor que la información que creen tener sobre la política portuguesa de internacionalización y educación bilingüe en la ES. Las FNI también evidencian el conocimiento básico del conferenciante sobre los temas y un enfoque casi exclusivamente en el programa ERASMUS.
f) En general, los encuestados también expresan su opinión sobre la política lingüística del IPP, cuando lamentan que no se les ofrezca (sin coste económico) la oportunidad de asistir a cursos de competencia lingüística, o cuando refieren que debería haber más estudiantes ERASMUS entrantes en el IPP e indirectamente señalan al aparente escaso atractivo del IPP para los estudiantes que ingresan en la institución.

- De forma global, las necesidades autopercibidas de los encuestados sobre la formación teórica y metodológica para la enseñanza en un LE son "considerables".

El análisis de las respuestas de los profesores (cuestionario y FNI) a las subpreguntas de investigación 1c / 2c (Área focal 1: habilidades y necesidades autopercibidas) sobre su conocimiento de los materiales y recursos utilizados para la enseñanza bilingüe revela que:

- Los profesores del IPP ven los "materiales y recursos para enseñar en una LE" como un desafío ya que, en general, no están muy seguros de su conocimiento de los principios para producir materiales auténticos para enseñar contenido en inglés/LE, ni en su capacidad para adaptar materiales para enseñar en inglés, o utilizar materiales de referencia en línea para impartir sus contenidos en clases especializadas en inglés.

- El *FNI@home* y el *FNI@broad* también parecen tener una opinión muy clara sobre las características de los materiales pedagógicos ideales para la enseñanza bilingüe, particularmente en términos de presentación y forma de los contenidos.
- Los docentes de *FNI@home* mencionan que cuando piensan en enseñar en una LE, son conscientes de la necesidad de adaptar los materiales al nivel de idioma de los estudiantes y de la necesidad de traducir esos materiales.
- Los docentes FNIs abordan el tema "materiales y recursos" para la enseñanza bilingüe desde la perspectiva de los criterios adoptados para su selección y presentan un amplio abanico de razones y justificaciones para ello.
- En términos de necesidades de formación, los profesores del IPP perciben su necesidad de formación sobre "materiales y recursos" para enseñar en una LE/inglés como considerable o alta.

El análisis de las respuestas de los profesores (cuestionario y FNI) en las subpreguntas de investigación 1d/2d (Área focal 1: habilidades y necesidades autopercibidas) sobre su desarrollo profesional continuo para el uso del inglés/LE como medio de instrucción revela que:

- La percepción de los profesores sobre su situación actual en materia de desarrollo profesional para la docencia bilingüe es muy pesimista y es su debilidad en comparación con el resto de bloques temáticos del cuestionario. El único elemento en el que los profesores parecen tener bastante más confianza es "la asistencia a cursos de actualización de la metodología de la enseñanza".
- Los hallazgos de las FNIs refuerzan los resultados del cuestionario con algunos encuestados (tanto de *@home* como *@broad*) señalando la falta de cursos de capacitación en lengua extranjera ofrecidos por el IPP. Además de la falta de cursos de capacitación en idiomas, los datos recopilados a través de las FNIs también permitieron identificar la falta y necesidad de formación de los encuestados en el diseño de materiales pedagógicos para la enseñanza bilingüe y en el apoyo de los medios tecnológicos a las clases.
- Las necesidades de formación de los profesores del IPP sobre el desarrollo profesional para la enseñanza de contenidos utilizando una LE son considerables.

El análisis de las respuestas de los profesores a las sub-preguntas de investigación 3/4 (Área focal 1: Percepciones de los profesores sobre las habilidades y necesidades de los estudiantes) sobre la percepción de los profesores del IPP sobre las habilidades lingüísticas de sus estudiantes en inglés revela que:

- En general, los profesores consideran que las habilidades lingüísticas de sus estudiantes en inglés son algo adecuadas para asistir a clases que se imparten en inglés.

- Los docentes que responden al *FNI@home* también mencionan este tema y apuntan a las serias dificultades lingüísticas de los estudiantes portugueses en inglés.
- Con frecuencia los *FNI* revelan que los profesores son conscientes de los diferentes niveles de dominio del idioma de los estudiantes en clase y se identifica como desafíos para los encuestados.
- La percepción de los profesores sobre las necesidades de formación lingüística de sus alumnos es, en todos los aspectos, "considerable".
- En las FNI, los profesores muestran una profunda conciencia y preocupación por las necesidades lingüísticas específicas de los estudiantes.

El análisis de las respuestas de los profesores a las sub-preguntas de investigación 5 sobre las percepciones de los profesores del IPP sobre el impacto en su situación actual y sus necesidades de formación de variables como su edad, sexo, número de años de docencia en ES, tipo de contrato, área de especialización o situación en la que han utilizado el idioma inglés en contexto académico en los últimos dos años revela que:

- No se encontró un impacto estadístico significativo de la edad, el género y el tipo de contrato profesional de los profesores en informática.
- Los profesores con 6-10 años de experiencia, parece tener un nivel "adecuado" de confianza en los materiales y recursos para la educación bilingüe (CS3) y un alto nivel de confianza en su conocimiento percibido de los aspectos metodológicos de la educación bilingüe.
- En cuanto a los departamentos, los resultados más significativos indican que los profesores del área de Ciencias del Lenguaje y la Comunicación tienen más confianza en su competencia lingüística para la enseñanza en una LE que el resto de los departamentos.
- La variable 6 indagó sobre las situaciones en las que los profesores habían utilizado el idioma inglés en un contexto académico en los dos cursos académicos anteriores. Uno de los resultados es que todas las situaciones enumeradas en la variable 6 tuvieron un impacto positivo estadísticamente significativo en al menos un bloque temático, aunque algunas situaciones tienen mayor impacto que otras. Por ejemplo, tener "clases regulares con estudiantes portugueses y de ERASMUS en el IPP" tuvo un impacto estadísticamente positivo en los cuatro bloques temáticos, lo que indica la importancia de esta actividad para la mejora de la competencia lingüística en una LE, para el conocimiento de las metodologías de enseñanza para la enseñanza bilingüe, para la elaboración de recursos y materiales e incluso como una oportunidad para el desarrollo profesional. Este último impacto también fue sugerido por uno de los encuestados del *FNI@home*.

El análisis de las respuestas de los profesores a las sub-preguntas de investigación 6 sobre las percepciones de los profesores del IPP hacia la enseñanza a través del inglés y cómo se relaciona con las necesidades de formación que identifican revela que:

- Los resultados recopilados apuntan a una autopercepción globalmente débil del conocimiento de los profesores en las 4 áreas temáticas solicitadas para la enseñanza en inglés / LE, a pesar de concepción más positiva sobre sus habilidades lingüísticas para hacerlo. En general, las necesidades de formación que requieren, aunque con variaciones dentro de los cuatro bloques temáticos, son considerables en todos los temas. Los profesores señalan el "desarrollo profesional" como el área en la que más necesitan formación.

## 2. Conclusions

The motivation to start this research project derived, mainly, from my professional involvement in a research group on CLIL, and the conviction that the CLIL approach could constitute a relevant and innovative instrument both to support my colleagues at the Polytechnic Institute of Portalegre to address their specific wants and needs when teaching their content subjects in English, and to enhance the internationalisation positioning of IPP.

From the idea to the conclusion of this doctoral research project many phases have taken place, but the general aim of the research study was defined and settled at an early stage of the process, and it was

> to examine the perceptions of the lecturers at the Polytechnic Institute of Portalegre concerning the use of English/FL as a medium of instruction and their perceived training needs in order to step up to a CLIL/ICLHE education model.

The easy and quite straight forward decision about the general aim of the research study, gave way to a phase of some dispersion and intense reading of the specialised literature, a consequence of the unveiling of the vast array of issues that revolve around the themes of EMI, CLIL/ICLHE and CLIL teacher training in HE, and that make these issues complex and challenging (Doiz et al., 2013a; Dimova et al., 2015; Dimova, & Kling, 2020). The review of the specialised literature is at the basis of the contextual, conceptual, and methodological frameworks of this dissertation, and provides the background setting for better understanding the findings of the needs analysis research study undertaken in this dissertation to explore the potential of the CLIL/ICLHE approach at IPP.

Over the last three decades, the active involvement and commitment of European HEIs in the provision of international environments and multicultural learning opportunities for students, staff, and researchers has brought a very different dynamic to the institutions and has created a new context of work for all the stakeholders. Through the implementation of institutional internationalisation policies and strategies, often as a reaction to EU strategies and agenda in these matters, HEIs are repositioning themselves in the globalised world and using all opportunities for innovating and improving quality

standards. The role of the EU has been paramount in this process, and the promotion of linguistic diversity determinant for the growing use of English or any other second language (L2) in academic contexts, either for research, for communicating with specialists or for teaching specialized content, that is, used as the language of instruction.

However, the introduction and the use of a FL as a medium of instruction at tertiary level raises complex problems for both content specialist lecturers and students, issues such as the cultural impact of offering subjects through a lingua franca, the lecturers' and the students' level of English, methodological skills involved in teaching in another language, teachers' training for teaching content in English, among others.

The CLIL/ICLHE educational approach, which had been gaining momentum in Europe from the beginning of the twenty-first century particularly at primary and secondary levels, began consolidating its path into tertiary settings where the advantage of being "dual-focused", and able to promote simultaneously the learning and the teaching of "both content and language' in a FL (Coyle et al., 2010, p. 1) was seen as a convenient tool to foster multilingualism, promote change and innovation at HE while improving students' FL skills, without introducing more hours in the university timetables.

Vital for the success of CLIL/ICLHE implementation are lecturers, the key stakeholders and promoters of the process and who have a key role to play (Piquer-Píriz and Castellano-Risco, 2021), and teacher education, the fundamental pillar that can provide the necessary support to the demanding endeavor of teaching in a FL/English using a CLIL/ICLHE approach.

Considering the scarcity of studies in CLIL teacher training, the idea of continuing "replicating studies in different contexts in order to base decisions regarding CLIL programs on real and pertinent needs" (Perez Cañado et al., 2021, p. 2) seemed pertinent and it constitutes the niche of specialized research that this dissertation wants to add to.

The purpose of this dissertation is to investigate the potential of the CLIL/ICLHE approach with higher education (HE) lecturers in Portugal through a mix method needs analysis study carried out at the Polytechnic Institute of Portalegre (IPP), in Portugal. Specific objectives were established within this general aim, namely the study of lecturers' self-perception of their current situation and their training needs on (1) their own and their students' linguistic competence in English/FL, (2) bilingual education policies, theories, and methodologies for bilingual education, (3) materials and resources for bilingual education and (4) professional development for bilingual teaching.

To carry out the needs analysis study, a questionnaire (adapted from the NALTT Project, Perez Cañado, 2016a) and framed narrative inquiries (FNI) were used as research tools. The adoption of this fairly innovative research tool - framed narrative inquiry - to document the lecturer' experiences, and embedding it in a case study type of research, made it possible to obtain a rich ammount of data and a

multilayered snapshot of IPP lecturers' beliefs on bilingual education. The adoption of the framed narrative inquiry as data collection tool in this research has enabled the reseracher to learn further about lecturers' self-perceived understanding of their current situation and about their training needs when teaching in a FL/English. The use of narrative inquiry in teacher education gives access to the experience of teachers in particular contexts, and it has been previously adopted to elicit teachers' personal understanding and experience of aspects of professional development (Barkhuizen & Wette, 2008). The use, within the case study methodological framework, of quantitative and qualitative analysis, through questionnaires, and narrative framed inquiries, to learn about the experiences of IPP lecturers, offers a still novel approach to research in the CLIL area here explored, and whose potential this research study tried to explore.

This research aims to contribute to the existing knowledge in the fields of CLIL/ICLHE approach with a focus on the field of CLIL/ICLHE teacher training/education. Within a wider scope, this study adds to the sparse evidence-based research, grounded on solid diagnosed needs analysis aiming at providing for a more effective training of CLIL/ICLHE university lecturers; at national level, this study hopes to contribute to the Portuguese still scarce research on EMI and CLIL/ICLHE in HE.

Throughout this dissertation, the data collected was examined and presented in as much detail as possible. Connection, relations, possibilities of interpretation were explored and discussed. Thus, in the conclusion, only the main findings will be presented using the research questions as guidelines.

The analysis of lecturers' responses (questionnaire and FNIs) in relation to **RQ1** concerning *IPP lecturers' views of their current linguistic, methodological, and ongoing professional development situation for teaching their content subjects in English/FL* reveals that:

- Globally, IPP lecturers have a weak and very critical image of their skills to engage in bilingual teaching. Although they seem to be fairly confident about their linguistic skills, which they see as generally adequate, the perception of their knowledge of bilingual education policies, theories, and methodologies for bilingual education is not so solid, and barely reaches adequate level. They also have a generally negative perception about their knowledge of materials and resources for bilingual teaching, and an even lower - "insufficient"- self-perceived idea of their ongoing professional development for teaching in a FL/English. Of note is:

    a) lecturers' reasonable confidence on their linguistic skills for teaching in a FL/English;

    b) lecturers' very pessimistic self-perception of their ongoing professional development for teaching in a FL, which they find mostly insufficient or inexistent.

    c) lecturers' low self-perception of their knowledge about theory, methodology, material design and resources for teaching in a FL with a slightly more confident attitude towards their knowledge of materials and resources for teaching in a FL/English.

- Lecturers' self-perceived weak knowledge about theories and methodologies for bilingual education and about materials and resources for teaching in a FL is contradicted by the reports in the FNIs about the use of varied materials and diverse teaching strategies. In their classroom practice lecturers clearly know the objectives and characteristics of the materials and resources they choose, as well as the type of strategies they want and need to use in the classes taught in a FL/English. Of note is:

    a) the mismatch between lecturers' self-perceived knowledge about these two topics and the report made about their current practice;

    b) the fact that despite the self-reported lack of confidence on their knowledge on methodologies and on materials and resources, that did not deter them from using varied and rich materials and strategies in the classes they teach in English;

    c) that although lecturers seem to lack the knowledge of the theory, which they totally acknowledge, they seem to already have a repertoire of strategies and to use varied materials in the classes they teach in a FL/English;

    d) to elicit lecturer's prior knowledge about theories, methodologies, materials and resources for bilingual teaching is of paramount importance in any CLIL/ICLHE training programme.

The analysis of lecturers' responses (questionnaire and FNIs) on **RQ2** about *the training needs that IPP lecturers perceive as most relevant for teaching in English/FL* reveals that:

- There is an across-the-board demand for increased training, with lecturers' self-perception that they need considerable training in all the areas (language, methodology, resources and professional development).

The analysis of lecturers' responses (questionnaire and FNIs) on research sub questions **RSQ1a/RSQ2a** (Focal area 1: self-perceived skills and needs) about *how IPP lecturers perceive their own FL/English language competences* reveals that:

- Globally, lecturers view their linguistic skills in English as adequate for bilingual teaching, a view corroborated by the FNIs, in which lecturers do not highlight language competence as a major difficulty. Receptive production skills - listening, reading specialized bibliography and knowledge of specialised academic vocabulary – are the aspects lecturers feel more confident about and grammar knowledge, pronunciation skills, oral communication skills and the knowledge of the foreign language culture are self-perceived by lecturers as their weakest competences.

- Other relevant aspects related to respondents' self-perception concerning language were also disclosed, such as:

    a) the top priority concern for FNI@broad respondents is "content" (its effectiveness, accuracy, efficiency, adequacy or clarity), whereas the FNI@home, lecturers' major concern when teaching in a FL are pedagogical issues and educational policy matters. The reason for the difference should be explored further, but a possible explanation might be the urgency of passing content when there is only one class to teach (abroad) and the attempt to focus on a more supporting framework when the programme is for a whole semester.

    b) a high percentage of lecturers reports difficulties with the FL in the FNI@home,, which seems to contradict the fairly comfortable self-perceived idea of their own proficiency in English reported in the questionnaire and in the FNI@home.

    c) FNI@home lecturers report FL language difficulties more often than he FNI@broad, which seems to confirm that lecturers who engage in ERASMUS teaching mobilities abroad have less concerns about their proficiency in the FL.

    d) issues related to language competence seem to be intertwined, more or less deeply, within all the key areas of bilingual education teaching enunciated in the FNIs, namely methodology, materials, resources, and professional development. This finding attests the relevance of linguistic proficiency in bilingual teaching, the need to attend to this factor when supporting lecturers and it is a good indicator that the support to be given to lecturers to teach in a FL using a CLIL approach must also go beyond language proficiency and be worked from the perspective of the attitudes, knowledge, and skills necessary to engage into and master effective CLIL teaching.

    e) respondents to the FNI@home acknowledge to find support on L1 -"translanguaging" - particularly when there is a possibility of misunderstanding, or when they need to explain a word or expression, and they decide to translate it.. Translation and code-switching seem to be used as strategies to foster communication, to promote the effective learning of content or even as a means to counter students' and lecturers' own language problems.

- Globally, lecturers' self-perception of their language training needs for teaching in a FL/English are seen as "considerable". "Oral communication skills" and "pronunciation in English" are the aspects they perceive they have more training needs, whereas reading specialized bibliography and general listening skill are competences that lecturers feel more comfortable with and not in so much need of training.

The analysis of lecturers' responses (questionnaire and FNIs) on research sub questions **RSQ1b/RSQ2b** (Focal area 1: self-perceived skills and needs) about *their knowledge of theoretical and methodological aspects of bilingual education* reveals that:

- Globally, respondents to the questionnaire believe that their knowledge of bilingual education policies, theories, and methodologies for bilingual education is "insufficient" for all the items, except for "principles and practices of student-centered methodologies and collaborative learning", which they seem to be more comfortable with.
- FNI@home highlight some topics not included in the questionnaires, namely "teachers-teacher collaboration", "attention to students' prior knowledge", "motivating students' participation", "time management" and "assessment" which suggests the participants high awareness of some of the key issues of bilingual teaching. Listed below are some of the key findings about these topics:

  a) FNI@broad respondents prefer teacher-centered whereas lecturers teaching in a FL at home, favour the use of practical methodologies with a few respondents accounting to have introduced some changes in the methodologies they usually adopt in the classes taught in L1.

  b) Overall, lecturers make an effort to engage their students in interactive student-oriented activities.

  c) FNIs report an extensive use of collaborative learning methodologies and active strategies.

  d) Only the respondents to the FNI@broad bring in the topic "collaboration among colleagues", reporting a very productive use of this strategy.

  e) Lecturers' self-perceived knowledge about IPP internationalisation strategy is significantly higher than the information they believe they have about the Portuguese policy for internationalisation and bilingual education in HE. FNIs also evidence lecturer's basic knowledge about the issues, and a focus almost exclusively on the ERASMUS programme.

  f) In general, respondents also express their opinion about IPP language policy, when they regret not to be offered (for free) the opportunity to attend FL courses, or when they refer that there should be more incoming ERASMUS students at IPP and indirectly point to the apparent weak attractiveness of IPP for incoming students.

- Globally, respondents' self-perceived needs on theoretical and methodological training for teaching in a FL are "considerable".

The analysis of lecturers' responses (questionnaire and FNIs) on research sub questions **RSQ1c/RSQ2c** (Focal area 1: self-perceived skills and needs) about their *knowledge of materials and resources used for bilingual teaching* reveals that:

- IPP lecturers see "materials and resources for teaching in a FL" as a challenge as, in general, they are not very confident about their knowledge of the principles for producing authentic materials to teach content in English/ FL, for adapting materials to teach in English and for using online reference materials for teaching their content specialised classes in English.
- The FNI@home and in the FNI@broad also seem to have a very clear opinion about the characteristics of ideal pedagogic materials for bilingual teaching, particularly in terms of content presentation and form.
- FNI@home mention that when they think about teaching in a FL, they are aware of the need to adapt materials to the language level of the students and of the need to translate those materials.
- In the FNIs lecturers approach the theme "materials and resources" for bilingual teaching from the perspective of the criteria adopted for their selection and present an extensive range of reasons and the rationales for it.
- In terms of training needs, IPP lecturers perceive their need for training on "materials and resources" for teaching in a FL/English as considerable or high.

The analysis of lecturers' responses (questionnaire and FNIs) on research sub questions **RSQ1d/RSQ2d** (Focal area 1: self-perceived skills and needs) *about their ongoing professional development for using English/FL as a medium of instruction* reveals that:

- Lecturers' perception about their current situation concerning professional development for bilingual teaching is very pessimistic and their weakness comparatively to the other thematic blocks of the questionnaire. The only item that lecturers seem fairly more confident in is "the attendance of teaching methodology upgrading courses".
- FNIs findings reinforce the results of the questionnaire with some respondents (both abroad and at home) pointing out the lack of FL training courses offered by IPP. Besides the lack of language training courses, data collected through the FNIs also made it possible to identify respondent's lack and need of training in pedagogic materials design for bilingual teaching and in technological media support to classes.
- IPP lecturers' training needs on professional development for teaching content using a FL are considerable.

The analysis of lecturers' responses on research sub questions **RSQ3/4** (Focal area 1: Lecturers' perceptions on students' skills and needs) about *IPP lecturers' perception about their students' linguistic skills in English* reveals that:

- Overall, lecturers view their students' linguistic skills in English as barely adequate for attending classes taught in English.
- The FNI@home also bring up this topic and the general attitude points to Portuguese students' serious linguistic difficulties in English
- Lecturers' awareness of and difficulty with different levels of students' language proficiency in class is frequently mentioned in the FNIs and identified as challenges for respondents.
- Lecturers's perception of their students linguistic training needs is, in all items "considerable".
- In the FNIs, lecturers show a deep awareness and concern about students' specific language needs.

The analysis of lecturers' responses on research sub questions **RSQ5** about IPP lecturers' perceptions on *the impact on their current situation and their training needs of such variables as their age, gender, number of years teaching in HE, type of contract, specialisation area or situation in which they have used the English language in academic context in the last two year*s reveals that:

- No significant statistically impact was found of lecturers' age, gender and type of professional contract on CS.
- Lecturers with 6-10 years of experience, seems to have an "adequate" level of confidence on materials and resources for bilingual education (CS3) and a high level of confidence in their perceived knowledge of methodological aspects of bilingual education.
- In terms of the departments of origin, the most significant findings indicate that lecturers from the area of Language & Communication Science are more confident about their linguistic competence for teaching in a FL than all the other departments.
- Variable 6 inquired about the situations in which lecturers had used the English language in an academic context in the two previous academic years and one of the findings is that all situations listed in variable 6 had a statistically significant positive impact on at least one thematic block, although some situations have a higher impact than others. For example, having "regular classes with Portuguese and incoming ERASMUS students at IPP" had a statistically positive impact on all four thematic blocks, which indicates the importance of this activity for the improvement of linguistic competence in a FL, for the knowledge of teaching methodologies for bilingual teaching, for the elaboration of resources and materials and even as an opportunity for

professional development. This last impact was also suggested by one of the respondents of the FNI@home.

The analysis of lecturers' responses on research sub questions **RSQ6** about *IPP lecturers' perceptions towards teaching through English (RSQ1) and how it relates to the training needs they identify,* (RSQ2) reveals that:

- The findings collected point to a globally weak self-perception of lecturers' knowledge in the 4 thematic areas inquired for teaching in English/FL, despite the more positive idea about their language skills to do it. Overall, the training needs they require, although with variations within the four thematic blocks, are considerable across all topics. Lecturers' signal "professional development" as the area they are in most need of training.

## 3. Implications

Globally, the findings of this dissertation are evidence of IPP lecturers' perceptions of their ongoing knowledge and their training needs on bilingual education. Thus, overall, they might have significance for the policy and strategy of IPP. Two broad scopes were identified for these implications, namely IPP internationalisation policy and IPP lecturers' CLIL/ICLHE teacher training and some of the key ideas on these issues are presented below:

- One of the key findings of this research study points to IPP lecturers' appeal for professional development programmes. In the area of bilingual education. IPP lecturers believe that their preparation is inexistent and the requirement for training needs are considerable. Lecturers' framed narratives are also expressive in references for the need for professional development initiatives.
- By promoting professional development programmes that include the training in bilingual education, IPP can make available to lecturers the tools that will also assure IPP quality services. Without being offered possibilities of professional development and specific training in bilingual education, lecturers may feel unsupported, ill-prepared to engage in teaching their content in a FL, and simply not be involved in the process (Beltrán-Palanques, 2021).

The CLIL/ICLHE approach can bring some contributions to the reinforcement of a strong internationalisation policy (abroad and at home) at IPP:

- Considering that one of the priorities of HEIs agenda is to overcome the challenges of reconciliation between internationalisation and regional impact, particularly in economically more depressed regions like the Alentejo region, in Portugal, HEIs need the support of strategies and measures to lever their capacity for generating knowledge and skills and thus succeed in the alignment of regional strategies and international dimension that will improve the HEI and the region. The CLIL approach has the potential to contribute to this process.

- With the implementation of a CLIL approach, the numbers of the still small proportion of the privileged minority of students who are able to go abroad and benefit from an international education can change, and the number of those receiving an international education "at home" can increase. By increasing the participation in international joint publications, international research networks, projects and infrastructures, IPP can contribute with a major asset for the region to internationalise. More research and innovation collaborations at IPP might have a leverage effect on other organisations in the region, attract and include other territorial stakeholders, such as SMEs, clusters or business organisations, which could partner within the same projects, participate in more EU projects and open the opportunities for the region.
- Moreover, the assignment of all responsibility for international activities in IPP to the GRI (International Relations Office / Gabinete de Relações Internacionais) was comprehensible when internationalisation was primarily associated with international students" recruitment and mobility through ERASMUS or similar European programmes. However, seeing that "internationalisation" is identified as a key concept in the mission and strategy (and culture) of IPP, it should be taken more seriously and made more evident in the activities undertaken at IPP and be really imbedded into the structure of the Institution to become a determinant factor for IPP competitiveness and sustainability.
- For lecturers and other staff in general, any call for direct engagement with the internationalisation strategy of the HEI should be clear, clearly communicated, and embedded directly in a formal role to allow for the management of personal and professional expectations. The HEI should make it clear how the work of internationalisation may relate to other shared rationales, such as the provision of quality education or the involvement with local stakeholders.
- Promote "internationalisation at home" with such measures as the recruitment of international staff and students, plan actions for the improvement of the offer in English.
- It is important that CLIL/ICLHE training is transferred into and transformed inside the classroom, so that it makes a positive difference there and leads to better academic results in a broad multilingual and pluricultural IPP,

## 4. Limitations

One of the major limitations of this study refers to the non- integration of the voices of the other relevant stakeholders in the process, namely, the students and those responsible for the strategic policy of the institution. The initial plan included them, but it had to be abandoned for reasons of logistics and time. The interviews for the institutional stakeholders were prepared and the planning and the whole protocol defined to be implemented. However, after collecting the data from the questionnaire and

mostly the qualitative date from the narrative inquiries, it was clear that the introduction of more data to collect, prepare and analyse, would not be feasible to handle with the means and under the conditions lived at the time. The interviews were replaced by extensive documental research on IPP institutional internationalisation and language policy documentation in force at the time, and the idea of learning about the students' beliefs was not further pursued. Yet, the project of hearing their voices has not been abandoned, and in terms of further research these other intervenient in the process will be contemplated.

One other limitation derives primarily from the context and circumstances of the Polytechnic Institute of Portalegre and it is related with the respondents to the framed narrative inquiries. The fact is that currently there is no CLIL/ICLHE provision at IPP, and the only classes taught in a FL are those classes that, in a particular semester, integrate ERASMUS students. Pondering on the possibility of not using the FNIs as research tools or applying them to this specific set of lecturers, it was considered methodologically acceptable to apply the FNIs to these groups of lecturers and acknowledge that the focus of their narratives might sometimes be the Erasmus students' context and not the broader context of using a FL/English as the medium of instruction. An evaluation of this option was subsequently undertaken, and it was decided that although some respondents' narratives sometimes highlighted the ERASMUS context, as when they take a very critical stance about the organisation and logistic of some ERASMUS procedures at IPP, in general terms of the research study design it was found adequate.

No qualitative data analysis software (N-Vivo, for example) was used to analyse the qualitative data collected through the FNIs used in this research. The data from the FNIs was analysed using content analysis and the limitations inherent to this procedure. However, taking into account that the total number of FNIs to analyse was 15 + 17 narratives, it was considered feasible to do. Moreover, a first contact and attempt to analyse the FNIs with a sentiment analysis software (SentiLex-PT, a sentiment lexicon designed for the extraction of sentiment and opinion about human entities) did not return much encouragement, excluding the use of any qualitative data analysis software.

Other limitations had to do with the use of the FNIs as research tool. Barkhuizen and Wette (2008) had identified a set of possible limitation to the use of FNIs, and two of these possibilities had a particular resonance in this study. The first was a desire for more information than was often provided and the other was the lack of "opportunity to explain what was intended by each starter-sentence prompt" (Barkhuizen and Wette, 2008, p. 382). Despite the richness of the narratives in the FNI, there is not the possibility of real-time interaction with the respondent and some situations may be left unclear. But that is always an issue with the analysis of qualitative data.

Another type of limitation of this study is the fact that it focuses on the self-reported pedagogical practices of lecturers, rather than on their actual practices (in classroom context, for example), and what is reported might differ from what was actually happening in the classroom. However, in line with van Kampen et al. (2018, p.232) as "we consider teaching approaches to consist of a combination of a

teachers' teaching intentions (why they adopt a particular strategy) and a teachers' teaching strategies (what they do), we think self-report is the most effective way to provide us with an overview of these approaches".

One final limitation related to the use of the FNIs has to do with the fact that the prompts of the FNI did not coincide with all the topics that were dealt with in the questionnaires. For example, in the FNIs lecturers were not asked about their needs in terms of methodology or materials, for example. However, much could be inferred from the FNI and although that can be a limitation for this particular research study, it does not diminish the richness of the FNIs as a research tool and a key element in this research.

Finally, the reduced number of respondents and the restricted scope of the research that is concentrated on a particular HEI in inland Portugal, with no tradition of multicultural educational practices. This limitation, however, can also be considered a strength of this research, as it presents an in-depth study of a typical inland HEI in Portugal, with very specific characteristics and problems to overcome.

## 5. Future research

In the development of this research work, several issues were raised that suggested possibilities of further research. Among the various themes listed along the dissertation, three are here highlighted that will deserve further attention:

- Based on the limitations encountered with this research, the idea of complementing the findings of this study and develop a project to explore the perspective of the students on the introduction of the CLIL approach in their classes and explore their effective experience of participating in CLIL classes is a plan that exists from the time this research was started.

- The "framed narrative inquiries" is a research tool whose potential in needs analysis studies is only emerging. It will be further studied and applied in future research.

- The differences identified in the teaching practice of lecturers teaching in a FL at home and those teaching in a FL abroad will deserve further investigation.

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