

# Designing and Implementing a Professional Programme for ICLHE Teachers: Beyond Linguistic and Communicative Competence

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**Abstract**—English Medium Instruction (EMI) is being fostered by universities across the world to promote their internationalization with an increasing number of courses taught through English both at graduate and postgraduate level. This requires university lecturers to be offered opportunities for professional development. It is the aim of this paper to present an extended training programme -CLIC@unizar (Content and Language Integrated Competences at the Universidad de Zaragoza)- developed at our institution which seeks to foster not only the communicative skills but also the pedagogical skills of those lecturers teaching through the medium of English or who are planning to do so. The training itinerary is grounded on previous research on EMI professional development programmes, English for Academic Purposes (EAP) and English for Specific Purposes (ESP), and methodological principles promoting the students' active role and their development of communication and digital competences. The use of digital tools and technologies which promote online collaboration, especially HyperDocs and Google Apps for Education (mostly Google Docs, Google Slides, and Google Forms), has been integrated in the itinerary following the SAMR Model (Puentedura, 2013). The use of these digital tools has allowed us to include multimodal ways to provide participants with input, make them interact with the material, with us and among themselves, and produce output as demonstrations of their learning. It is essential to make ICLHE (Integrating Content and Language in Higher Education) teachers aware of their need to adapt their methodology or adopt new ones to be effective in their teaching in an L2.

**Index Terms**—EMI, ICLHE, internationalization, higher education, communicative skills, digital competences, pedagogical skills

## I. INTRODUCTION

University teachers' professional practices more and more commonly require the use of English for publishing, management and also teaching purposes. The focus of our paper will be on academics' teaching practices through the medium of English and will present a programme designed for professional development in ICLHE (Integrating Content and Language in Higher Education) in our own context and institution: a Spanish university. English Medium Instruction (EMI) is a rapidly growing global phenomenon (Dearden, 2014), which is being fostered by universities across the world to promote their internationalization with an increasing number of courses taught through English both at graduate and postgraduate level. This has triggered a lot of scholarly attention in different aspects such as language policies, teachers' and students' perceptions and motivations, the language and interaction strategies used in the classroom, and learners' strategies, among others (Macaro, 2018). Recent attention has been paid to EMI professional development programmes (e.g. Ball & Lindsay, 2013; Costa, 2015; Cots, 2013; Morell et al., 2020; Morell & Volchenkova, 2021; O'Dowd, 2018; Pérez-Cañado, 2020; Sánchez-Pérez, 2020), as these tend to vary and be adjusted to the specific needs and contexts in which the lecturers work.

In line with this previous research, in the design of our professional development itinerary we aimed to address not only language and communicative competence aspects but also, very importantly, methodological aspects, including digital competences, contributing to developing participants' teaching skills. In fact, we sought to make our colleagues participating in the professional development programme aware of their need to adapt their methodology or adopt new teaching strategies and techniques to be effective in their teaching in an L2. Such a training programme goes beyond one-off courses, and has been developed working in collaboration with the Vice-Rectorship for Internationalisation and Cooperation at our institution. The objective was to promote training which could support bilingual teachers and could encourage some others to embark on it in the near future, with the overall aim to "strengthen the quality of the university's shift towards bilingualism" in line with professional development programmes in other European countries (Guarda & Helm, 2017, p. 900).

It is, thus, the aim of this article to contribute to the growing research on EMI teacher training programmes by describing and analyzing our teacher training itinerary, CLIC@unizar (Content and Language Integrated Competences



development of the training programme described, students' English skills development was not specified as a learning outcome. There was no intentional planning for their development and therefore they were not given any attention, even though such achievement is expected by lecturers, students and policy makers (Pecorari & Malmström, 2018). It is thus believed that the training of ICLHE lecturers can lead to a more explicit, systematic thought about development of English language skills obtained thanks to a methodological turn and some exposure to models of good practice regarding these.

Our teacher training plan is further grounded on several methodological principles, namely, Communicative Language Teaching (CLT) (Brown, 2010; Larsen-Freeman, 2000; Richards, 2006), Task Based Learning (TBL) (Ellis, 2003; Long, 2015; Skehan, 1998; Willis & Willis, 2007), Second Language Acquisition (SLA) (Cummins, 1979, 2008; Long, 1981, 2015; Swain, 1995, 2010), digital competences (Carrington, 2016; Puentedura, 2013), and Visible Learning (Hattie, 2012). Connections are established between TESOL and EMI (Pecorari & Malmström, 2018) as we believe that students' language competence development should not just be expected, but planned and fostered.

CLT principles such as making a meaningful use of the language in the classroom, to foster pair and group work and communication promoting exchange of information and ideas and negotiation of meaning among peers (e.g.; Brown, 2010; Larsen-Freeman, 2000; Richards, 2006) are followed in the design and implementation of the courses by presenting tasks and activities that require such interaction and use of the language. In addition, SLA principles are also borne in mind. We seek to make our colleagues be exposed to input that is comprehensible through given strategies and tools, especially when new, abstract or complex content is presented. These can work as scaffolding (Gibbons, 2015). But for language to be learnt and acquired, students need to be given opportunities to interact (Long, 1981, 2015) so that they can test their hypotheses and develop their interlanguage. Tasks are required that force them to produce output (Swain, 1995, 2010). We also consider the functions of language in an educational context, more specifically the need to develop CALP (Cognitive Academic Language Proficiency) and BICS (Basic Interpersonal Communication skills) (Cummins, 1979, 2008), although in this particular case we restrict these a great deal to the context of the university classroom.

Digital EdTech resources and the potential subsequent development of teachers' digital competence are an additional, valuable component of our specific professional development programme. This is especially relevant given the growing interest in developing and certifying teachers' digital competences, as attested by the proliferation of standards and frameworks, such as the ISTE Standards for Educators (<https://www.iste.org/standards/for-educators>) in the US or the Digital Competence Framework for Educators (DigCompEdu) (<https://publications.jrc.ec.europa.eu/repository/handle/JRC107466>) in Europe. This urge to upskill and reskill educators in their digital competence has been accelerated by the current context of open education and online learning. In our introduction of EdTech in the itinerary, we make use mainly of G-Suite (<https://workspace.google.com/dashboard>), including *Google Slides*, *Google Docs*, *Google Sheets*, *Google Forms*, and most importantly *HyperDocs* to guide and self-contain the learning process. Through *HyperDocs* (<https://hyperdocs.co/>) we can create multimodal text sets, that is, "collections of texts about a topic that includes a variety of information sources such as websites, articles, videos, images, quotes, and infographics" (Highfill et al., 2016, p. 65) in such a way that educators practice digital literacy skills and can subsequently apply and foster these in their classes to promote their students' skills. In addition, Puentedura's (2013) SAMR Model for technology integration in the classroom has been adopted in our professional development programme to incorporate these digital tools. This model comprises four levels of integration and use of technology in learning activities in the classroom: Substitution, Augmentation, Modification and Redefinition. The first two levels entail only a process of enhancement as technology is a substitute for other learning activities, without functional change (Substitution) or with some functional change (Augmentation). The last two levels entail a process of transformation, as technology allows the learning activities to be redesigned (Modification), or new tasks which would not have been possible without the use of this technology (Redefinition).

Finally, in our training itinerary, educators are made aware of what they are learning, why they are learning that, and how they can transfer that learning into their classes, through reflection and metacognition. Educators are led through different learning stages moving from activation to input, connection, planning, creating and publishing, and finally assessment and reflection. They are also led to realize what stage they are in and what our aims are, as well as the type of resources and activities used, promoting visible learning and teaching (Hattie, 2012). We use the tools and strategies to both teach them and to serve as models for their own applied teaching practices. In fact, we try to go beyond this experiential learning and implement loop input (Woodward, 2003) inasmuch as tutors demonstrate and practise the concepts through techniques and methods that are then discussed as possible additions to the participants' own repertoires.

### III. OUR PROFESSIONAL DEVELOPMENT PROGRAMME FOR ICLHE TEACHERS

In order to respond to the need for ICLHE teachers' support and training, the Vice-Rectorship for Internationalisation and Cooperation at our institution commissioned a group of colleagues from the English Department to design a professional development programme. After studying the results of a survey on the teachers' perceptions of internationalisation, on their motivations to teach in English and their needs to do so efficiently, we designed the different courses in the itinerary, which we labelled CLIC@unizar (Content and Language Integrated Competences at

Universidad de Zaragoza). It is conceived within an institutional Plan for Internationalisation, and as such, it takes a broad international perspective, seeking to go beyond English language instruction and involving different stakeholders and agents (e.g. Dafouz, 2021; Fortanet-Gómez, 2013).

Our teacher development programme offers two routes (see Figure 1). The first, longer route, is offered for those university teachers who have a B2 level and no experience in EMI. It consists of a total of 115 hours of training, as they start in stage 0 with the course *English for Teaching Purposes* and then continue on to the rest of the itinerary. The second, shorter one, is available for those who begin with a C1 level or previous EMI experience and it consists of a total of 90 hours of training. Stage 1 comprises 30 hours of training provided in the course *General Training in ICLHE*, and Stage 2, another 30 hours provided in the course *Specific Training in ICLHE* in their content areas: Bio, Science and Engineering or Social Sciences and Humanities. The remaining 30 hours of training correspond to a varied crash course menu from which lecturers can make their own choices.

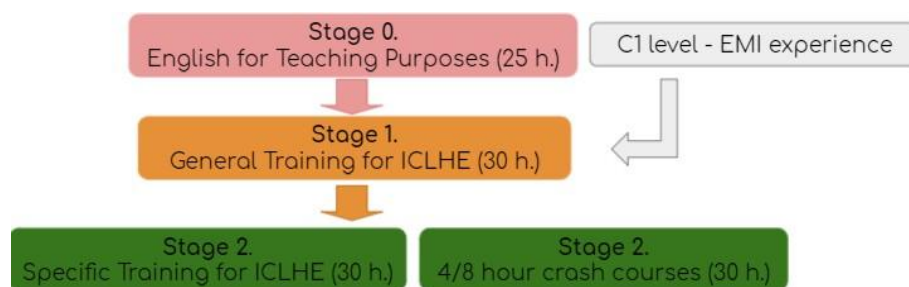


Figure 1. CLIC@unizar Professional Development Itinerary (<https://internacional.unizar.es/apoyo-la-ensenanza-en-ingles>)

It was conceived as an itinerary allowing for varied paths thanks to the different starting points and crash courses of the participants' choice. Crash courses are added and deleted in response to participants' evaluation and needs. These are some of the crash courses offered to date: *Designing checklists and rubrics*, *Engaging students: apps and tools*, *Designing visual support*, *Writing instructions and exam questions*, *Giving feedback*, *Interaction in the ICLHE classroom*, *Pronunciation for ICLHE Teaching I*, *Pronunciation for ICLHE Teaching II* and *Language functions for the ICLHE teacher*. The training programme can be completed at the teachers' own pace. Several editions of varied courses are offered every year. We regularly evaluate the plan and changes are introduced every year.

In the itinerary the first courses generally have a greater focus on developing ICLHE lecturers' or lecturers'-to-be language and communicative skills and confidence in their use of the English language for teaching purposes. Anxiety and uncertainty are reported to be some of the main challenges among our colleagues to undertake teaching through the medium of English, which seems to be a common concern at least among Spanish university teachers (Nieto Moreno de Diezmas & Fernández Barrera, 2021). In the course *English for Teaching Purposes*, which entails 25 hours of training, the focus is on developing participants' General Academic English working on Cognitive Academic Language Proficiency (CALP) (Cummins, 1979, 2008), as well as their language competence in the classroom focusing on classroom discourse. The course revolves around language functions that have been shown by EAP studies to be used frequently by academics, namely, Defining objects and concepts, Explaining processes and procedures, Describing events, devices and data in visuals, Presenting taxonomies and classifications, and Providing outlines, summaries and overviews. The course *General Training for ICLHE*, which entails 30 hours of training, is considered the cornerstone of the programme as all participants take it either after the *English for Teaching Purposes* course or as a first step in the itinerary. In the course a balance is struck between the development of language and pedagogical skills. Participants are made aware of language and communication aspects, as well as aspects related to teaching in an L2, such as making input comprehensible, checking students' understanding, analysing and evaluating lecture and seminar styles and exploring resources and techniques aimed at supporting students' L2 output and at promoting interaction in the ICLHE classroom. Contents are organised around three modules on Guiding input, Supporting output and Structuring interaction. Finally, in the course *Specific Training for ICLHE*, which entails 30 hours of training and which participants can only take upon successful completion of the *General Training for ICLHE* course, further attention is given to disciplinary cultures and discourse characteristics. Three different courses have been designed around related fields, namely, Social Sciences and Humanities, Science and Engineering, and Bio Sciences. Similar contents and objectives are established as in the previous course, but greater depth is gained offering further opportunities for application and analysis to their own specific teaching contexts and drawing participants' attention further to discourse and generic disciplinary specificities and to the development of students' disciplinary literacies (Airey, 2011; Zhang & Chan, 2020).

#### IV. THE CLIC@UNIZAR ITINERARY: DEVELOPING TEACHERS' COMMUNICATIVE AND DIGITAL COMPETENCES

After presenting the teacher training programme designed and implemented at our institution, we focus on the main tenets on which the training rests, seeking to develop participants' language and methodological skills focusing on how digital tools have been integrated to offer and process input, to promote interaction and collaboration among

participants and to guide their output.

As pointed out in Section 2, the courses in our CLIC@unizar programme are planned around *HyperDocs* which vertebrate the learning process, taking participants through different stages in each unit or module within the courses (see Figure 2).



Figure 2. A *HyperDoc* Template Used in our CLIC@unizar Professional Development Programme

In the Activation stage there is a two-fold purpose. First, university teachers are presented with the expected learning outcomes and are briefed not only on what they will be learning but also on how they will demonstrate their learning at the end of the sequence. Second, teachers' previous knowledge on the topic is established and mental schemata are activated. In the Input stage, critical comprehensible input is provided in multimodal means, and visual organizers are generally used to structure, facilitate the processing of the new learning, and promote visible learning (Hattie, 2012). In the Connection stage, participants are pushed to interact either with their peers, trainer or the material, and deepen their knowledge, establishing links with other aspects of the topic or delving further into their thinking. They are asked to participate and complete diverse tasks in which communication and interaction are essential, promoting exchange of ideas, negotiation of meaning and further learning (Long, 1981, 2015). In Planning, Creating and Publishing, participants begin to apply and transfer knowledge obtained by means of previous tasks (Ellis, 2003), pushing students' output (Swain, 1995, 2010) and facilitating the creation of a final product. These final products -such as recording themselves presenting a taxonomy that is relevant in their teaching contexts, completing a chart for a lecture plan, or designing their own rubrics or checklists for their students' performances- constitute the outcome of the module, learning sequence or task (Willis & Willis, 2007). In Assessment and Reflection, as a post-task phase lecturers look back at their learning process and share their reflections with other participants. Throughout all of the aforementioned stages, digital technologies are used as tools to help ICLHE teachers promote and register learning, completing tasks which require interaction and a meaningful use of the English language.

#### A. *Curating and Creating Input*

In order to provide the most effective input, relevant websites, EAP textbooks and available corpora were used to find, select and adapt different resources such as authentic texts, videos, or infographics as part of the curation process. Digital tools, for example, *Google Docs* and *Slides*, or video editors are employed to modify existing texts and to create our own versions of multimodal input. Both the curated and created materials are presented in a way that learners can process the new information and concepts facilitated by the design of organizers (Figure 3), charts and activities drawn up using *Google Forms*, *Docs*, *Slides*, or *Flippity*.

INPUT

We are going to focus more specifically on **written output and university student genres (text types)**.

After analyzing a whole corpus (The British Academic Written English Corpus (BAWE)) consisting of 6,000 good-standard student assignments (6,506,995 words) distributed across four broad disciplinary areas (Arts and Humanities, Social Sciences, Life Sciences and Physical Sciences), it was determined that there are **five Primary Purposes for writing at university**.

|  |  |
|--|--|
|  | <b>1.</b> Demonstrating Knowledge and Understanding  |
|  | <b>2.</b> Developing Powers of Independent Reasoning |
|  | <b>3.</b> Building Research Skills                   |
|  | <b>4.</b> Preparing for Professional Practice        |
|  | <b>5.</b> Writing for Oneself and Others             |

For each of the purposes different genres and types of texts can be identified.

**3.** Complete the following [worksheet](#) to learn more on the type of genres and written output that we could ask our students to produce in our courses.

Rank the primary purposes from what you consider are the most complex (number 1) for your students to the ones you consider are the least complex ones (number 5).

|    | Student university writing | Why? Concept Procedure (skills and thinking) Language. | Examples of support which could be offered |
|----|----------------------------|--|--|
| 1. |                            |  |  |
| 2. |                            |  |  |
| 3. |                            |  |  |
| 4. |                            |  |  |
| 5. |                            |  |  |

Figure 3. Example of Input Provided (a *HyperDoc* and a Linked *GoogleDoc* as Visual Organizer) Facilitating the Reception and Processing of New Information and Concepts

Following the SAMR model (Puentedura, 2013) explained in Section 2, this entails a modification of the tasks that we would have proposed analogically; that is, we are not just substituting screens for papers but these tools allow for some sort of functional change.

**B. Promoting Interaction and Collaboration**

Interaction and collaboration among participants and between participants and the trainers are promoted in our professional development programme especially thanks to the use of digital technology through the use of *Google Forms* to create tasks such as a questionnaire to collect and establish previous knowledge on the new topic at hand, which entails a substitution of an oral brainstorming that may occur in a non-technological classroom. Also, *Google Slides* provide an opportunity for computer-mediated interaction and collaboration, which is especially relevant in the context we were living in, where face-to face interaction needed to be reduced. By sharing editing permissions, *Google Slides* can be completed in a shared way (see Figure 4), to provide collective answers to questions. Also, each participant can be asked to not only edit the slides available but also to add their own particular slide so that everybody’s output is registered and communicated.

Presentation to collect student thinking

CHOOSE A SLIDE THAT NO ONE ELSE IS USING. WRITE YOUR NAME. INSERT AN IMAGE (OPTIONAL) AND ANSWER THE THREE QUESTIONS

I'M LISTENING

VICKY

A1: My model answer.

A2: My model answer.

A3: My model answer.

Figure 4. Example of a Shared *Google Slides* to Promote Interaction

Images, videos and audios can also be part of the shared slides. Free access digital applications such as *Socrative* (<https://www.socrative.com/>) and *Mentimeter* (<https://www.mentimeter.com/>) allow teachers to check the shared understanding that develops as the class progresses with the advantage of being able to design questions adapted to the moment of teaching. Lastly, *Flippity* (<https://www.flippity.net/>), which is an add-on for *Google Sheets*, allows for the creation of study aids such as audio flashcards and vocabulary lists for students to encounter the new vocabulary for autonomous retrieval practice through the use of the gamified tools provided such as the Random Name Picker or the Badge Maker. This is particularly effective for the learning of content-specific material developing learners’ CALP.

As the ICLHE lecturers encounter the different tools used in the training courses, they are also provided with a model for good strategies and techniques that they can implement in their own teaching contexts. In addition, emphasis is made on discussing the processes, activities, methods and resources used throughout the training, and evaluating the advantages and disadvantages from the students’ and teachers’ points of view, following Woodward’s (2003) concept of loop input. Indeed, “allowing time for the decompression phase also involves participants in a detailed and very useful discussion of the steps, materials, content and participant experience of the activity from the inside out” (Woodward, 2003, p. 303).

C. Facilitating Learner Output and Assessment

Teachers can also develop their digital competences by being asked to produce their own output. Following Puentedura’s (2013) SAMR model, *HyperDocs* augment the functions of a more traditional lesson plan or worksheet since they can structure the process and production of output. They enable the integration of guidelines, checklists and rubrics hyperlinked to the task so that learners can create their output with the specific goals and success criteria in mind and at hand (Figure 5).

Checklists for final task 2

2.1. Written description of **events** using a digital timeline

|   | Excellent | Good | Fair |
|---|-----------|------|------|
| The description includes a start event, at least an intermediate event and a final event.   |           |      |      |
| The description includes the characteristics, problems and solutions of the events (achievements or stages toward the invention). |           |      |      |
| The description reads fluently and is easy to follow.   |           |      |      |
| The description is coherently divided in paragraphs (e.g. one paragraph per achievement or stage).                                |           |      |      |
| Time expressions are accurately used and help the reader understand the evolution of the events (in order).                       |           |      |      |
| A timeline is included which eases the understanding of the text.   |           |      |      |
| The timeline contains accurate, appropriate information and is visually attractive.   |           |      |      |

Figure 5. Example of a *HyperDoc* Section to Facilitate Learner Output and Assessment

Other digital tools for voice recording such as Vocaroo (<https://vocaroo.com/>) or [www.online-voice-recorder.com](http://www.online-voice-recorder.com) with very simple interfaces and technology allow learners to create an audio link or file with their oral productions and insert them via this link to any other type of document such as a *Google Slides* presentation. This allows teachers to collect and assess evidence of speaking competences that would have in the past required much more time to gather. Teachers can also make use of these simple digital recording tools to easily record and send oral feedback to participants, which they highly value.

Platforms which can host different posts and tasks such as *Padlet* (<https://padlet.com/>) and *Symbaloo* (<https://www.symbaloo.com/>) are also used to collect and share participants’ output. They can upload videos, documents, audios, or other files so that others can see them. *Padlet* in particular also allows participants to comment on each others’ uploads. The tasks thus designed are very different from a traditional task where only the teacher would read the answer and provide feedback, which entails a Redefinition process following Puentedura’s (2013) SAMR model.

Exit tickets created using *Google Forms* or *Socrative* help to assess learning and to receive feedback on the process of teaching as well. This allows for the adaptation of our teaching to the changing needs of learners, for instance, by modifying the way that learners “hand-in” their productions and the ways in which teachers can assess these and give feedback.

V. QUALITATIVE EVALUATION OF PARTICIPANTS

Participants generally report high degrees of satisfaction with the courses completed, acknowledging their development of communicative skills and their reflection and adaptation of teaching practices, even if some resistance was encountered at the initial stages of the training by a few teachers, as regards the digital component of the training.

Participants enrolled in the different courses report to have been fully satisfied with it and they value all items specified in the official questionnaire very highly: content, approach, methodology, applicability, and current relevance. When evaluating the courses in a more specific manner, ICLHE teachers value specially the following items: reflecting

on their own teaching practices, working in collaborative teams in the classroom, interacting with their workmates, learning about how to promote interaction and collaboration, and using digital tools and applications. Participants are also encouraged to share their views through open comments in the evaluation questionnaires. In these comments, they appreciate and positively evaluate the communicative and pedagogical combined nature of the training received, as transpires from the following examples:

“The course combines tools for improving English [sic.] and also teaching methodologies” “I have more tools in order to teach my students”.

“The activities made in these classes and homework help us to apply them in our classes (or at least, see how they could be applied and the potential gain when applying”.

“Being able to widen my skills and my teaching methodologies, also learning how to do it in case in the future I go somewhere else to teach”.

“It's my first time in a class focused on english [sic] for teaching, so it has been interesting the way that we have used to work in different methodologies through english. I have think [sic.] deeply on it and it will be useful at class[sic]”.

“Me ha gustado que las actividades nos han permitido reflexionar acerca de cómo estructurar nuestras clases. Me llevo unas cuantas ideas, que espero poder aplicar a mi docencia cotidiana”. [I really liked that the activities have allowed us to reflect on how to structure our classes. I take with me a few ideas, which I think will be able to apply in my everyday teaching practice].

These remarks seem to be in line with previous work on EMI teacher training programmes and their evaluation in different cultural contexts (e.g. Guarda & Helm, 2011; Morell et al., 2020). Guarda and Helm (2011) reported findings in an Italian context in which a participant stated that “I have discovered new teaching pathways”, which seems to be in line with those reported above by colleagues at our institution.

## VI. FINAL REMARKS

Professional development training programmes that combine language and pedagogy are necessary to support ICLHE lecturers. These should go beyond one-off courses, be flexible and adapted to the participants' reported needs, but also to the needs which the literature on the topic has revealed, as well as on participants' likely lacks.

We believe that the design, development, implementation and evaluation of professional development training programmes have to be firmly grounded on theoretical principles and also pedagogical ones, since a methodological adaptation has to be undertaken by colleagues teaching in an ICLHE context. They need to be made aware of necessary and useful methodological adaptations when teaching through the medium of English. We believe this is achieved by putting teachers into the position of learners, experiencing the learning so that they can see the applicability and usefulness of such changes. By asking trainees (ICLHE lecturers) to process input, complete tasks and use digital tools in their professional training, they can design their own materials adapted to their specific teaching in the English-medium context. Training should not be limited to upgrading teachers' English proficiency (Macaro, 2018); methodological principles need to be not only followed but also made salient, drawing the participants' attention to them and reflecting on them (Woodward, 2003). In addition, drawing their attention to specific language and discourse aspects, we believe that we are working towards a symbiotic relationship between language learning and subject content objectives and moving from accidental to incidental, or even planned in the best cases, language teaching (Pecorari & Malmström, 2018).

There is still a lot of work ahead in developing ICLHE's lecturers support and training at our institution. It is our intention to develop a community of practice that meets and shares experiences in line with suggestions provided by Fortanet-Gómez (2020) and Morell et al. (2020), among others. We believe that creating trainees' digital production portfolios can also be an interesting learning experience for ICLHE lecturers who can then apply such resources and principles in their own English-medium teaching context. Most important of all, we envision continuing to carry out quantitative and qualitative studies on the overall impact of this training on lecturers' teaching experiences and students' learning, and more specifically on the extent to which the integration of digital tools in this professional development programme actually has an impact on the trainees' digital competences and those of their students taking courses through the medium of English.

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