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of Arts in Teaching English as a Foreign Languages ( TEFL)*

***“An Evaluation of the Technical English Course for EMI Preparation:  
Perspectives of In-Service Trainees and Trainers at the UCE, Bordj Bou  
Arreridj “***

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## **Dedication 1**

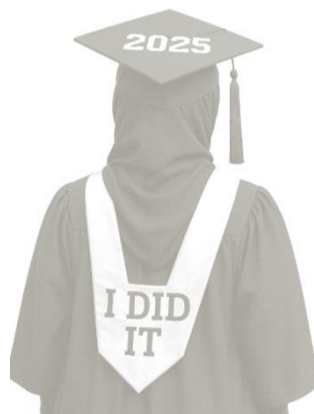
*First and foremost, all praise is to Allah for granting me the strength and patience to complete this work.*

*With deepest gratitude, I dedicate this dissertation to my beloved family, whose encouragement and faith sustained me throughout this journey. I am particularly indebted for my parents, for their endless love, prayers, and support.*

*I also extend my sincere appreciation to my sisters, who continually reminded me of my self-worth and encouraged me to believe in my abilities.*

*A special dedication is made to the memory of my late brother, Mohammed. May Allah grant him eternal peace and admit him into His vast paradise.*

*Finally, I wish to dedicate this work to my headmaster, Mr. Abbad Harriz, whose mentorship and steadfast support were invaluable. His wisdom helped me understand that life's challenges are an inherent part of personal growth, and that embracing both success and hardship is essential for inner peace.*



*Mebarka*

## Dedication 2

*“In the Name of Allah, Most Gracious, Most Merciful”.*

*“All the Praise is due to God Alone, the Sustainer of the Entire*

*I dedicate my work, to my dearest parents, your endless love, sacrifices, and prayers have been the light that guided me through every challenge. I owe this journey to your strength, patience, and unwavering belief in me. May Allah reward you for everything you've given me.*

*To my beloved siblings – Karima, Mouhieddine, and Abdelmoumen, Thank you for being my pillars of support, for every word of encouragement, and for always standing by me with love and understanding.*

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*Meriem*

### **Dedication 3**

*“In the Name of Allah, Most Gracious, Most Merciful”.*

*“All the Praise is due to God Alone, the Sustainer of the Entire World”*

*I dedicate my work*

*To my dear husband, thank you for your unwavering support, patience, and strength.*

*To my beloved children, you are my motivation, my joy, and the future I pray will shine through you.*

*To the people of knowledge and wisdom, with deep gratitude – you were the guiding light behind this achievement.*

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***Malika***

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## Abstract

This exploratory research investigates the alignment between the Technical English (TE) course and the needs of English as a Medium of Instruction (EMI). In particular, it seeks to know how in-service trainees perceive the TE course and how well it prepares them to apply EMI in their teaching practice. Given the growing significance of EMI in promoting higher education in a globalized world, this research offers meaningful feedback on the current TE course design by identifying its weaknesses and strengths. Evaluating the alignment of the TE course with EMI presents a valuable opportunity to improve the quality of English language instruction to enhance participants' English proficiency and course improvements. Mixed-method research was employed through integrating quantitative and qualitative data gathering. To ensure the credibility and depth of the analysis, this study applied methodological triangulation combining structured questionnaires with 27 respondents, interviews conducted with seven participants, and document analysis. The data were statistically and thematically analyzed. The findings revealed that a significant disconnect between the intended objectives of the TE course and the practical needs and expectations of its participants. Although the course helped enhance overall English proficiency, it was lacking in addressing the practical and subject-specific issues of in-service teachers in EMI settings. The majority of participants felt that the course did not have a proper needs analysis, did not provide field-specific training, and emphasized theory over practical skills. This research contributes to the evaluation of the TE course in Algeria and provides practical recommendations for curriculum designers to align more effectively the content, instruction, and assessment practice with learners' needs and EMI demands. Policymakers can use these findings to shape language education policies that better support EMI.

**Key terms:** Technical English Course, In-service trainees, English as a Medium of Instruction (EMI)

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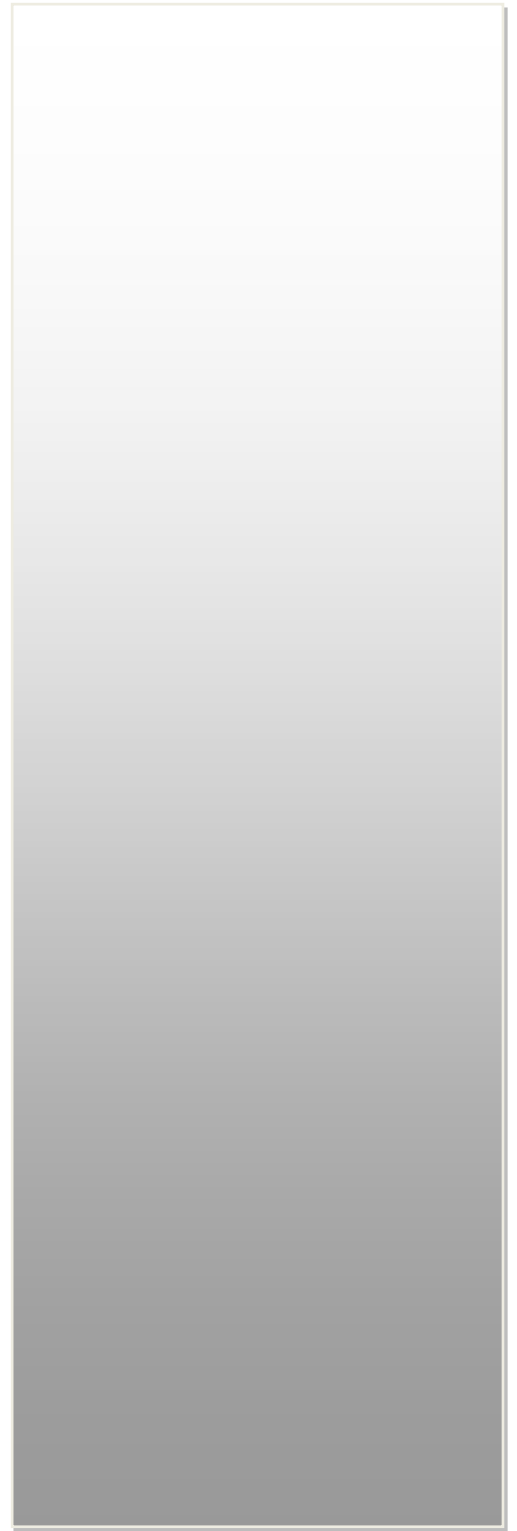
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## List of Abbreviations and Acronyms

- **CBI:** Content-Based Instruction
- **CEFR:** Common European Framework of Reference for Languages
- **CLIL:** Content and Language Integrated Learning
- **CMOE:** China's Ministry of Education
- **CPD:** Continuous Professional Development
- **EAP:** English for Academic Purposes
- **EFL:** English as a Foreign Language
- **ELLS:** English Language Learners
- **EMI:** English as Medium Instruction
- **EQUIIP:** Educational Quality at Universities for Inclusive International Programme
- **ESP:** English for Specific Purposes
- **ETPs:** English-Taught Programs
- **HE:** Higher Education
- **HEIs:** Higher Education Institutions
- **KAIST:** Korea Advanced Institute of Science and Technology
- **MOE:** Ministry of Education
- **NA:** Need Analysis
- **PD:** Professional Development
- **PE:** Programme Evaluation
- **TAEC:** Transnational Alignment of English Competences for University Lecturers
- **TE:** Technical English
- **UCE:** University of Continuous Education



# General Introduction

## General Introduction

### 1. Background of the Study

English has gained widespread recognition as a global language of communication, with 1.5 billion speakers worldwide (Dyvik, 2024). This prevalence is especially evident in global trade, where English is the most commonly used language for communication. Furthermore, English is the most commonly used language in scientific and technological discourse, leading to a significant percentage of scientific publications in English. The language's strong and dominant position worldwide is attributed to the advent of globalization, which has also resulted in the widespread use of English as a medium of instruction in universities all over the world ( Dearden , 2014; Ament and Pérez-Vidal, 2015; Macaro et al., 2018).

People all over the world may now share ideas and information using a common language because of the rapid trend towards globalisation, which has also changed the medium of instruction in education. In countries where English is not the primary official language, this phenomenon helps to expand the use of English as a Medium of Instruction (EMI), allowing for a wider use of English when teaching content knowledge. EMI has emerged as a worldwide trend in every aspect of education, with its expansion notably speeding up in higher education. Increasingly, universities worldwide are eager to implement EMI policies in both undergraduate and postgraduate programmes (Dearden, 2015; Macaro et al., 2018; Richards & Pun, 2021; Macaro, 2022; Sah & Fang, 2023). Compared to other countries, where EMI has grown rapidly and exponentially, Algeria has been described as a relative latecomer to this dominant trend. Short- and medium-term objectives have been set by the Algerian Ministry of Higher Education to progressively make English the official language of instruction and course materials at Algerian universities. Algeria's president and higher education minister both supported this initiative (Missedi, 2019; Allal, 2020; Bouthelji, 2022).

Recently, the Algerian government has put significant effort into encouraging the use of English throughout the country, particularly in academic settings (Missedi, 2019; Allal, 2020; Bouthelji, 2022). This decision supported the effort to keep up with the globalized market, promote scientific research, and provides more foreign opportunities for Algerian students and lecturers. The adoption of English-medium instruction (EMI) in higher education in

Algeria appears to be a complex and varied process. The Algerian government aims to increase the quality of its higher education system. The change in language has a significant effect on academic performance (Bredtmann et al., 2021).

The Algerian Higher Education Ministry prioritises ESP learners who use ESP as the medium of instruction (EMI). As the name implies, EMI means "using English as the primary medium of instruction in educational institutions where the learner's first language is not English" (Macaro, 2018). As the EMI project is still in its early phases in Algeria, there is little literature on hands-on course design practice for faculty staff. A few research examined students' and teachers' perceptions on EMI in higher education (Saidani & Afkir, 2023; Ouarniki, 2023). Few case studies addressed the practice of EMI teacher training or course design. This is because EMI teacher training courses are heavily context-dependent and there is no one size- fits-all approach (Galloway et al., 2017). Investigating EMI at a higher education institution in Algeria in order to gain a deeper understanding of this little-studied idea and to concentrate on the attitudes of lecturers, as well as their language and pedagogical needs for a successful outcome is crucial for the success of any EMI course .

## **2. Statement of the Problem**

Despite the growing use of English as a Medium of Instruction (EMI) in Algerian universities to enhance internationalisation and English proficiency, its effectiveness depends heavily on appropriate course design, especially in contexts involving in-service trainees who are university instructors in STEAM (Science, Technology, Engineering, Arts, and Mathematics) fields, with diverse linguistic and academic backgrounds attending a TE course designed to prepare them for teaching through EMI. At the University of Continuous Education (UCE) in Bordj Bou Arreridj, a TE course has been introduced without sufficient empirical evaluation of its design or its relevance in preparing in-service trainees to use English as a medium of instruction in their teaching practice.

In an investigation of EMI training courses, O'Dowd discovered a significant difference between the priority of delivering subjects in English and the emphasis provided to teacher training (O'Dowd, 2015). While training for EMI is typically forgotten, we also find that analysing needs is often ignored in course design, even though taking lecturers into account is vital for establishing professional development courses. (Kling, 2013; Airey, 2013; Johnson, 2012) . To ensure training is relevant to trainees' needs and sensitive to their teaching contexts

(Bax , 1997) .Currently, little is known about how in-service trainees perceive the structure, content, and delivery of Technical English (TE) course in preparing them to use English as a Medium of Instruction (EMI). This lack of understanding raises the possibility of a disconnect between learning objectives and learning requirements, which would impair comprehension, communication, and academic achievement. For any course support EMI implementation to be successful and available in this setting, an evaluation of TE course from the trainees' point of view is essential.

### **3. Rationale and Purpose of the Study**

This study addresses a critical gap in research on the alignment of Technical English (TE) course with English as a Medium of Instruction (EMI) within Algerian higher education. While EMI is increasingly adopted to enhance English proficiency and academic internationalisation, its effectiveness remains understudied in the Algerian context , especially among in-service trainees who face unique linguistic and professional challenges. The purpose of this study is to explore in-service trainees' perspectives and experiences with Technical English course at the University of Continuous Education (U C E) in Bordj Bou Arreridj. By analyzing their feedback on course design, delivery, and perceived outcomes, this research aims to assess the current effectiveness of Technical English course in preparing in-service trainees to implement EMI in their teaching practice ,identify challenges and barriers trainees encounter in their training., and propose practical improvements for Technical English course design to prepare in-service trainees in Algerian Higher Education( HE) to use EMI , and to highlight potential improvements and innovations in ELT methodologies to better support EMI implementation in Algerian higher education.

### **4. Research Questions**

Given that this study aims to investigate how in-service trainees perceive the Technical English course as preparing them for the professional demands of EMI teaching, the research is guided by the following questions:

- **RQ.1** How do in-service trainees perceive the Technical English course in preparing them to use English as a Medium of Instruction (EMI)?
  - **RQ1a** What challenges do in-service trainees encounter during their training?

- **RQ.2** How do trainers perceive the alignment of Technical English with EMI implementation?
- **RQ.3** To what extent do the objectives of the Technical English syllabus (*Canevas*) align with the needs of EMI implementation?

## 5. Objectives of the Study

Based on the research questions, the study aims to achieve the following objectives

- To explore in-service trainees' perceptions of the Technical English course in relation to their preparedness for using English as a Medium of Instruction (EMI) , including the challenges they encounter during their training experience.
- To investigate trainers' perspectives on the alignment between the Technical English course and EMI implementation.
- To evaluate the extent to which the objectives of the Technical English syllabus align with the needs of EMI implementation.

## 6. Research Methodology

Guided by the constructivist (interpretivist) paradigm, this study uses a mixed-methods approach, combining quantitative and qualitative data from semi-structured online questionnaires and semi-structured interviews and documents analysis. Using purposive sampling, 27 respondents completed the questionnaires, providing qualitative and statistical data, while seven participants were interviewed to gain deeper understanding of their experiences. The quantitative data were analysed using descriptive statistics, and the qualitative data were analysed thematically in order to provide a comprehensive analysis how do in-service trainees perceive Technical English course prepare them to use EMI in their teaching practice .

## 7. Significance of the Study

This research serves as course evaluation through the lens of trainees and trainers to give meaningful feedback on how Technical English ( TE ) course design can be improved by determining the strengths, as well as the weaknesses, of the present structure and its alignment with trainers needs to be able to implement EMI . These insights can be used to inform specific interventions to help improve participants' English proficiency. Evaluating Technical

English course alignment with EMI from the perspective of in-service trainees' perceptions offers a valuable opportunity to improve the quality of English language instruction. By carefully listening to trainees and using their input to inform course design, instructors can develop more effective and engaging learning experiences

Moreover, the findings of this research can assist course developers in enhancing the course material, pedagogy, and testing methods to better align with learners' needs and expectations. Policymakers, too, can derive evidence-based recommendations for formulating language learning policy that will enhance the smooth implementation of EMI programmes. At the institutional level, the study can help decision-makers of University of Continuing Education and leaders evaluate and enhance the overall effectiveness and quality assurance of Technical English course and eventually the quality of academic outputs and higher internationalization of education.

## **8. Study Organization**

This study is structured systematically to investigate the experiences and attitudes of in-service trainees towards Technical English courses and their effectiveness in preparing them to use English as a Medium of Instruction (EMI) in Algerian Higher Education. It begins with a General Introduction, which outlines the background and context of the study, defines the research problem, articulates the rationale and purpose, and presents the research questions and objectives. It also highlights the significance of the study and provides an overview of the dissertation structure.

The Literature Review chapter establishes the theoretical and empirical foundation of the research. It reviews key concepts and definitions related to EMI in higher education, explore relevant theoretical frameworks, and examine previous empirical studies. This chapter also discusses practical implementations of EMI, drawing on global and regional perspectives to contextualize the Algerian case. The Methodology chapter adopts a mixed method approach to explore the complex experiences and perceptions of in-service trainees. The study sample includes a diverse group of in-service trainees from various departments across university of El Bashir el Ibrahimi , Bordj Bou Arreridj , selected to provide a broad range of insights into the Technical English course. Data were collected through semi –structured questionnaire, semi-structured interview, and document analysis. The data collection process involved participant preparation, questionnaire administration, interviews, and a subsequent thematic analysis. Ethical considerations were rigorously observed, including informed

consent, confidentiality, and the right to withdraw from the study, thereby ensuring a respectful and ethically sound research process. The Findings and Results chapter presents the data in a thematically organized manner based on the research questions. Findings are derived from multiple data sources and analyzed through the lens of existing literature and the theoretical perspectives discussed earlier in the study. This chapter highlights the main findings, considers the limitations of the study, and makes recommendations for future studies. It also suggests beneficial improvements to Technical English course design and teaching, in the expectation of enhancing in-service trainees' readiness for EMI in Algerian higher education. The dissertation is concluded by the General Conclusion highlights the central role of needs analysis in optimizing the effectiveness of course design.

1<sup>st</sup>

**Chapter**

**Literature Review**

## **Chapter One: Literature review**

### **Introduction**

In an era shaped by globalization and internationalization, the field of higher education is undergoing significant transformation. This chapter provides a comprehensive theoretical framework that explores the intricate relationship between globalization, the internationalization of higher education, and the use of English as a Medium of Instruction (EMI). It begins by shedding light on the motivations behind the internationalization of higher education and emphasizing the growing role of English as a global language. Transitioning to EMI, the chapter defines the concept, traces its global expansion, and explores teacher beliefs, attitudes, and best practices for course design and assessment. By analyzing both converging and diverging perspectives, this review identifies gaps in existing research in particularly evaluating Technical English courses' alignment and professional readiness for EMI. This Algerian focus attempts to address the particular complications and gaps in existing literature, contributing to the broader debate on EMI in Algerian higher education.

### **1.1 Globalisation and Internationalisation of Higher Education**

In the current era, characterized by the rapid expansion of the knowledge economy and the relentless forces of globalisation, the internationalisation of higher education has become a strategic priority for academic institutions and educational policymakers worldwide. Internationalization, as described by the Cambridge Dictionary, is the process of making something global. Internationalisation of higher education is defined in academic discourse as "the process of integrating an international, intercultural, a worldwide perspective on the goals, operations, or provision of postsecondary education" (Canadian scholar Jane Knight, 2004).

The evolution of globalisation has significantly shaped the internationalization of higher education, contributing to what is now widely recognized as "Globalisation" (Aydin, 2021). In this globalized context, higher education increasingly emphasizes the development of global citizenship and the promotion of sustainable development. The emergence of open educational resources and digital learning platforms has improved inclusivity and strengthened cross-border academic collaboration and intellectual exchange. For countries and institutions such as those in Algeria seeking to enhance their internationalization strategies, understanding these global trends provides essential insights.

The process of internationalisation of (HE ) is dynamic and multifaceted, as demonstrated by the enthusiastic adoption of international initiatives, the expansion of cross-border campuses, the establishment of cross-national collaborations, and the increasing mobility of students and academic staff (Moshtari & Safarpour, 2024). One notable consequence of this growing internationalization is the rise of English Medium Instruction (EMI), which has in turn created a strong demand for effective language support and professional training for academic staff.

Indeed, EMI has emerged as a significant force driving internationalisation and is now a widespread phenomenon across global higher education. Globalisation has exerted a profound influence on higher education systems, prompting universities especially in non-English-speaking countries to implement strategies aimed at improving educational quality and expanding their international reach (Doiz et al., 2012; Macaro et al., 2018). For higher education in Algeria, this trend calls for a thoughtful evaluation of how academic programmes align with international standards and expectations.

### **1.1.1 Interplay between Internationalisation and Globalisation**

The concept of internationalization is closely linked to broad discussions about globalization, as internationalization is considered a catalyst and driving mechanism for globalization within the framework of global liberalism (Deardorff, et al., 2012;Jiang, 2005). As Altbach and Knight (2007) note, globalization and internationalization are not the same. The "context of economic and scholarly changes that are part of the realities of the 21st century" is how characterize globalization, whereas internationalization refers to the measures that academic systems and institutions have made in response to the globalization of the academic environment.

### **1.1.2 Motives behind the Internationalisation of Higher Education**

Higher education (HE) Internationalisation should ideally involve a rich educational experience, foster international understanding and collaboration, equip students, faculty, and institutions to prosper in a diverse and interconnected world, and, more recently, effectively utilize digital technologies to improve educational prospects (Madge et al., 2019; Brewer & Leask, 2022). With the escalation of global competition and university rankings, discussions surrounding HE internationalization are constantly changing (Hazelkorn, 2018; De Wit,

2019). Unpredictable events like pandemics and their effects, shifting geopolitics, economic imperatives, labor market demands, social connections, and the marketization of the knowledge economy have all increased the need for global interconnectedness in higher education (Raghuram et al., 2023; Steyn & Gunter, 2023; Jones, 2024). For institutions like the University of Continuous Education in BBA, these global drivers influence decisions regarding curriculum development and language of instruction.

English has developed a privileged position in higher education (HE) contexts in recent years, going from being a foreign language (ESP, EAP, etc.) English being utilized in non-Anglophone nations as a language of teaching for academic disciplines (Dearden 2015; Macaro 2018; Dafouz and Smit 2019). The growing impact of English and the increasing globalization of higher education are responsible for the rise in EMI in higher education around the world that has been seen in recent decades (Galloway et al., 2017; Lin & Lei, 2021). EMI's appeal to international students and staff, its role in fostering institutional internationalization, and its capacity to boost competitiveness are some of the elements that contribute to its broad appeal (Walkinshaw et al., 2017; Graham et al., 2021; Lin & Lei, 2021). For the Higher Education in Algeria, the adoption of EMI in some programmes might be seen as a strategy to enhance its national and potentially international standing.

According to Airey et al., (2017), and Mao & Peng (2024) EMI is seen by many ministries of education as an effective strategy to improve the standard of higher education and give students 21st-century capabilities, to attract top academics from institutions facing financial pressures and to appeal to both international and local students, many stakeholders have actively promoted English Medium Instruction (EMI) as a strategy for internationalizing higher education. Several universities in Europe and Asia have adopted EMI to increase graduates' employability and, in turn, their competitiveness in both domestic and global labour markets (Lei and Hu, 2014). As result of these global shifts, The increasing use of English Medium Instruction (EMI), which is a major component of internationalization in higher education and helps to improve the quality and appeal of university programmes abroad, is one notable aspect of this trend. Therefore, for the University of Continuous Education in BBA, the decisions to support EMI implementation in Higher Education, and the role of courses like the Technical English course, become significant considerations in their internationalization efforts.

## 1.2 English Medium Instruction

In more recent times, the shift towards English medium instruction (EMI) necessitates that instructor in non-Anglophone countries possess not only strong subject matter knowledge but also a high level of English proficiency and pedagogical skills tailored for teaching in English. This raises important questions about how well like "Technical English" in equipping teachers with the necessary competencies for these demands, particularly within the Algerian higher education context.

### 1.2.1 Definition of English as Medium Instruction

The role of English in teaching and research in higher education has grown, and as higher education has become more globalized, a global phenomenon of English medium instruction (EMI) where the English language is used in non-native contexts to teach academic subjects (Doiz et al., 2013). As English as the medium of instruction (EMI) has become more widely used, there appears to be a swift global movement away from teaching English as a foreign language (EFL) and towards using EMI for academic subjects like physics, geography, and medicine in non-Anglophone countries (Dearden, 2015). This transition places significant linguistic and pedagogical problems on teachers who may not have been initially trained to instruct in English, highlighting the need for adequate support and preparation, potentially through specialized courses like the Technical English .

EMI differs from other teaching strategies such as CLIL (Content and Language Integrated Learning) is a method of teaching non-language subjects using a foreign language as the medium (Dalton-Puffer et al., 2010) and CBI (Content-Based Instruction), Language instruction and content instruction are integrated through CBI (Snow, 2001). Due to this distinction, which is illustrated in Figure 1.1 below :

**Figure 1.1**

*Continuum of EMI in Practice (Thompson & McKinley, 2020)*



CLIL and CBI courses seek to help students improve their English language skills. Many people still believe that EMI offers students the chance to advance their academic knowledge and English language proficiency even though it does not specifically target English learning (Rose & Galloway, 2019; Rose et al., 2020; Yuksel et al., 2021). While students in EMI settings are expected to improve their English incidentally, the instructors themselves require a robust and often subject-specific command of English to effectively convey complex academic content. This underscores the need for targeted language development opportunities for teachers transitioning to or working within EMI contexts in Algeria.

Many definitions of English as a Medium of Instruction (EMI) acknowledge the important distinctions between EMI and English as a subject, as well as context-based diversity. In English language courses focused on English for Academic Purposes (EAP) or English for Specific Purposes (ESP), the language itself takes precedence over the content. However, the rise in English-specific courses like ESP and EAP is a result of EMI's popularity. EMI is usually viewed as incidental or implicit in the English instruction process rather than having a distinct language acquisition goal (Galloway, 2021). So, teacher preparation and continuous professional development, such as the Technical English course at the University of Continuous Education in BBA, must provide instructors with the specific language skills and teaching approaches required to deliver EMI effectively.

Despite their seeming similarities, EMI, CLIL, and CBI differ in a few ways. For instance, EMI is mainly utilized at the Higher Education level, whereas CLIL is typically utilized in secondary-level instruction. Additionally, CLIL emphasizes the integration of language and content, whereas CBI places greater emphasis on language than content (Simbolon, 2016). On the other hand, EMI programmes prioritize content, even though incidental language acquisition is anticipated (Aguilar, 2017; Banegas & Manzur Busleimán, 2021). In contexts where English is not the primary language of instruction, English is utilized (Macaro et al., 2018). Consequently, EMI serves as a link between the needs of English language learners (ELLs) and educational institutions where English is not the primary language. However, for this link to be effective, the instructors themselves must possess the linguistic competence required to bridge this gap, highlighting the critical role of teacher training and support initiatives in Algerian higher education.

### 1.2.2 The Expansion of EMI in Higher Education around the world

In fact, as the English Medium Instruction (EMI) phenomenon spreads throughout Europe and beyond (Wächter and Maiworm 2014; Dimova et al. 2015; Wilkinson 2017; Macaro 2018; Sánchez-Pérez 2020; Smit and Dafouz 2012; Doiz et al. 2013) and a growing trend towards the internationalization of Higher education (Knight 2008; De Wit et al. 2015). This widespread adoption of EMI on a global scale has significant implications for the demand for educators who are proficient in teaching their subjects in English, highlighting the crucial role of adequate teacher preparation.

Between 2001 and 2014, English-medium instruction (EMI) programmes in Europe grew significantly, increasing eleven fold (Wächter & Maiworm, 2014). Maiworm and Wächter's (2002) study surveyed 1,558 higher education institutions (HEIs) across 19 European countries and found only 725 English-taught programmes (ETPs), showing EMI was still uncommon. A 2007 follow-up survey of 2,218 HEIs in 27 countries reported 2,389 ETPs, a 229% increase, with the Netherlands and Nordic countries leading. ETPs had increased to 8,089 by 2014, according to a survey of 2,637 HEIs, with the Netherlands once again providing the most (1,078 programs). However, Dimova, Hultgren, and Jensen (2015) caution that such estimates may overlook the complexity of EMI practices and varying adoption patterns, highlighting the need for context-sensitive teacher training across Europe.

Numerous Asian and Middle Eastern nations have begun implementing EMI in HE (Nunan , 2003), and their growth patterns are comparable to those of Europe. Governments in nations like China and Japan have been aggressively encouraging the use of EMI in both public (state-funded) and private universities. One of the 12 main directives issued by China's Ministry of Education (MOE) in 2001 stated that, within three years, 5–10% of undergraduate specialization courses at prestigious universities must use EMI (MOE ,2001). To ensure the execution of this new policy, the MOE included the criterion of the number of EMI programmes offered by a HEI to the HE assessment. EMI's rapid expansion in Korea is evident. According to Cho (2012), although efforts to broaden EMI programs began in the middle of the 2000s, it wasn't until 2006 that President Suh Nampyo, who was then the recently appointed head of the Korea Advanced Institute of Science and Technology (KAIST), unveiled his "Globalization Project" that real expansion began to spread throughout the nation. Suh aimed to increase EMI programs by 10% a year until all doctorate, masters, and bachelor's degree programs were taught in English by 2010. Following then, the number

of EMI courses offered in Korean HEIs expanded significantly: out of 410,000 courses, 9,000 (or 2.2% of the total) were offered in English (Byun et al. 2010) . The proactive adoption of EMI in these Asian contexts further underscores the global need for well-prepared instructors, potentially highlighting the relevance of initiatives like the Technical English course at the University of Continuous Education in BBA within the broader international landscape.

Research on HE is comparatively lacking in Latin America and Africa, which may be a reflection of the slow rise of EMI in those regions. Understanding the specific progression of EMI implementation and the corresponding teacher support structures in regions like Algeria, the context of this study, becomes particularly important given these global trends and potential regional variations.

### **1.2.3 Reason for Implementation of EMI in Higher Education**

The growth of EMI in higher education is influenced by multiple factors, and it is crucial to understand the reasons behind its global expansion in higher education institutions (HEIs). Particularly when considering the preparedness of the teaching staff at universities .English's adoption is primarily driven by its position as the global language of science and technology (Ducker, 2019). Universities use EMI for academic, political, social, and economic reasons; it is viewed as a reaction to globalization (Rahman & Mehar Singh, 2020). However, the successful realization of these strategic goals hinges on the ability of instructors to effectively deliver content and interact with students in English.

The following factors may influence HEIs' decision to present content in English. Galloway and Rose (2015) state that HEIs may choose to use English when delivering content in order to increase awareness abroad, evaluate the most recent developments, and increase global competitiveness, which requires teachers to effectively communicate complex ideas in English to an international audience and engage with international scholarship. Another reason is enhancing employability in both domestic and international markets, demanding graduates with strong English skills fostered by instructors who can model and facilitate this language use in their subjects, potentially an aim of the Technical English course. HEIs may also aim to promote intercultural competencies in graduates, suggesting a need for teachers who are not only linguistically proficient but also culturally aware and able to foster intercultural understanding in their EMI classrooms. Additional reasons include showcasing advancements in English language instruction, utilizing English in multilingual contexts such

as those in East and Southern Africa, and increasing lecturer and student mobility to help draw in talented students, implying that teachers need to be comfortable teaching in English to diverse student populations and potentially collaborating with international faculty.

Therefore, the effectiveness of EMI in achieving these goals depends on instructors' language proficiency and teaching skills. This highlights the value of targeted support, such as the Technical English course examined in this study.

#### **1.2.4 Teacher's' Beliefs and Attitudes toward EMI**

The increasing internationalization of higher education necessitates the implementation of English as a Medium of Instruction (EMI) in various disciplines. Lecturers, as key stakeholders in this process, are central to its success (Dafouz & Smit, 2020). However, the understanding of internationalization can sometimes be reduced to mere English language proficiency, potentially overlooking the specific demands of teaching academic content in English (Dafouz & Smit, 2020). This simplification highlights the importance of examining the preparedness of future instructors for the complexities of EMI, which is the central aim of this study evaluating the Technical English for in-service trainees at the University of Continuous Education (UCE), Bordj Bou Arriridj.

Previous research has shown that teachers' beliefs and attitudes towards EMI can vary widely depending on factors such as their language proficiency, teaching experience, and cultural background (Lasagabaster & Sierra, 2009). Some instructors can view EMI as a chance to advance their own language skills while giving pupils useful English language skills for the global labour market. According to Cots and Guerrettaz (2012, p.87), using English as a teaching language can help students become more proficient communicators and increase their employability in a globalized world. Some educators, on the other hand, could be opposed to EMI because they see it as a danger to their own language and cultural identity or as an extra burden on top of their already demanding workload (Lasagabaster & Sierra, 2010).

Numerous studies have looked at how university teachers who use or plan to use EMI feel about English. In Tunisia, where the higher education ministry was preparing to implement EMI in universities, Jebali (2020) carried out a study. The researcher discovered that both students and lecturers had a favorable opinion of English and thought it was an essential language for research and science. She also discovered that teachers in EMI

programmes were more positive than those in programmes where French was the primary language of teaching.

It is crucial that institutions and authorities acknowledge the part that teachers' attitudes and beliefs play in the implementation of EMI and offer sufficient assistance and training to handle any issues that may come up. As Hu and McKay (2018, p. 238) argued, that teachers need to be equipped with the necessary pedagogical skills and language proficiency to effectively implement EMI and ensure student success. According to Guarda and Helm (2016), a development programme in Italy that involved more than fifty lecturers giving lectures and seminars followed by group discussions appears to have been successful. Analysis of participant opinions before and after reveals some encouraging shifts in attitudes and increased readiness to communicate with students in English and take their needs into account.

To sum up, teachers' beliefs and attitudes play a critical role in the success of EMI implementation in higher education. Institutions and policymakers should take into account the diversity of teacher perspectives and provide support and training to ensure effective EMI implementation. According to Dafouz et al. (2019, p. 1), the lack of coordination between the many university bodies involved in EMI may result in "fragmentation in the provision" and call for "renewed focus at policy level. As Lasagabaster and Sierra (2009) noted, "the attitudes of teachers towards EMI are crucial in determining the success of this language policy" (p. 155). Therefore, understanding the perspectives of in-service trainees within the specific context of the Technical English course at UCE, BBA, is crucial for evaluating its effectiveness in preparing them for the realities of EMI teaching.

### **1.2.5 Professional Development of EMI Teachers**

Professional development for teachers is a crucial component of successful EMI implementation in HE. As noted by scholars such as (Lasagabaster & Sierra, 2010; Doiz et al., 2010). Professional Development (PD) can enhance teachers' language proficiency, content knowledge, and pedagogical skills, all of which are essential for effective EMI teaching and learning. Lecturers have also voiced concerns about their lack of professional development opportunities and preparation for teaching. Regarding the term "ability to teach through English," however, there is also a lack of research data on the various kinds of teacher preparation programmes offered by EMI in HE. This lack of comprehensive understanding

about teacher preparation underscores the relevance of the current study, which investigates the alignment of a Technical English course -a form of initial professional development – with the demands of EMI teaching as perceived by in-service trainees at the University of Continuous Education (UCE), BBA.

Airey (2011) examined a professional development course on EMI in Sweden that involved 18 teachers from different fields who had little to no prior experience with EMI. It should be noted that the belief that the course could help one get a promotion was one of the stated motivations for enrolling. Unexpectedly being asked to switch to EMI without giving them enough time to prepare was revealed by a few of these participants. According to Aguilar and Rodríguez (2012). The primary reason for participating was the lecturers' wish to improve their English language proficiency rather than think about altering their approach.

There are various models of professional development that can be adapted for the Algerian higher education context, including an effective model of professional development that has been successfully implemented in other EMI contexts is the Content and Language Integrated Learning (CLIL) approach. This model involves the integration of language learning and content learning, with a focus on developing both language and subject-specific skills (Coyle, Hood, & Marsh, 2010). Effective EMI teaching requires subject-specific pedagogical abilities and language fluency, both of which can be developed by Algerian EMI teachers through the use of the CLIL approach.

For EMI to be implemented successfully in Algerian higher education, professional development for EMI professors is crucial. Different models of professional development, such as CLIL, can be adapted to meet the specific needs of Algerian higher education institutions. As noted by Murray and Maley (2005), ongoing, collaborative, and context-specific professional development is critical for enhancing teachers' language proficiency, content knowledge, and pedagogical skills, all of which are essential for effective EMI teaching and learning. Consequently, the experiences of in-service trainees in a Technical English course offer a window into the initial professional development for EMI and its perceived relevance to the challenges outlined.

### **1.3 Evaluation of Technical English Course for EMI Context**

#### **1.3.1 Evaluation Methods**

In an educational context, evaluation is viewed as ‘collecting information about different aspects of a language program in order to understand how the program works and how successfully it functions, allowing for the making of various judgments (Richards, 2001, p. 286). In the context of preparing university teachers for EMI, the evaluation of a Technical English course takes on particular significance. The primary goal of the evaluation is "to guide classroom instruction and enhance student learning on a day-to-day basis" (Genesee, 2001, p. 146). Considering all aspects of learning and teaching, programme evaluation could be either formative, developmental, or ongoing, which takes place during the course, and summative, which is conducted at the end of the course.

#### **1.3.1.1 Formative Evaluations for Improvement**

The initial purpose is to supply data for the creation, assurance, or enhancement of a service. Usually, assessments used for this purpose are referred to as formative assessments (Scriven, 1967). In essence, feedback is provided for development. Those in charge of maintaining and enhancing the program's quality might benefit from formative evaluations, which provide recommendations. They should also closely consider the characteristics and requirements of the program's users. In formative assessments, evaluators evaluate and help establish priorities and goals, give planning guidance by evaluating potential approaches, and create draft plans. In formative Evaluation, the evaluator should work closely with programme staff to provide guidance on decision-making. For a Technical English course aimed at training EMI instructors, formative evaluation could gather feedback on trainees' growing confidence in technical English for preparing them teaching in English.

#### **1.3.1.2 Summative Evaluations for Accountability**

The second main use of evaluations is to produce summative reports (Scriven, 1967). While the formative evaluation is usually informal and aims to refine the existing programme by making necessary adjustments, the summative evaluation is formal and its purpose is to assess how effective and efficient the program is. Periodic summative evaluations provide vital information about what has been accomplished, and "put a programme in an excellent position to respond to crises when and if, they occur" (Brown, 1989, p. 230). Summative evaluation of a Technical English teacher training course might assess the trainees' perceived preparedness to handle the linguistic demands of EMI in their technical fields.

To provide a complete picture, both summative and formative assessment methodologies must be used to evaluate the entire curriculum (Chiarelott, 2006). This triangulation approach, gathering diverse perspectives, could also be valuable in evaluating a Technical English teacher training program. Salter-Dvorak (2016) evaluates an EAP program at a UK university by triangulating the data derived from questionnaires, focus group and individual interviews, discussion notes at staff meetings, and an ethnographic case study. Through the triangulation of document analysis and interviews with some leading ELT specialists. Well-planned and well-conducted evaluations can provide helpful information about classroom practice and support more effective teaching and learning.

### **1.3.2 Programme Evaluation in Language Learning ( PE)**

Programme Evaluation (PE) provides a crucial framework for assessing the effectiveness and alignment of language learning initiatives, making it particularly relevant to this study's aim of evaluating how well a Technical English course prepares in-service trainees for the professional demands of English Medium Instruction (EMI) teaching.

Weir and Roberts (1994) identified two main drivers of language PE: programme development and programme accountability. As the interest of this research is to understand and potentially enhance the Technical English course for EMI preparation, a development-oriented evaluation, this is especially relevant as its goal is to enhance a programme both during and after implementation. In line with this, Richards (2001) highlighted several areas of a language program that can be evaluated, including teachers (their preparation for EMI), curriculum design (how Technical English syllabus addresses EMI demands), classroom processes (instruction of EMI-specific proficiency), instructional materials (technical English materials' suitability to EMI context), the syllabus and program content (coverage of language and pedagogical competence ) Therefore, PE offers a valid model for this research aim of determining the challenges, perceptions, and expectations of in-service trainees regarding how well the Technical English course has equipped them for EMI at HE. Through the evaluation of the program outcome and effectiveness from the trainees' perspective, we can discover its strengths along with weaknesses.

Previous studies of language PE offer some useful information. For instance, studies evaluating teacher education programmes ( Fenton-Smith & Torpey, 2013; Karim et al., 2019) and the PE of English as a Medium of Instruction ( Chang et al., 2015) provide

approaches and issues relevant to investigating the impact of a Technical English course on in-service teachers' EMI readiness. Evaluation design and findings reporting are also essential elements to an efficient process (Llosa & Slayton, 2009).

#### **1.4 Technical English Courses' Efficiency in Preparing for EMI**

The widespread usage of EMI in HE has led some scholars to investigate how well it accomplishes the objectives of the course (Lei and Hu 2014) . An area for attention in the design and delivery of effective EMI teacher training pertains to general and specific profiles of EMI teacher trainees. In terms of the general profile of EMI teachers, training designers and EMI in HE decision makers should keep in mind that, firstly, trainees are commonly already-busy academics and researchers who are administrated with teaching and / or managing duties. This general profile is further complicated by the fact that EMI teachers commonly do not see language development as part of their teaching (Macaro et al., 2016). In the context of preparing instructors to teach subjects through EMI, the effectiveness of Technical English courses must be evaluated in light of such key factors .

When considering the effectiveness of EMI courses, previous studies have reported that being a native or non-native English teacher is not a defining issue. Rather, recent studies showed that the effectiveness of EMI courses depends on the EMI faculty's linguistic competence, teaching methods, and intercultural competence (Qiu & Fang, 2019; Inbar-Lourie & Donitsa-Schmidt, 2020; Yuan et al., 2020). For Technical English instructors, linguistic competence includes not only general proficiency but also a strong command of technical vocabulary and discourse.

Qiu and Fang (2019) explored English language learners s' (ELL) perceptions of two types of EMI instructors: native English-speaking instructors and non-native English-speaking instructors. However, non-native English instructors showed higher intercultural competence, which indicated that they could communicate with ELLs about their learning difficulties more effectively. This study revealed that ELL exhibited preferences for interactive and effective EMI classrooms in which EMI instructors demonstrated intercultural and linguistic competency, allowing ELL to solve learning challenges and overcome linguistic obstacles. Effective Technical English courses for EMI preparation should incorporate pedagogical approaches that model effective EMI strategies for technical content delivery.

## 1.5 Challenges of EMI –Oriented Technical English Course

### 1.5.1 EMI Staff Selection and Preparation

Through an expansion of EMI education programmes, one of the major issues that university management has is selecting staff to deliver such courses. There is numerous approach for selecting EMI professors. One is to designate lecturers who have a high degree of English proficiency (Werther et al., 2014). Even though the acceptable level of English for EMI content teachers remains a topic of debate. According to Macaro et al. (2018), there is no definitive global criterion for the degree of English proficiency required to teach at the national or international levels. Spanish universities required their instructors to have a B2 level of English (Costa, 2015). The only acceptable level for Nordic institutions is C1, although EMI content professors in Russia have language competency ranging from B1 to C1.

Furthermore, because the term "qualified" is unclear in EMI literature, the definition of "ability to teach" can vary depending on the individual. "Qualified" may refer to an EMI teacher's high degree of linguistic competency or a certificate for completing an EMI course (Dafouz, 2018). This approach works for the universities where a high level of English proficiency is an evaluation criterion for academic staff assessment scheme or tenure track. These language requirements can be incorporated in a university's language policy.

The second strategy involves organising EMI certification for academic staff without delivering EMI training courses. Several European universities have certification procedures: Test of Oral English Proficiency for Academic Staff. However, Klaassen and Räsänen (2006) urge for the development of a universal evaluation tool that may be used both in Europe and around the world. Furthermore, once certified, many universities will find a significant demand for creating EMI teacher training efforts to educate lecturers to operate effectively in international classrooms.

The third approach is to design and implement EMI training courses for EMI staff which are an integral part of continuous professional development ( CPD) . The need for EMI teacher training is widely acknowledged and has been extensively reported in previous studies (Werther et al. 2014; Trent ,2017;Gustafsson, 2018; Lasagabaster & Douz 2018) with both academic staff and students on EMI courses complaining that the EMI staff lack expertise in the areas of English language proficiency, including English for Specific Purposes (ESP) including Technical English( TE) and English for Academic Purposes

(EAP), pedagogical skills, EMI-specific micro-skills and intercultural awareness. These knowledge and competence gaps cause EMI lecturers to feel less confident when giving their courses, resulting in lower teaching quality. As there is a demand for EMI courses in universities, the third approach is commonly used by many European and Eastern universities, and it can take numerous shapes.

In Algerian universities the third approach prevails as there is a lack of EMI staff with high language proficiency. It is worth considering if the existing general and academic English training adequately prepares lecturers for the specific linguistic demands of teaching technical subjects in English before they undertake EMI-specific training. A lecturer is typically prepared to begin an EMI training course after two or three years of general and academic English training, with a minimum language requirement of B1.

### **1.5.2 Design of EMI Training Courses**

The design of EMI teacher training courses is still developing, with limited case studies available due to their highly context-specific nature “there is no one-size-fits-all approach” (Galloway et al., 2017). Two major projects Educational Quality at Universities for inclusive international Programmes (EQUiP) and Transnational Alignment of English Competences for University Lecturers (TAEC) provide general recommendations for EMI training. The EQUiP project (2016–2019), an Erasmus+ initiative of seven European universities, offers support for improving quality in international and intercultural classrooms, though it is unclear how well it addresses the needs of technical subject instructors. The TAEC initiative seeks to create a common framework for EMI quality assurance and language assessment across countries.

While these projects offer useful guidelines, they lack detailed, practical descriptions of classroom activities that would assist novice ESL teachers in course design. A key issue remains whether these frameworks adequately address the Technical English demands in technical disciplines. Determining appropriate course content, necessary trainee skills (e.g., explaining technical concepts), and clear learning outcomes (like confidence and competence in using Technical English) remains a challenge.

Moreover, there is no standard agreement on course duration or content. A Spanish study found considerable variation: 25% of courses last 1–15 hours, 36% last 15–30 hours, 25% run 30–60 hours, and 14% exceed 60 hours (Martin del Pozo, 2017). The structure and

delivery of EMI training also differ both within and across countries (Martin del Pozo, 2017; Belyaeva & Kuznetsova, 2018).

### **1.5.3 Instructors' Resistance to Pedagogical Change**

The third challenge that an EMI teacher trainer should be prepared for is that academic staff are adult learners with professional experience, particular values and deep-seated attitudes to teaching and learning. They should be taught according to andragogy principles (Knowles 1980; Volchenkova 2015). They are individuals with well-developed critical thinking abilities who require a compelling case from an EMI teacher training to modify their present practice (Knowles 1980; Volchenkova et al 2017). This may be an issue, coupled with a lack of motivation to increase English-language proficiency that stems from the fact that improving language skills is time-consuming (Bradford 2016).

Moreover, John Airey (2020) notes: "In my dealings with physics lecturers, I struggle to convince them that they should view themselves as teachers of disciplinary discourse. However, for content lecturers, content is king" (p.343). EMI is merely viewed as a practical means to a content-related goal. In such cases, it is not unexpected that subject lecturers have been reported to insist on not teaching language (Airey, 2012). As a result, EMI content instructors may not feel responsible for modifying their own language to their students' English levels or for assisting them in developing their linguistic ability in order to succeed in their academic subjects. This might be particularly true in technical fields, where instructors may prioritize the perceived precision of technical terminology over pedagogical adjustments for language learners. This misconception that may be held by content teachers should be challenged in EMI teacher training, as it is the task of an EMI teacher trainer to persuade the lecturers must accept responsibility for their students' linguistic abilities, learning outcomes, and social skills.

Over the last 20 years, language proficiency has become the responsibility of education providers as higher education institutions prepare graduates for a global market that values language skills, disciplinary expertise, and global networking (Räsänen, 2008; Yang, 2017). A paradigm shift is needed, with EMI content teachers becoming responsible for developing students' language proficiency (Jiménez-Muñoz, 2020). This implies that EMI trainers should teach language scaffolding, especially for technical terms and concepts. Designing successful EMI teacher training is complicated and must suit teachers' particular

needs (Beaumont 2020). A well-designed Technical English course should directly tackle resistance and provide instructors with the tools to integrate language support into technical teaching.

## **1.6 Course Design Process**

Course design is the process of designing how a syllabus will be executed, including what teaching methods and materials will be necessary, how much time will be given, how classroom activities will be organised, and how the programme will be evaluated (Dudley-Evans & Johns, 1998). According to Richards (2001), one of the most crucial points is that the phases do not progress in a linear fashion but rather follow a cyclical pattern and are connected understanding of the learners' needs, aims, and the language needs of their professional field. It is critical to do thorough needs analysis to determine the linguistic abilities and competencies that learners must acquire to communicate effectively in their specific domain.

### **1.6.1 Needs Analysis for EMI Teaching**

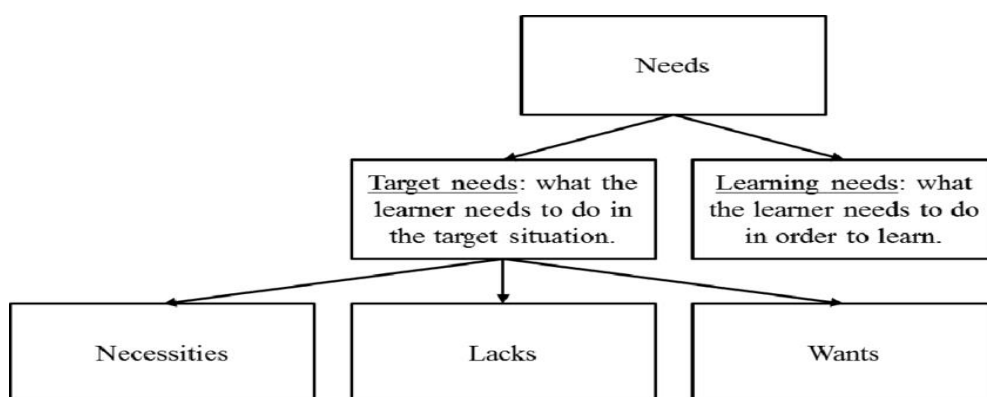
Needs analysis is the key step to designing relevant and useful courses in English for Specific Purposes (ESP), but finding ways to deliver needs in a motivating and interesting way is also paramount. Need Analysis (NA) provides information on whether and how this course can respond to the students' needs (Nation & Macalister, 2010). Admittedly, a curriculum tailored perfectly to meet learners' expectations and desires is a myth, because the areas they consider unnecessary may be areas where they need improvement; thus, the key to a successful EAP course is to bridge the gap between target needs and students' wants using a thorough NA approach. (Zglombiu, 2019). As English for academic purposes (EAP) programs are specifically designed to address learners' English-related challenges within a target institutional context, needs analysis is seen as fundamental to the effectiveness of these programmes (Feng et al., 2019; Gaffas, 2019). Therefore, investigating in-service trainees' perceptions toward Technical English as a tool for EMI is central in needs analysis.

Needs identification and Analysis' requires a comprehensive analysis of actual texts from the trainees' professional or academic contexts. This is particularly crucial for understanding the specific Technical English demands of EMI in technical disciplines. The needs analysis helps to define the course's goals and serves as a starting point for further

design stages (Basturkmen, 2010). Hutchinson and Waters (1987) list several needs that must be addressed during the needs analysis process. Target needs, for example, describe what is expected of learners in the target environment. There are three types of target needs: necessities, lacks, and wants. The term "necessities" refers to what students must acquire in the EAP/ESP program in order to meet the goals that have been established. Figure 1.2 illustrated Hutchinson and water's classification of need analysis.

**Figure 1.2**

*Hutchinson & Waters' (1987) Classification of Needs Analysis*



For a Technical English course for EMI, this includes the specific language skills required to teach technical content effectively in English. The gap between what students already know and what is required to perform well in the objective situation is called a lack. In this context, it's the gap in their ability to use Technical English effectively for instructional purposes. Wants refer to the learners' perceptions on their needs.

According to Basturkmen (2010), it is crucial to take students' preferences into account when planning use. The wants of students who use English to accomplish their objectives are closely related to their interests. For instructors preparing for EMI in technical fields, this might include wanting to develop specific Technical English skills or pedagogical strategies. Lessons and deciding which approaches to Learning needs include information about learners, such as how they learn, why they are learning the language, and the time and location of the Technical English (TE) course. By conducting a comprehensive needs analysis, educators can gain valuable insights into the needs of their students and tailor the course material and instructional strategies accordingly.

Some of the research methods for needs analysis, as Long (2005) indicates, are unstructured/structured interviews (potentially focusing on specific linguistic challenges encountered or anticipated in teaching technical subjects through English), questionnaires and surveys (probing confidence levels in using specific Technical English functions like explaining processes or defining terms), language audits (of relevant technical texts and teaching materials), text-based analysis, observations (of current teaching practices, if applicable, to identify language use patterns), diaries, journals and logs.

Needs assessments are frequently overlooked in course design, yet instructors are critical when developing professional development efforts. Johnson (2012), Kling (2013), and Airey (2013) have worked to ensure that training is relevant to trainee needs while also taking into account their instructional environments. This is particularly important when designing Technical English courses for EMI, as the specific needs of instructors in different technical disciplines can vary significantly. Witkin and Asltschuld point out that needs data should be collected using multiple methods and sources to increase the reliability and validity of the information and relying on one source of data is insufficient to provide an adequate basis for understanding needs and making decisions on priorities (Witkin & Asltschuld, 1995).

### **1.6.2 Syllabus Design for Technical English**

This step includes developing the overall course structure, syllabus, and instructional tactics. The specific materials, language, and skills to be addressed in the course are determined at this stage based on the trainee teachers' determined needs (Hutchinson & Waters, 1987). After the needs analysis is conducted to determine the trainees' specific linguistic and pedagogical needs for teaching technical subjects through English, the course outline should be designed to address these demands and include relevant subjects such as technical vocabulary development, strategies for explaining complex technical concepts, analysis of technical discourse, and pedagogical approaches for EMI in technical fields.

The syllabus should also outline specific learning objectives related to the trainees' ability to effectively communicate technical information in English for instruction and appropriate assessment procedures that evaluate their application of Technical English in a teaching context, such as micro-teaching or lesson plan development (Basturkmen, 2012). In addition, the design stage should reflect the contemporary context, taking into account the impact of the digital transformation of the 21st century and the incorporation of technology in

language learning to enhance the learning experience and satisfy the particular needs of TE in-service trainees preparing for EMI in technical disciplines, potentially utilizing online resources for technical terminology or platforms for collaborative lesson planning (Tuzlukova & Heckadon, 2020).

### **1.6.3 Development of Course Materials**

Following the completion of the syllabus design, the next stage 'materials production/materials development' entails the creation of the actual instructional materials and resources (Basturkmen, 2010). This involves generating lesson plans, coming up with new materials or adapting existing ones, and ensuring that they are in line with the design expectations (Hutchinson & Waters, 1987, Belcher, 2006; Basturkmen, 2010), developing or selecting learning enhancing multimedia resources, such as audio recordings, videos, and interactive online activities (Gionnikas, 2019). For a Technical English course aimed at EMI preparation, this stage also involves developing materials that trainee teachers can adapt or use directly in their own EMI teaching, such as model explanations of complex technical concepts in clear English.

According to Hutchinson and Waters (1987), the resources have been developed to cater to the trainees' individual linguistic needs within the context of their respective academic or professional fields. Thus, educators should ensure that course materials and resources effectively address the language requirements of trainees and provide opportunities for meaningful practice and application of language skills during the development phase. This includes developing materials that help trainees scaffold student understanding of technical terminology and adapt existing technical content for EMI. Minasyan (2016) also report that material development should be tailored to the specific language requirements of the trainees and integrate a variety of authentic resources, such as industry-specific texts, case studies, and multimedia resources. For a Technical English course in this context, authentic resources from the trainees' technical fields should be utilized and adapted for EMI teaching purposes.

### **1.6.4 Evaluation of Course outcomes**

The last step "Evaluation" involves determining how successful the overall course design was and how much of an influence it had on the language acquisition of in-service trainees . Assessment and evaluation in TE courses particularly those aimed at preparing

instructors for EMI, should be aligned with the trainees' individual language needs and objectives of the course. It should focus on assessing trainees' abilities to communicate successfully in their professional or academic context as well as their ability to effectively communicate technical concepts and facilitate learning in English. According to Tuzlukova and Heckadon (2020), "Oral presentations, written reports, case studies, and simulations of real-world language use may be used as assessment methods".

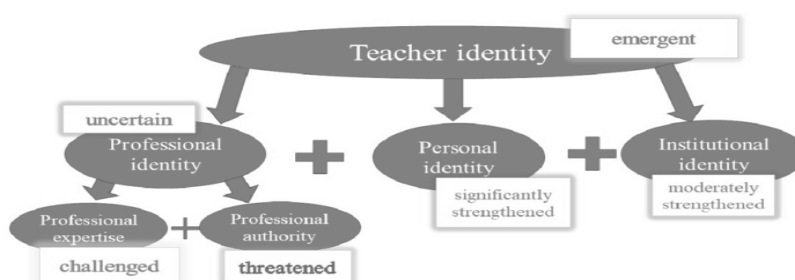
According to Hutchinson and Waters (1987), evaluation can take many different forms. Formative assessments can be given throughout the course, and summative assessments can be given at the end. Formative assessment methods can include performance-based assessment processes (O'Malley & Pierce, 1996; Katz, 2014) such as peer- and self-assessment, teacher observations, projects and language portfolios. Additionally, evaluation procedures such as self-evaluation and peer feedback can be used to improve the language development of trainees. The trainees' confidence in teaching in English and their sense of preparedness for the language demands of EMI should be key components of the evaluation.

### 1.7 Kling's Model Revisited: An application in Technical English Course Evaluation

To assess the impact of English Medium Instruction (EMI) on academic staff identity, it is essential to first understand the structure of teacher identity. Describing this structure allows researchers to uncover its underlying components. Eriksson defines identity as a configuration that integrates inclinations, basic needs, abilities, significant self-identifications, successful sublimations, and consistent roles. For this study, we adopted J. Kling Soren's model of teacher identity, which conceptualizes it as a construct comprising three components: professional identity, personal identity, and institutional identity. Understanding these components of teacher identity is particularly relevant when evaluating the impact of EMI, and specifically the role of Technical English courses in preparing instructors. Figure 1.3 illustrated this model.

**Figure 1.3**

*Kling's model of teacher identity*



According to Kling, professional identity is made up of two fundamental elements: professional expertise and professional authority. Professional expertise refers to the specific knowledge teachers acquire, while professional authority pertains to how others perceive them in relation to their knowledge and status. Kling's research, based on lecturers' cognitions, further breaks down professional expertise into two components: content knowledge and pedagogical knowledge. The latter includes a specialized variant known as content pedagogical knowledge, which refers to the pedagogical skills required to teach a specific subject. Professional expertise also encompasses professional authority, which reflects whether a teacher's expertise is recognized and accepted by others.

When considering the implications of EMI, it becomes evident that teaching in English can influence terminology, pedagogy, and the ability to communicate expertise effectively. For instructors teaching technical subjects through English, their perceived proficiency and authority in using the specialized terminology and discourse of their field in English can significantly impact their professional identity. As a result, EMI may challenge a teacher's professional identity, potentially affecting their sense of self as a professional. The subsequent evaluation of the Technical English course will consider how it addresses the development of trainees' professional expertise (including content pedagogical knowledge in English for technical subjects) and their professional authority in an EMI setting.

### **1.8 Implementation of EMI in Algeria Higher Education**

English as a medium of instruction (EMI) has gained ground in Algerian higher education institutions in recent years. The Algerian government, in its efforts to modernize and internationalize the country's educational system has recognised the value of English language competency and the advantages of teaching in English. The rationale for the transition to English instead of French and Arabic is based on various causes, including the expanding global integration of higher education and the growing relevance of English in the global job market, and the Algerian government's goal to improve the quality of its higher education system. The linguistic change has a significant impact on school attainment (Bredtmann et al., 2021).

To promote the use of English in academia concerns the training of all lecturers in English to the extent that enables them to deliver courses in English. Correspondence 1433 of 28 September (AMHESR, 2022) from the Secretary General of the ministry gives further

details about the decision. The document emphasises that the purpose of exposing Algerian higher education to the outside world requires the use of English as the medium of instruction across higher education institutions in Algeria. For this end, the training of all teachers in English is indispensable.

The ministry set level B2 or C1 of Common European Framework of Reference for Languages (CEFR), especially in English for specific purposes (ESP), as the target of this training. Such training should be delivered either in the centers for intensive language learning or in the English departments in universities. The principal objective is for each higher education institution to start delivering courses in English starting from the academic year 2023-2024. Apart from classes in the centers for intensive language learning and the departments of English, the ministry also launched an online platform starting from 02<sup>nd</sup> January (AMHESR, 2022).

On December 7<sup>th</sup>, 2024, The Rector of The University of Continuous Education, inaugurated the first cohort of university professors enrolled in a Technical English Bachelor's programme as a second qualification. The programme, managed by the university, aligns with the Ministry of Higher Education's strategy to integrate English into Algerian higher education, enhancing innovation, research, and international visibility.

The training, designed by experts and delivered by distinguished professors, follows a hybrid (in-person and online) model. It includes specialized fields like economics, law, and pharmaceutical medicine, helping professors use English in teaching and research. 2,500 professors from 15 institutions in Algiers and Oran are participating. This initiative complements the university's existing Technical English programme for students. It aims to boost Algeria's academic rankings by improving English proficiency in research and pedagogy (University of Continuous Education, 2024).

### **1.8.1 Benefits of EMI implementation in Algeria**

Researchers have investigated the benefits of implementing EMI in several academic situations, including higher education (Derakhshan et al., 2022; Su & Kong, 2023; Sahan & Şahan, 2024). Implementing EMI at Algerian universities is critical in today's globalised society. EMI can help to enhance graduates' employability by equipping them with the English language skills necessary to succeed in international job markets.

Furthermore, implementing EMI can improve the quality of higher education in Algeria by exposing students to diverse academic cultures and perspectives, as well as enhancing critical thinking skills. EMI can also provide possibilities for Algerian researchers to participate in foreign academic and research communities, publish their research in prestigious publications, and attend conferences and seminars around the world.

Finally, implementing EMI can help Algeria's economic development and integration into the global market by guaranteeing that graduates are proficient in English, allowing the country's growth and competitiveness. Therefore, Algerian universities must invest in English language education and encourage the implementation of EMI in their curricula to prepare graduates for the challenges of the twenty-first century. Job market and academic world. Evaluating training programmes, Courses like the technical English at UFC, BBA are crucial for helping Algerian universities effectively benefit from EMI, given the common challenges of its implementation.

### **1.8.2 Barriers to EMI implementation in Algeria**

The adoption of EMI in Algerian higher education faces several challenges, such as insufficient language skills among educators and learners, inadequate resources and institutional support, and a lack of training and professional development programmes (Belkhiria, 2019; Saidi, 2021). The preparedness of university teachers to effectively teach through English emerges as a central and critical concern. Other difficulties such as the presence of language barriers, the preparedness of teachers, and the need for supplementary support systems (Pun & Thomas, 2020; Fernández Barrera & Nieto Moreno De Diezmas, 2021). As a result, EMI teachers feel more tense and stressed, have to concentrate more in class, and feel insecure and disempowered (Doiz and Lasagabaster 2018). Teachers report that teaching in English diminishes their ability to improvise and spontaneity, significantly impacting the emotional bonds and strong rapport they are accustomed to developing with their students when teaching in their own language (Doiz et al., 2019).

One of the difficulties in integrating EMI in higher education is instructor quality (Oktaviani, 2019). Current programs do not effectively train instructors to immerse and implement EMI practices in their classes as training and continuous professional development courses would be difficult to achieve their desired results (Octaviani, 2019). The other main issue is the low proficiency level of teachers in general and their lack of adequate oral skills in particular; this is recognized as one of the main factors producing negative

outcomes in many EMI settings (Octaviani, 2019). Also, teachers might feel frustrated as they will have to spend more time adapting to the new teaching materials and activities, which requires more effort and resources from them (Octaviani, 2019).

In the best-case scenario, when teachers have the necessary communicative competence, students become a barrier because they do not grasp the lesson provided in English (Oktaviani, 2019). Their limited English ability and communication breakdowns may result in a lack of classroom discussion and engagement, resulting in poor academic performance. In most situations, teachers use code switching to bridge the communication gap and restore motivation and interest in the lectures (Octaviani 2019). In addition, there is a significant lack of resources such as textbooks, e-books, activity books, and other teaching materials for EMI classes, which complicates their implementation in higher education (Oktaviani, 2019). These material shortages highlight broader challenges in Algeria's EMI efforts, emphasizing the need to evaluate teacher training effectiveness.

Effective EMI implementation, especially in Algeria, demands thoughtful planning and comprehensive support. As Canagarajah (2018) notes, "EMI implementation is not about substituting one language for another," but requires a deep understanding of context, objectives, and needs. Involving all stakeholders, teachers, students, and administrators, and providing them with sufficient resources is essential to ensure the success of EMI in higher education.

## **Conclusion**

This chapter explored various concepts and debates surrounding EMI in general and the Evaluation of TE Course in particular. The reviewed literature highlights the importance of implementing EMI courses effectively to meet educational and professional goals. However, there is limited understanding of how well the TE course at the Continuous Education University prepares in-service trainees for the professional demand of EMI teaching. To address this gap, this study aims to evaluate the effectiveness of the Technical English (TE ) course in aligning with the demands of EMI by examining in-service trainees' perceptions, challenges, and experiences. This foundation paves the way for the subsequent chapter, which will focus on the Research Methodology, contributing to the collection and analysis of data for this study.

2<sup>nd</sup>

**Chapter**

**Methodology**

## Chapter Two : Methodology

### Introduction

The previous chapter reviewed the literature relevant to this study. This chapter outlines the research methodology employed to address the study's key questions. It details the research design, methods, setting, population, instruments, and data collection procedures, along with the rationale for their selection. Additionally, it provides a thorough explanation of the data processing methods and the justification for their use. Finally, the chapter discusses the ethical considerations implemented to ensure the study's integrity and quality. Furthermore, it outlines the limitations and delimitations of the study.

### 2.1 Research Questions and Objectives

#### 2.1.1 Research Questions

This research investigates in-service trainees' perceptions and experiences toward the Technical English course and its role in preparing them to use EMI in their teaching practice, there is a notable deficiency in research within the Algerian context. Consequently, this study seeks to address this gap by exploring the following research questions, which guided the investigation

- **RQ.1** How do in-service trainees perceive the Technical English course in preparing them to use English as a Medium of Instruction (EMI)?
  - **RQ1a** What challenges do in-service trainees encounter during their training?
- **RQ.2** How do trainers perceive the alignment of Technical English with EMI implementation?
- **RQ.3** To what extent do the objectives of the Technical English syllabus (*Canevas*) align with the needs of EMI implementation?

#### 2.1.2 Research Objectives

Based on the research questions, the study aims to achieve the following objectives:

- To explore in-service trainees' perceptions of the Technical English course in relation to their preparedness for using English as a Medium of Instruction (EMI) , including the challenges they encounter during their training experience.

- To investigate trainers' perspectives on the alignment between the Technical English course and EMI implementation.
- To evaluate the extent to which the objectives of the Technical English syllabus align with the needs of EMI implementation.

The following section will discuss the research Paradigm and Approach.

## 2.2 Research Paradigm

Research paradigms affect how the world and its phenomena are perceived, understood, and interpreted. They refer to the theoretical perspectives that shape the way research is formulated and implemented (Mackenzie & Knipe, 2006, p. 195). Kuhn (1962) defines paradigm as the assumptions and intellectual structure that underlie research and development in a field of enquiry while Saunders et al. (2009) define it as a method for gathering and explaining knowledge about an area of study.

Given the nature of the study, the data supporting it, and the methodology employed, a number of scholars believe that all scientific research should be founded on a few essential philosophical presumptions (Myers, 1997; Orlikowski and Baroudi, 1991; Neuman, 2011). The research paradigm adopted for this research is constructivist (interpretivist). The interpretive paradigm emphasizes research with qualitative methods (Jean Lee, 1992; Awa et al., 2015) to show social realities - such as education, which is a social field – and is related to ethnography, hermeneutics, phenomenology, and case studies (Lee, 1991; Awa et al., 2015). From an interpretive perspective, researchers achieve a deeper understanding of the complexity of a phenomenon within a specific context, rather than aiming for generalizations across populations (Creswell, 2007, p. 3).

This study, guided by an interpretive paradigm, explores the alignment of the Technical English course with English as a Medium of Instruction (EMI) from the viewpoint and lived experiences of in-service trainees at the University of Continuous Education. By taking this approach, it acknowledges that in-service trainees' perceptions are shaped by their individuals interpretations, cultural background and educational experiences. The study aims to elicit the profound meanings and fundamental constructs that participants connect with the Technical English course's success in enabling them to employ EMI in their teaching practices. Embracing an interpretivist perspective enables a detailed exploration of the complex nature of in-service trainee's perspectives and experiences. This philosophical stance directly informs the research design and methodology used in the study.

### 2.3 Research Design

Research design is the overall plan for connecting the conceptual research problems to the pertinent and achievable empirical research. It is an inquiry which provides specific direction for procedures in a research (Creswell, 2014, p. 55). The essence of research design is to translate a research problem into data for analysis so as to provide relevant answers to research questions. A qualitative approach was followed in this study. It aligns with the interpretive philosophical standpoint adopted in this study. Qualitative researchers are not concerned with the objective truth, but rather the truth as the participants perceive it (Burns & Grove, 2000, p. 388).

Indeed, and given the nuanced and multifaceted nature of in-service trainees perceptions and experiences toward alignment of Technical English course with EMI, qualitative research can provide a platform for uncovering subjective interpretations and experiences influenced by individual perspectives, institutional contexts, and cultural factors. The strength in qualitative research lies in the fact that it is descriptive or exploratory and it stresses the importance of context and the subject's frame of reference (Burns & Grove, 2000, p. 388)

For this research endeavor, a case study research design has been selected. A case study is one of the most widely used and accepted means of qualitative research methods in the social sciences ((Bloomberg & Volpe, 2022, p. 237). The case study approach is particularly useful to employ when there is a need to obtain an in-depth appreciation of an issue, event or phenomenon of interest, in its natural real-life context (Crowe et al., 2011). Case studies provide researchers with an opportunity for greater depth of understanding of an issue (Stake, 2006, p. 2).

Yin (2003) and Stake (1995) use different terms to describe a variety of case studies. Yin categorizes case studies as explanatory, exploratory, or descriptive. The selected one relies on the specific nature of the research questions, the available resources, and the level of understanding and prior knowledge of the phenomena. Exploratory case studies design in particularly appropriate to evaluate TE course. This type of case study would be used if you were seeking to answer a question that sought to explain the presumed causal links in real-life interventions that are too complex for the survey or experimental strategies. In evaluation language, the explanations would link programme implementation with programme effects (Yin, 2003). This design offers an immersive and in-depth examination of a specific case, enabling a holistic understanding of complexities and intricacies of TE course effectiveness

in the unique of Algerian context Higher Education. Furthermore, it provides a robust framework for collecting qualitative data, capturing the nuanced and multi-dimensional analysis of the research topic.

However, in order to guarantee validity and comprehensiveness and to give a more comprehensive picture of how technical English course prepare In-service trainees to use EMI, this study employs a mixed-methods approach. It is an approach in which two data sets are combined to get a complete picture of the issue being explored and to validate one set of findings with the other (Creswell & Plano Clark, 2018, p. 221). As such, data will be gathered using three research instruments namely survey questionnaire, semi – structured interview and documents analysis in order to fully capture participants' viewpoints, gain deeper insights, and enhance the credibility of the findings.

## **2.4 Research Instruments**

A hallmark of case study research is the use of multiple data sources, a strategy which also enhances data credibility (Patton, 1990; Yin, 2003). To answer the research questions and achieve the aim of the study, three instruments were designed.

### **2.4.1 Semi – Structured Questionnaire**

To explore the in-service trainees 'perceptions, a questionnaire was selected to be used as a tool to for data collection. A questionnaire, as described by Sreejesh (2014, p. 143), is fundamentally a structured series of questions presented to respondents during an interview, accompanied by clear instructions detailing the sequence and selection criteria. As Bryman (2016, p. 248) outlines, the integration of both closed-ended and open-ended questions allows for the collection of both structured, quantifiable data and rich, qualitative insights, a principle guiding the design of the questionnaire used in this research. Both closed-ended and open-ended questions were included in the questionnaire used for this study, and their design is discussed in the following sections

#### **2.4.1.1 Design of Semi -Structured Questionnaire**

An online questionnaire consisting of 24 closed- ended and open -ended questions , divided into 03 sections , it was adapted from Tiaiba (2025). It was developed using Google Forms, a web based survey administration tool (See appendix A). The questionnaire link was

distributed to in-service trainees across at the University of Continuous Education between 15<sup>th</sup> February and 3<sup>rd</sup> May, 2025. It aimed to gather insightful information for this research

### **Section 1: Background Information (Q1-Q9)**

This section gathers general information about participants, including their faculty, English proficiency level, prior experience with English, and their teaching experience.

### **Section 2: Needs Related to EMI and the Current Course (Q10-Q18)**

This section examines participants' expectations, learning needs, and perceptions of the Technical English (TE) course, assessing how well its content and materials meet their professional and language needs.

### **Section 3: Challenges Faced During the Course (Q19-Q24)**

This section identifies difficulties encountered by trainees while attending the EMI course. It focuses on language barriers, and any external factors that may affect their learning experience.

#### **2.4.2 Semi-Structured Interview**

According to Magaldi and Berler (2020) the semi-structured interview as an exploratory interview. They further explain that the semi-structured interview is generally based on a guide and that it is typically focused on the main topic that provides a general pattern. It allows the researcher to gain special insights or insider views (Hynninen & Kuteeva, 2017, Davis, 2019; Neumann et al., 2019).

In this study, interviews were chosen as the secondary method for collecting data. The semi-structured interview is often used within a process of triangulation as a method that can enrich and extend understandings ( Li et al., 2018; Zhang et al., 2020). This enables researchers to explore participants' experiences in depth while ensuring consistency across interviews .Semi-structured interviews were selected to gather trainers' insights on the alignment of the current Technical English course in preparing in-service trainees to use EMI in their teaching practice . This methodological choice aligns with the study's aim of our study .

The semi-structured interview helps build rapport and encourages open sharing, making it useful for identifying key issues for questionnaires and for following up on survey findings through in-depth interviews. According to Drever (2003), because the nature of interviews is an in-depth explanation within a particular context while questionnaires paint a broad though possibly superficial picture, it is often a good idea to use both consecutively.

### **2.4. 2.1 Design of the Semi – Structured Interview**

In the semi-structured interview, an interviewer generally has a framework of themes to be explored. And Rubin (2005, p. 171)) suggest that good interviews usually consist of a balance between main questions, follow-ups, and probes. However, a specific topic or topics that an interviewer wants to explore during the interview should be well prepared in advance.

The interview was structured to allow flexibility while still keeping the focus on the research objectives. It included a series of open-ended questions that gave participants space to share their opinions, experiences, and suggestions. ( See the appendix B.1 ) These questions covered several key areas, such as the general effectiveness of the course, its relevance to EMI, the most and least useful Modules , the challenges trainees face when using English for instructional purposes, and the difficulties trainers themselves encounter while teaching the course. Trainers were also invited to propose improvements that could make the course more practical and aligned with EMI goals.

To support and balance the open discussion, a short section using a 5-point Likert scale was added. In this part, trainers were asked to rate specific statements related to the clarity of the course objectives, the relevance of the content to trainees' professional needs, and the extent to which the course supports EMI-related skills. This helped to highlight common patterns and compare responses across different participants.

The interview guide was carefully prepared and reviewed before use. The interviews were carried out either face-to-face or via email, depending on the trainers' availability. Each interview lasted around 30 minutes and was recorded with the participants' permission for transcription and later analysis.

### **2.4.3 Pilot Study**

A pilot study is one of the important stages in a research project and is conducted to identify potential problem areas and deficiencies in the research instruments and protocol prior to implementation during the full study. A pilot interview was conducted to check the clarity of the questions and make minor adjustments. Before launching the questionnaire online, was primarily validated by the supervisor of the study who suggested some changes concerning the questions selection and distribution. Then, it was piloted by distributing both paper sample with QR code and an online sample via email to other teachers. Face and content validity were used by the pre- mentioning teachers who agreed on the relevance of

questions, and they suggested some modifications and corrections at the level of structure and questions formation.

#### **2.4.4 Document Analysis**

Document analysis is a systematic procedure for reviewing and evaluating documents, both printed and electronic (computer-based and internet-transmitted). Like other analytical methods in qualitative research, document analysis requires that data be examined and interpreted to elicit meaning, gain understanding, and develop empirical knowledge (Rapley, 2007; Corbin & Strauss, 2008).

As part of the data collection tools, an official institutional document titled Canvas Learning Management System (LMS) content of the first year Technical English course was used (see the Appendices C.1), as this was the only course material accessible. This document outlines the detailed curriculum and training offer for first-year students at the University of Continuous Education (UCE). In addition, the modules delivered in the Technical English course for the first, second, and third years were reviewed and summarized (See the appendix C.2).

The purpose of using these documents was to understand the official structure, objectives, and placement of the Technical English course within the broader syllabus. They provided essential context for evaluating the course's design and its alignment with EMI objectives. Furthermore, the documents ensure that the research instruments accurately reflected the content delivered to trainees. By analyzing these documents, the study was able to link trainers' and trainees' responses to the official program and explore potential gaps or inconsistencies between the intended curriculum and its perceived effectiveness.

## **2.5 Research Setting and Sample**

### **2.5.1 Setting**

The research setting is the place where the research study takes place. According to Creswell (2014), "the research setting is the physical, social, and cultural site or location where the researcher conducts the study" (p. 179). Therefore, the setting chosen to attempt the fieldwork was the University of Continuous Education during the academic years 2024–2025.

## 2.5.2 Sample and Sampling Procedure

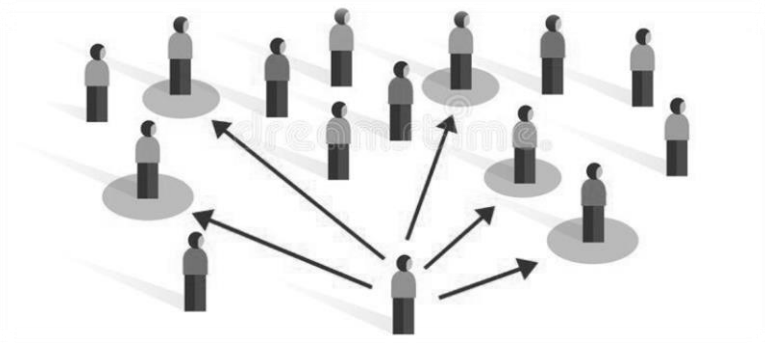
In a research study, the "target population" refers to the selection of the appropriate individuals that are helpful to investigate the research study and draw conclusions about it. (Creswell, 2014, p. 76). The population targeted in this study consists of approximately 150 in-service trainees enrolled across all academic years at the University of Continuous Education in Bordj Bou Arreridj.

According to Fraenkel et al. (2022), a research sample consists of specific individuals selected by the researcher to generate data representative of a broader population (pp. 360–361). The primary sample includes in-service trainees. In this context, the selected individuals bring a unique combination of experiences, as all participants are STEAM (Science, Technology, Engineering, Arts, and Mathematics) university instructors attending a TE course designed to prepare them for teaching through EMI. The majority of participants are in their second year (59.3%), with a smaller representation from the first year (18.5%) and third year (22.2%). This distribution was intentional, aiming to better understand how trainees' readiness for EMI evolves over time. In addition to the trainee participants, a group of course trainers took part in semi-structured interviews. Their input provided further insights and supported the triangulation of data.

This study employed a purposive sampling strategy, which was deemed appropriate given the need for in-depth information from participants with relevant expertise. Purposive sampling is defined as "the deliberate selection of certain individuals or groups for inclusion in a study because they possess characteristics of importance to the research question" (Fraenkel et al. 2022, p. 238). Accordingly, the sample was composed of in-service trainees at the UCE who are well-positioned to provide informed perspectives on the alignment of the TE course with the demands of EMI based on their teaching experience.

**Figure 2 .1**

*Purposive (non-random) Sampling Source <https://www.dreamstime.co>*



## 2.6 Data Collection

According to the qualitative study, data collection employed multiple sources in an attempt to verify the richness and credibility of the finding. The process started by on-line questionnaire administered to in-service trainees , This was followed by semi-structured interviews with trainers ,also, relevant materials, Ethical issues were taken into account at every step while collecting data, including obtaining informed consent ( See the Appendix B.2) from all the participants prior to their participation in the study. This method ensured participants were well informed about the study, its aim, and how they could be engaged.

### 2.6.1 The Administration of Semi-structured Questionnaire

The questionnaire was designed using Google Forms; two methods of distribution were used, namely mailed and hand-delivered. The questionnaires was delivered student private group facebook page . The aim and objectives of the research were explained to these in-service trainees by the researcher. Table 2.1 below displays the in-service trainees' questionnaire respondents' profiles.

**Table 2.1**

*The in-service trainees' questionnaire respondents' profiles*

Faculty		Department		Subject
Natural and Life sciences , Earth and Universe Sciences	11,1%	Agricultural science	3,70%	Hydro Agriculture management Micro-biology Chemistry
		Biology science	3,70%	
		Ecology and Environment	3,70%	
Mathematics and Computer science	14,81%	Mathematic	14,81%	Algebra 3 + Algebra 4 Hydraulic Mechanics
Science and Technology	18,51%	Mechanic-Engineering	7,40%	Ethics, Standardization, Computer science, , Numerical methods, electromagnetic - English for automatic
		Electro-Mechanic	34,04%	
Arts and languages	22,22%	French Language	14,81%	Didactics – Oral – Tic Discourse Analysis and Human Civilization
		Arabic language and literature	7,40 %	
Social and human Sciences	7,40%	Psychology	3,70%	Psychometric Social psychology
		Media and communication	3,70 %	
Economic , commercial and Management Sciences	25,92%	Commerce science	14,81%	Marketing – international trade –statistic Business Administration -Statistical Software
		Management sciences	11,11%	
Law and Poiltical Sciences	0%			

The sampling frame consisted of 27 in-service trainees who are currently teaching at different departments in the University of El Bachir El Ibrahim-BBA-. These were asked to complete an online questionnaire. The table presents data on in-service trainees detailing their faculty, departments, and subject they teach. Among the respondents, the majority of in-service trainees come from the Faculties of Science and Technology, and Arts and Languages. There were no participants from the Faculty of Law and Political Sciences

### 2.6.2 Conduct of the Semi-Structured Interviews

To gain deeper insights into the effectiveness of the current TE course in preparing in-service trainees to use EMI, semi-structured interviews were conducted with Seven trainer teachers. Four of the interviews were conducted face-to-face at the participants' workplaces, allowing for a more interactive and responsive exchange. The interviews were recorded with a digital voice recorder and transcribed. Three interviews were conducted via email due to scheduling constraints. The purpose of these interviews was to gather the trainers' perspectives on the practical value and relevance of the TE course in real teaching contexts. Table 2.2 below displays the trainers' interview participants' profiles.

**Table 2.2**

*The trainers' interview participants' profiles*

<b>Participant</b>	<b>Gender</b>	<b>Academic background</b>	<b>Experience teaching Technical English:</b>	<b>Subject they taught</b>
<b>Teacher 1</b>	Male	Master degree	Three years	Linguistic/ phonetic
<b>Teacher 2</b>	Female	PhD	One year	Oral expression
<b>Teacher 3</b>	Female	Master degree	Two years	Grammar
<b>Teacher 4</b>	Female	PhD	One year	Study skills
<b>Teacher 5</b>	Male	PhD	Six years	Library research
<b>Teacher 6</b>	Male	PhD	Ten years	Literature/ Civ
<b>Teacher 7</b>	Male	PhD	Eleven years	Literature

Table 2.3 provides an overview of the academic backgrounds and genders of the seven participants involved in the interview. Out of the seven participants, four are male and three are female. The two females participant hold PhDs, while the third female participant has Master degree. The three males participants hold PhD and the fourth has Master degree. This diverse range of academic disciplines among the participants demonstrates multidisciplinary nature of the trainers teaching Technical English at UC E -BBA-.

## 2.7 Data Analysis

The information gathered is converted into empirical data during the analysis process, which is then used to accomplish the study's goal. Considering the research findings include both qualitative and quantitative data, two different methods were used: thematic analysis and descriptive statistical analysis. These approaches will be thoroughly explained in the sections that follow.

### 2.7.1 Descriptive Statistical Analysis of the Questionnaire and Interview's Closed-Ended Items

To analyse the closed-ended questions in our questionnaire and interview, we used descriptive statistical methods. The data was entered into Google Forms and then exported to Microsoft Excel 2010 for calculation and analysis.

### 2.7.2 Thematic Analysis of the Questionnaires and Interviews' Qualitative Data

Given that qualitative data analysis is “a reflexive, reactive interaction between the researcher and the decontextualized data” (Cohen et al., 2018, p.524), a thematic approach was adopted to analyse the qualitative data from the questionnaires and interview. Based on Braun and Clarke's (2006) six phases and other guidelines proposed in the literature (Dörnyei, 2007; Creswell, 2008; Yin, 2014; Cohen et al., 2018), The data presentation will be organized thematically. After initial coding, recurring patterns and categories were grouped into broader themes. Each theme will be presented in a separate subsection in the findings chapter, supported by illustrative quotes from participants to provide contextual understanding. The themes will be clearly named and defined, and where appropriate, a themes table will be used to summarise the themes, sub themes and associated codes. Our approach to thematic analysis was as follows:

#### Figure 2.2

*Thematic Analysis process ([https:// www.researchgate.net](https://www.researchgate.net))*



*Familiarization*: the first step is to get to know our data. It's important to get a thorough overview of all the data we collected before we start analyzing individual items. After transcribing the data, we examined the qualitative transcripts from the questionnaires and the interviews through cyclical readings to maintain "closeness" to the data and familiarise ourself with it (Halcomb and Davidson, 2006, p.40).

*Coding* : Next up, we need to code the data. Coding means highlighting sections of our text – usually phrases or sentences – and coming up with shorthand labels or "codes" to describe their content. This step was of paramount importance as it enabled us to consolidate interconnected themes in a coherent manner, thereby preventing any potential overlap or redundancy within the categories. It also guaranteed the appropriateness of the selected quotations for each respective category (Braun and Clarke, 2006). The development of themes was guided by their relevance to the research questions and significance within the dataset

Coding qualitative data. An illustrative example of initial coding is presented in table 2.3 below:

**Table 2.3**

*Example of Initial Coding from Trainer " Interview*

Interview extract	Initial codes
<i>"The module of literature is irrelevant as far as technical English is concerned. Students get bored and don't like it."</i>	Mismatch between course content and trainee specialization

In this extract, interview transcripts are thoroughly reviewed, with relevant phrases highlighted and coded by theme. New codes are added as needed, and all coded data is grouped to identify recurring ideas and common meanings, providing a clear overview of the main points.

*Generating themes* : Next, we look over the codes we've created, identify patterns among them, and start coming up with themes. Themes are generally broader than codes. Most of the time, we'll combine several codes into a single theme. In our example which is illustrated in Table 2.4 , we might start combining codes into themes :

**Table 2.4**

*Example of Themes " Generating from the Trainers " Interview*

<b>Data Extract</b>	<b>Code</b>	<b>Initial Themes</b>	<b>Category</b>
(Teacher 1) “The main challenge that can face learners is when they are not free all the time. They are not interacting with each other, and they are not interacting with technology.”	Lack of interaction and limited time availability	Insufficient peer and tech-based engagement	Trainee Challenges in EMI Contexts

At this stage, vague or less relevant codes can be discarded, while others may be developed into meaningful themes. The goal is to identify themes that provide useful insights aligned with the research objectives.

*Reviewing the Themes:* In this stage, we reviewed and refined themes by ensuring internal consistency and appropriately categorizing codes, a process crucial for avoiding overlap and maintaining clarity (Braun and Clarke, 2006). This allowed us to merge related themes and ensure that selected quotations fit each category. The refined themes were then linked to findings from other instruments to create a coherent narrative aligned with the research questions and aims.

*Defining and naming theme:* Now that you have a final list of themes, it’s time to name and define each of them. Defining themes involves formulating exactly what we mean by each theme and figuring out how it helps us understand the data. Naming themes involves coming up with a succinct and easily understandable name for each theme.

*Interpreting and Presenting the Results:* The last phase of Braun and Clarke’s (2006) approach is producing the report which entails the final presentation of the findings in a coherent way when reaching data saturation. We performed a thorough analysis to interpret the themes in relation to our research questions and aims. To enhance our interpretations, we established connections and offered explanations based on evidence from the data. Our findings were presented in a convergent design; we merged qualitative data under five main themes

### **2.7.3 Analyzing Documents**

Document analysis involves skimming (superficial examination), reading (thorough examination), and interpretation. This iterative process combines elements of both content analysis and thematic analysis. Content analysis refers to the process of organizing information into categories, while thematic analysis is a form of pattern recognition within the

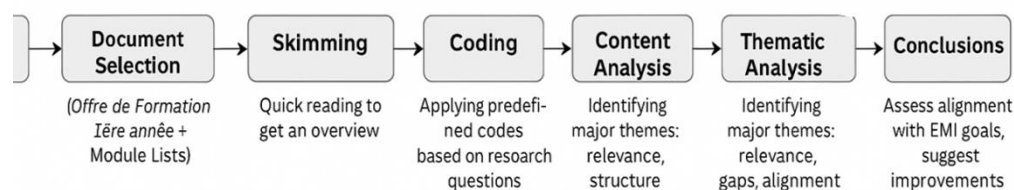
data, with emerging themes becoming the categories for analysis (Fereday & Muir-Cochrane, 2006).

The process requires careful, focused re-reading and reviewing of the selected documents. A document analysis checklist was used to guide the evaluation and ensure consistency in identifying relevant and irrelevant modules ( See appendix C.2). We performs coding and constructs categories based on the characteristics of the data to uncover themes pertinent to the phenomenon under investigation, particularly when document analysis is used to supplement other research methods within the study. Codes and the themes they generate serve to integrate data gathered through different methodological tools.

In the present study, document analysis was employed to complement findings from questionnaires and interviews, ensuring a comprehensive and integrated understanding of the alignment between the intended curriculum and participants' perceptions. The figure below summarizes the step-by-step procedure followed during the document analysis phase

**Figure 2.3**

*Process of document Analysis checklist*



## 2.8 Research Quality and Trustworthiness

Trustworthiness in qualitative research is evaluated according to four fundamental criteria: credibility, transferability, dependability, and conformability (Lincoln & Guba, 1985). These conditions were strictly adhered to in this exploratory case study to make sure that the findings of the research is credible and that the research process was within ethical guidelines.

*Credibility (internal validity)* :Credibility refers to the accuracy and truthfulness of the findings so that the research is indeed a true reflection of the views of the participants. Credibility of the study, or the confidence in the truth of the study and therefore the findings, is the most important criterion (Polit & Beck, 2014). To guarantee the credibility of this investigation, we used a mixed-methods approach (triangulation). Lincoln and Guba (1985) suggested triangulation as a vital strategy to improve conformability. To enhance the

credibility of this study, data were collected using a variety of methods, including questionnaires and interviews, to gain a thorough and in-depth understanding of the topic under enquiry.

*Transferability (Applicability):* The term transferability is also used for applicability. The generalizability of research findings in other contexts is considered the applicability of research data Lincoln and Guba (1985), (Polit & Beck, 2012; Houghton et al., 2013; Cope, 2014; Ghafouri & Ofoghi, 2016; Riazi & Ghanbar, 2023). Theoretical purposive sampling is a vital strategy given by Gaba (1981) to improve transferability. The results of our study might be transferred to any other context that uses the TE course to support EMI in higher education. We provided enough details regarding the design, the settings of the data collection, the selection of our participants, and how we analyzed the data and interpreted the study findings for the study to be replicable in other contexts. This approach may benefit researchers working on this topic or related studies, as it offers clear and practical insights that can be easily applied in different contexts.

*Dependability (Reliability) :* Consistency or dependability of data is the third criterion of trustworthiness. Polit and Black (2012) explain that dependability is data consistency over similar contexts (Polit & Black, 2012; Cope, 2014; Ghafouri & Ofoghi, 2016; Hanson et al., 2019; Enworo, 2023). To ensure dependability, we communicated with our supervisor throughout the data gathering and analysis process for assistance. Moreover, we provided a detailed description of data collection, including obstacles encountered and solutions used.

*Conformability (Neutrality):* Neutrality is suggested in the fourth criterion of trustworthiness. Some researchers used the word conformability and considered it the data consisting of participant responses rather than researcher choices, viewpoints, and biases (Polit & Beck, 2012; Cope, 2014). The direct quotes of participants' inclusion in reporting the data will help improve the neutrality of the research. Furthermore, we indicated that data collection tools are designed and applied by humans, and biases are inevitable, so it's impossible to ensure absolute objectivity. It shows that the subjective nature of humans will always affect research planning, implementation, and action. Researcher biases and prejudice are always there to decrease neutrality.

## 2.9 Ethical Dimensions

Ethics deals with moral problems related to the practice of research. The focus is on the responsibilities of researchers towards the rights and interests of their participants, their audience, their academic community, and their Society, (Judd et al., 1991; Cameron et al., 1994; British Educational Research Association BERA, 2004, 2018). It is important that researchers usually refer to some ethical guidelines to ensure they have adhered to the principles of good research practice (Judd et al., 1991).

*Ethic of Respect:* All individuals who are involved in our research must be treated with "respect" and utmost trust. Any research must be conducted with consideration for the participants' respect, consequently, all participants must be treated equally and must receive close consideration for every point they make during the investigation.

*Informed Consent:* As researchers, we are required to obtain the voluntary informed consent of every participant prior to any data collection session (BERA, 2004, p .6). To ensure this, we provided each participant with a detailed informed consent letter. This letter outlined the main aims and objectives of the research, as well as key ethical considerations, including issues of confidentiality and anonymity.

*Confidentiality and Anonymity :*As researchers, we made every effort to protect the anonymity of the participants and the privacy of the data collected (Dane, 1990; Miles & Huberman, 1994). Before conducting the data collection sessions, we clearly communicated these two principles to all participants all written and audio records were securely stored in a location that was both safe and accessible.

## 2.10 Limitations and Delimitations of the Study

### 2.10.1 Limitations

Limitations are constraints you cannot control in your study. Primarily, limitations deal with the constraints to the research method (Miles, 2017, p. 2). Limitations are constraints on the generalizability of the results (Terrell, 2016, p. 42). The study was limited by three major limitations as the basis for this study.

- *The first limitation* is sample size, in which the number of participants may be relatively small, which could limit the generalizability of the findings to all in-service trainees at the University of Continuous Education.
- *The second limitation* is access limitation to detailed teaching materials, lesson plans, or internal curriculum documents, which may restrict the ability to thoroughly evaluate course content alignment with EMI standards.
- *The third limitation* is language constraints, some participants may have limited proficiency in English, potentially affecting their ability to fully express their views or understand certain aspects of EMI, which could influence the accuracy of the data.

### **2.10.2 Delimitations**

Delimitations are weaknesses associated with the scope of the studies (Simon & Goes, 2013, p. 1). While limitations are not within the researcher's control, delimitations are factors that can be controlled. The researcher noted three delimitations that affect this study:

- The study is delimited to the University of Continuous Education – Bordj Bou Arréridj -
- The study is delimited to in-service trainees who are currently enrolled in the Technical English course.
- The study is delimited to data collection and analysis are confined to the academic year 2024–2025. Any changes made to the curriculum or course design outside this time frame are beyond the scope of the study.

### **Conclusion**

This chapter outlines the research methodology used to explore in-service trainees' perspectives on the alignment of Technical English courses with EMI. It details the study design, participant selection, data collection methods, and analytical approaches, including descriptive statistical analysis of closed-ended questionnaire items and qualitative thematic analysis. Ethical considerations and quality assurance measures were implemented to ensure credibility. The chapter also addresses the study's limitations and delimitations to clarify the scope and constraints of the research. Finally, it demonstrates that the methodology described in Chapter II was properly followed.

3<sup>rd</sup>

# Chapter

**Results , Discussion ,Conclusions  
And Recommendations**

## Chapter Three: Results, Discussion, Conclusions and Recommendations

### Introduction

This chapter presents the findings derived from the analysis of data collected through questionnaires, interviews, and document analysis. Quantitative results from the descriptive analysis of closed-ended questionnaire items and qualitative insights from the thematic analysis of open-ended responses and interview data are interpreted in relation to the research questions and objectives. The chapter integrates statistical results with thematic findings to provide a comprehensive understanding of the study. The presentation is organized into three main sections: Background Information, Needs Related to EMI and the Current Course, and Challenges faced during the Course.

### 3.1 Presentation of the Results

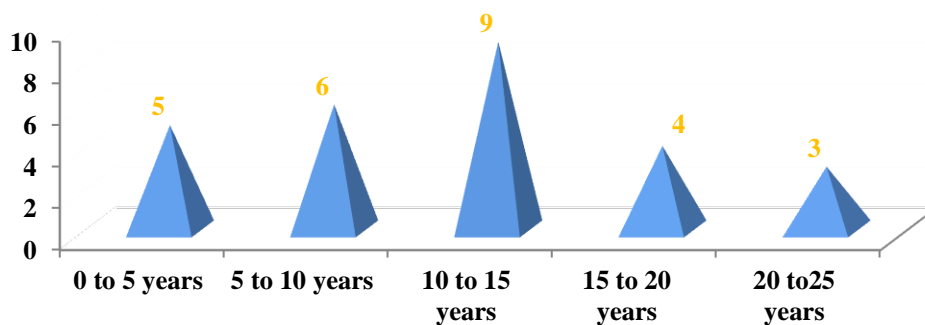
#### Section 1: Background Information

The first section of the questionnaire gathered background information about the participants, including teaching experience, language of instruction, experience teaching in English and their English proficiency level, a total of 27 in-service teachers participated in the study, representing a wide range of faculties and departments. This information helps build a profile of the teachers involved and allows considering any potential influences these factors might have on the study's findings.

#### Teaching Experience of In-Service Trainees Participants

**Figure 3.1**

*Participants' Teaching Experience*



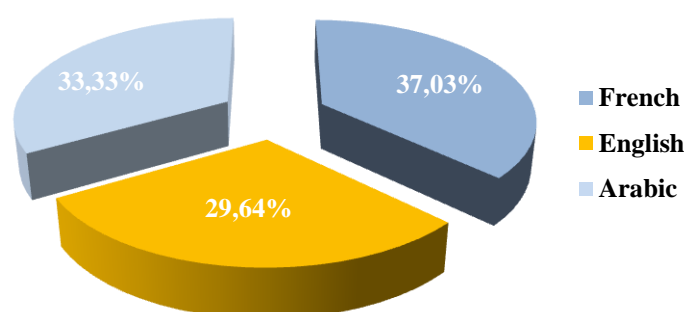
**Figure [3.1]** shows the distribution of teaching experience among participants from question 4 of the questionnaire. Five participants had 0-5 years, 6 had 5-10 years, 9 had 10-15 years, 4 had 15-20 years, and 3 had 20-25 years of experience. The largest group was those with 10-15 years of experience (n=9), while the smallest was those with 20-25 years (n=3). This range of experience provides context for understanding participants' perspectives on the Technical English course's alignment with EMI needs.

### Language of Instruction

**Figure 3.2**

*Participants 'Language of instruction*

Language of instruction	Frequency	Percentage
Arabic	9	33,33 %
French	10	37,03%
English	8	29,64%



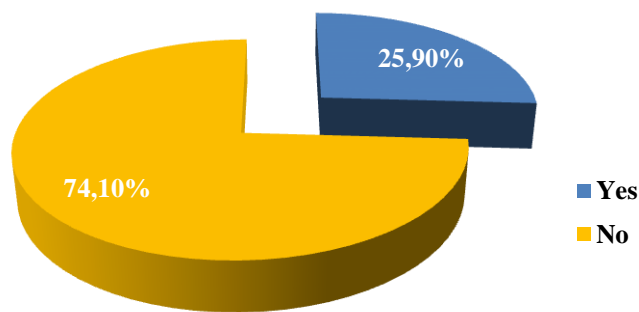
**Figure [3. 2 ]** shows the distribution of languages of instruction among the study participants from the question 5 of the questionnaire . French is the most reported, accounting for 37.03% of responses, followed by Arabic at 33.33%, and English at 29.64 %. This highlights the diverse linguistic context in which these in-service teachers operate and emphasizes the relevance of EMI in this study.

### Prior Teaching Experience in English

**Figure 3 .3**

*Participant's perspectives about prior experience teaching in English*

Prior Experience teaching in English	Frequency	Percentage
Yes	7	25,9 %
No	20	74,1%

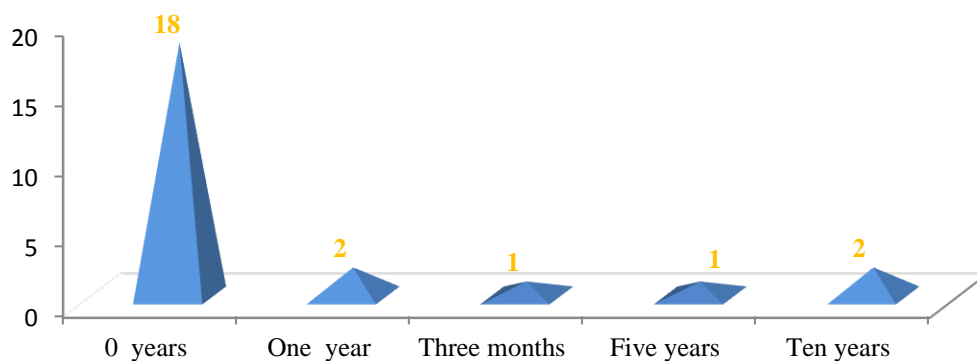


Another key aspect of the participants' background was their prior English teaching experience. Figure [3.3] shows that a large majority 74.1% reported no prior experience, while only 25.9 % had some. This lack of prior EMI teaching highlights the significant need for the Technical English course to adequately prepare these in-service teachers.

Further analysis of the 25.90% with prior experience Figure [3.4 ] revealed that only a small number of participants reported any substantial prior EMI exposure, two reported one year, one reported three months, one reported five years, and two reported ten years.

**Figure 3 .4**

*Participants' Teaching Experience in English*

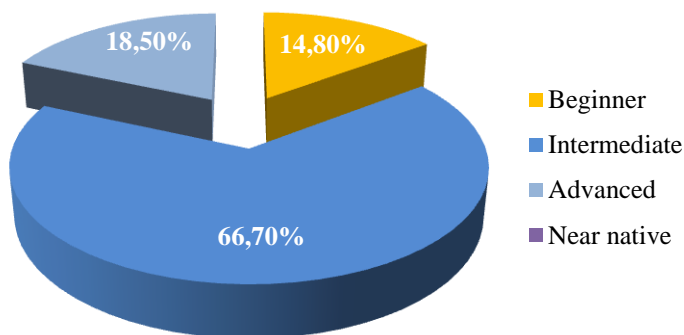


**Level of English Proficiency**

**Figure 3.5**

*Participants' self-assessed English language proficiency*

Level of English proficiency	Frequency	Percentage
Beginner	4	14,80 %
Intermediate	18	66,70%
Advanced	5	18,50%
Near native	0	0%



Participants were also asked to self-assess their English proficiency level. As shown in **Figure [3.5]**, the majority of participants (66.70%) identified their English proficiency as intermediate. A notable proportion (18.50%) considered themselves to be at an advanced level, while 14.80% perceived their proficiency to be at a beginner level. Notably, none of the participants self-assessed as having near-native English proficiency.

**Section Two : Need related to EMI and the Current Course**

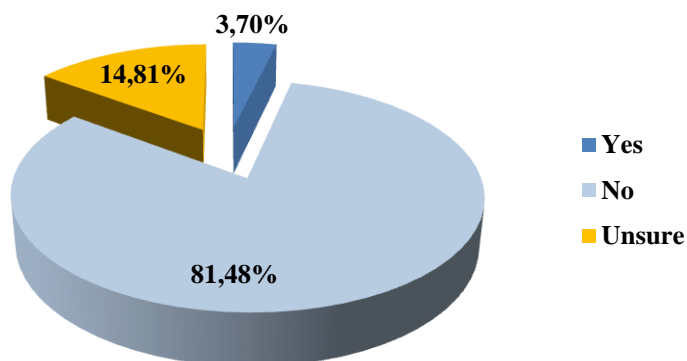
This section explores participants' expectations, learning specific- needs, and perceptions regarding the current course technical English and English-Medium Instruction (EMI).

**Field -Specific Group Streaming**

**Figure 3.6**

*Participant’s perspective on field-specific grouping streaming*

Field specific grouping streaming	Frequency	Percentage
Yes	1	3,70%
No	22	81,48%
Unsure	4	14,81%



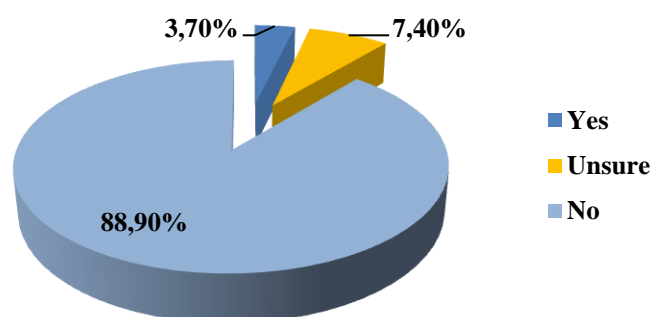
**Figure [3.6]** represent the result of question 9 from the questionnaire a substantial majority (81.48%) of participants reported that they were not grouped by field. Only 3,70 % indicated that they were, while 14.81% were unsure. This finding suggests that the pedagogical approach of the Technical English course largely did not involve the separation of participants based on their specific academic or professional backgrounds.

### Need Analysis Prior the Technical English Course

**Figure 3.7**

*Participants' Perceptions of Needs Analysis Prior to the Technical English Course*

Need Analysis prior the course	Frequency	Percentage
Yes	1	3,70%
No	24	88,90%
Unsure	2	7,40 %

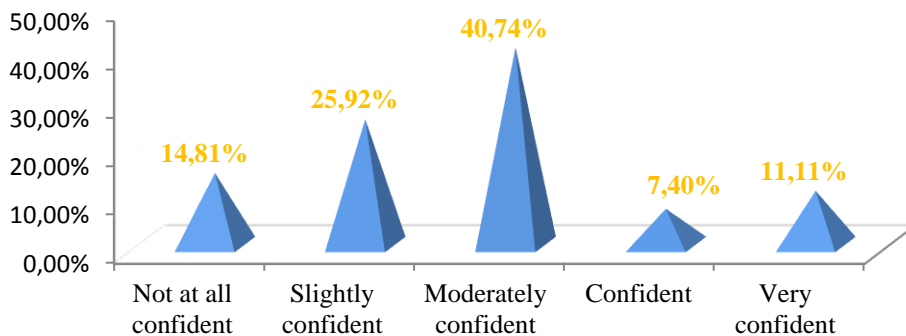


**Figure [3.7]**, illustrates responses to question 10 from questionnaire, which asked whether a needs analysis was conducted before the Technical English course. A large majority (88.90%) believed no such analysis took place, while only 3.70% said it did, and 7.40% were unsure. This perception suggests a possible mismatch between the course content and the actual EMI needs of in-service teachers, raising concerns about the course's relevance and effectiveness.

### Pre-Course Confidence in EMI

**Figure 3.8**

*Participants' Confidence in Teaching Their Subject in English*

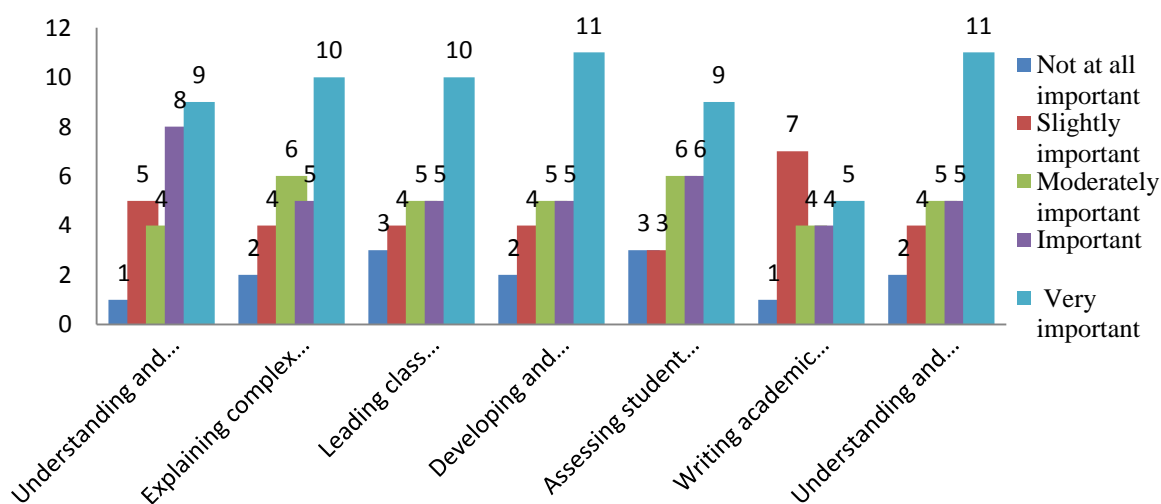


**Figure [3.8]**, represent the result to question 12 from the questionnaire ,it presents the in-service teachers' self-assessed confidence levels in their ability to teach their subject in English prior to starting the TE course. The data reveals that the most frequent response was 'Moderately confident' (40.74%). However, a substantial proportion of participants reported low levels of confidence, with 14.81% feeling 'Not at all confident' and 25.92% feeling 'Slightly confident.' Conversely, only a minority expressed high levels of confidence, with 7.40% indicating they were 'Confident' and 11.11% reporting they were 'Very confident.' The pre-course confidence levels show that many participants lacked confidence in teaching their subjects in English, suggesting a need for the TE course to boost their self-assurance. This baseline data will help assess the course's impact on their readiness for EMI.

**Importance of EMI -related Teaching Skills**

**Figure 3.9**

*Participants' Perceptions of Essential Skills for Teaching through English*

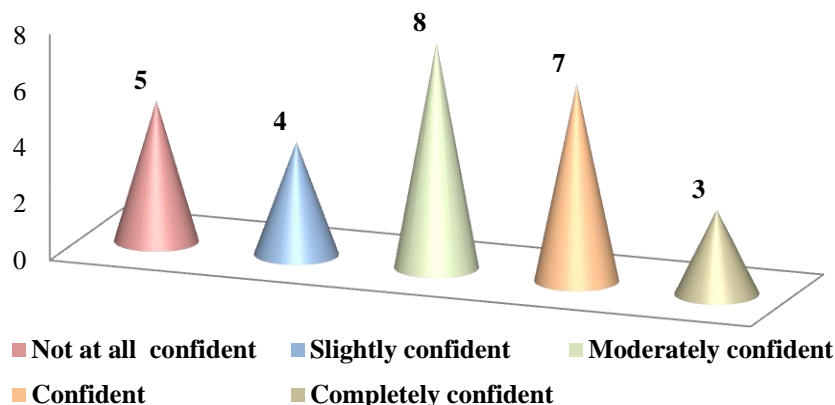


**Figure [3. 9 ]** presents the results of Question 13 from the questionnaire, showing that participants largely rated EMI-related skills as "Very important" or "Important." Key skills such as understanding terminology, explaining concepts, leading discussions, creating materials, and assessing student work were highly valued. While "writing academic materials" received slightly more varied responses, it was still considered relevant. Overall, participants viewed all listed skills as important to their teaching.

### Course Addressing Specific Needs:

**Figure 3.10**

*Participants' Perceptions of the course relevance to specific need*

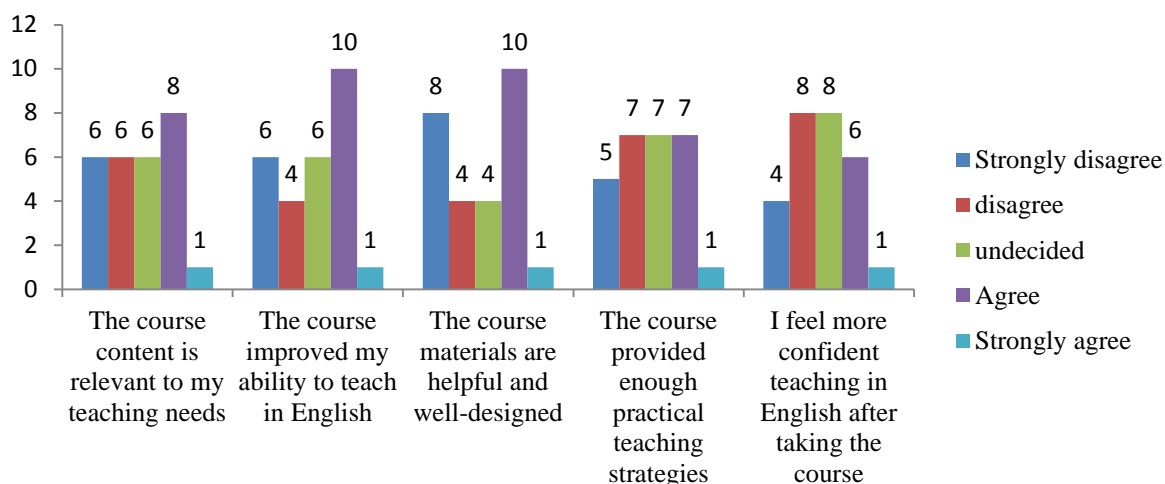


**Figure [3. 10 ]** presents the participants' responses to the extent to which the Technical English course addressed their specific needs related to teaching in English. The largest group of participants (n=8) reported that the course addressed their needs to a 'Moderately confident' extent, while 7 participants felt it did so to a 'Confident' extent. However, a notable number of participants indicated lower levels of perceived need fulfillment, with 5 feeling 'Not at all confident' and 4 feeling 'Slightly confident' that their specific needs were met. Only 3 participants felt 'Completely confident' in this regard.

### Level of Agreement with the Relevance and Impact of the Technical English Course.

**Figure 3.11**

*Participants' ' perceptions of the Impact of Technical English Course on EMI Readiness*



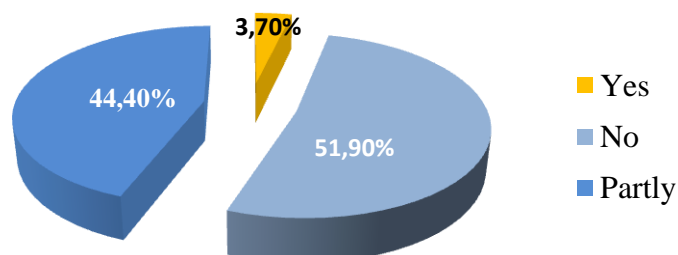
**Figure [ 3. 11]** presents in-service teachers' agreement with statements about the Technical English course ( $n \approx 27$  per item). The majority agreed that the content was relevant to their teaching needs (Agree 8, Strongly agree 1) and that the materials were helpful and well-designed (Agree 10, Strongly agree 1). Similarly, most felt the course improved their ability to teach in English (Agree 10, Strongly agree 1) and boosted their confidence (Agree 6, Strongly agree 1). However, responses on practical teaching strategies were more mixed: 7 were undecided, 7 agreed, and 12 disagreed or strongly disagreed.

### The Relevance of the Technical English Course to their Specific Subject Areas

**Figure 3.12**

*Participant's perspective of relevance of the course to their specific area*

Relevance of the course to their specific area	Frequency	Percentage
Yes	1	3,70%
No	14	51,90 %
Partly	12	44,40 %



**Figure [3.12 ]** represent in-service trainees perspectives about the relevance of Technical English course to their specific subject . A significant majority (51.90%) of the in-service teachers reported that the course was *not* relevant to their subject area, while a substantial 44.40% found it only partly relevant. Alarminglly, only a very small minority (3.70%) perceived the course as being relevant to their specific subject area.

### Document Analysis Checklist

The thematic analysis of questionnaire items 17 and 18 was integrated with the document analysis checklist to assess the alignment between in-service trainees' perceptions and the intended course objectives as it is presented in table 3.1

**Table 3.1**

*Document Analysis Checklist's results*

Category	Modules Identified	Notes
Relevant Modules	<ul style="list-style-type: none"> <li>- Corrective and Articulatory Phonetics</li> <li>- Comprehension (Oral and Written Expression)</li> <li>- Grammar</li> <li>- University Work Techniques (UWT)</li> <li>- Translation</li> <li>- English for Specific Purposes (ESP)</li> <li>- Communication and Professional Terms</li> <li>- Writing Reports</li> </ul>	Highly appreciated by students for improving language skills directly related to academic and professional needs.
Irrelevant Modules	<ul style="list-style-type: none"> <li>- Culture and Civilization of Languages</li> <li>- Introduction to Literary Texts</li> <li>- Foreign Language (French)</li> <li>- Social and Human Sciences (HSS)</li> <li>- (Partially) Introduction to Linguistics</li> <li>- Economy, Law, and Medical Writing topics (when mentioned separately)</li> </ul>	Viewed as less useful, not aligned with students' expectations for technical English and professional communication.

The findings indicate a partial alignment. On the one hand, positive feedback regarding modules such as Grammar, Oral Expression, Written Expression, Translation, Communication, and English for Specific Purposes (ESP) suggests that these modules align well with the checklist's criteria, particularly in developing essential professional skills and practical language competencies required for EMI contexts.

On the other hand, persistent dissatisfaction with modules like Literature, Civilization, Sociology, and French reveals a misalignment with the checklist's focus on content relevance

and practical language use. These more theoretical subjects were perceived as less applicable to the trainees' real-world teaching needs in English.

Furthermore, while the second- and third-year modules demonstrated greater alignment through a stronger focus on practical English skills, the first-year syllabus remained predominantly theoretical. This suggests that while the course structure partially supports professional preparation objectives, targeted adjustments in content selection and prioritization of language skills are necessary to fully meet the needs of in-service trainees transitioning to EMI instruction. Table 3.2 summarizes the alignment between the modules offered in the Technical English BA course and the trainees' perceived relevance to their professional needs, based on thematic analysis of questionnaire responses.

**Table 3.2**

*Alignment between Modules and Course Objectives*

<b>Category</b>	<b>Modules</b>	<b>Observation</b>
<b>Aligned Modules</b>	Grammar, Oral Expression, Written Expression, Translation, Communication, ESP	Strong focus on practical skills and professional needs
<b>Misaligned Modules</b>	Literature, Civilization, Sociology, French	Perceived as too theoretical and less relevant to EMI needs
<b>Partially Aligned Modules</b>	Linguistics, University Work Techniques, Human and Social Sciences	Some relevance, but needs clearer focus on practical application

### **Section three: Challenges faced during the Course**

This section identifies difficulties encountered by trainees while attending the TE course. Participant's expectation toward using EMI in their fields, skills needed to become effective EMI teachers, suggestion to improve technical English course, and their feedback regarding the shift to EMI.

#### **Question 19: What are the challenges that you faced during this course?**

**Table 3.3**

*Trainees challenges during the course*

Themes	Code	Percentage
Lack of Practice	Practice Issues	18.5%
Lack of Resources (Audio-visual, Labs, etc.)	Resource Shortages	29.6%
Time Management Problems	Time Issues	14.8%
Lack of Organization/Teaching Quality Issues	Organization/Quality Issues	18.5%
Absence of Specialized Teachers/Modules	Staff/Modules Issues	11.1%
No Challenges Experienced	No challenges	7.4%

The thematic analysis of the qualitative data identified several key challenges faced during the course. The most frequently reported issue was the lack of educational resources, Practice-related challenges and problems with teaching organization and quality were also significant concerns. Time management difficulties and the shortage of specialized teachers were mentioned by a smaller but notable portion of participants. A few respondents indicated that they did not encounter any major difficulties. Overall, the findings emphasize the need for better infrastructure, improved practical training, and stronger teaching support to enhance the learning experience.

#### **Question 20 What are your expectations for using EMI in your field?**

**Table 3.4**

*Participants' expectation for using EMI in their field*

Themes	Code	Percentage
Positive Expectations	Positive	63.0%
Negative Expectations	Negative	22.2%
Neutral/Conditional Views	Neutral	11.1%
No Response	No response	3.7%

The thematic analysis reveals that 63% of respondents have positive expectations toward using English as a Medium of Instruction, highlighting its importance for improving teaching quality and accessing modern resources. Meanwhile, 22.2% expressed negative views, mainly due to language barriers and a preference for Arabic. About 11.1% held neutral or conditional opinions, indicating gradual acceptance under certain conditions. Only 3.7% did not respond. Overall, while optimism about EMI is strong, challenges related to language proficiency remain.

**Question 21: What specific skills or knowledge do you feel you still need to develop to become a more effective EMI teacher?**

**Table 3.5**

*Participants' specific skills to become effective EMI teacher*

Themes	Code	Percentage
Oral Communication Skills	Oral Skills Development	70.4%
Writing Skills	Writing Skills	7.4%
Linguistic Knowledge	Linguistic Knowledge	7.4%
General Practice	Practice Skills	3.7%
No Need for Development	No Development Needed	11.1%

The thematic analysis highlights that most participants feel they need to develop oral communication skills, including speaking fluently, answering questions effectively, and mastering pronunciation to become more effective EMI (English as a Medium of Instruction) teachers. Some participants also identified the need to enhance their writing skills, such as writing essays and improving written expression. A few respondents mentioned the importance of deepening their linguistic knowledge and communication techniques. General practice in English was also cited as a necessary development area. Meanwhile, a small number of participants felt no additional skills or knowledge were needed.

**Question 22: What suggestions do you have for improving the Technical English BA course to better meet the needs of future participants?**

**Table 3.6**

*Participants suggestions for improving Technical English course*

Themes	Code	Percentage
Improve Materials, Tools, and Resources	Use more materials and technical tools, audiovisual aids, sound labs, learning resources	18.5%
Focus on Oral and Communication Skills	Oral practice, speaking fluency, communication skills	22.2%
Curriculum and Content Adaptation	Curriculum structure, modular content, specialization alignment, beginner to advanced levels	25.9%
Improve Teaching Quality (Staff Skills)	Better-qualified teachers, teaching methods improvement, staffing changes	14.8%

Practical Training and Application	Applied conversation practice, face-to-face training	11.1%
Group Organization (By Level/Specialization)	Group division by field, homogeneous classes	18.5%
Needs-Based Programs and Assessments	Needs analysis, targeted learning programs, innovative assessments	11.1%
International Exposure Opportunities	Long-term internships abroad	7.4%

The thematic analysis of participants' suggestions for improving the Technical English BA course highlighted key areas: Curriculum and Content Adaptation (25.9%) for modular content tailored to levels and specializations, Oral and Communication Skills (22.2%), and Improving Materials, Tools, and Resources (18.5%) for better speaking fluency and technical support. Other themes included Group Organization (18.5%), Improving Teaching Quality (14.8%), Practical Training (11.1%), Needs-Based Programs and Assessments (11.1%), and International Exposure (7.4%). These findings emphasize a need for a more practical, specialized, and resource-supported learning environment.

**Question 23 Do you have any other comments or feedback regarding the course?**

**Table 3.7**

*Participants' feedback regarding the course*

Themes	Code	Percentage
Need for More Time, Effort, and Resources	More time, need for hard work, gradual process, need for support and facilities	25.9%
Importance of Good Training and Development	Training of teachers, readiness assessments, improving English proficiency	22.2%
Focus on Oral Practice and English Usage	Emphasis on oral skills, teaching all subjects in English	14.8%
Challenges and doubt About Transition	Difficult transformation, long time needed, unprepared staff, timing concerns	22.2%
Optimism and Positive Attitudes	Good idea, connection to the world, great initiative	11.1%
Suggestions for Curriculum Improvement	Specialization in modules, use of authentic materials	11.1%

The analysis of participants' comments regarding the transition to English-medium instruction revealed several major insights. The most frequent feedback emphasized the need for more time, effort, and institutional resources (25.9%), as well as the importance of thorough teacher training and development programs (22.2%) to ensure readiness. Many participants stressed the focus on oral practice and full English usage (14.8%), while others pointed out significant challenges and doubt about the feasibility of the transition (22.2%). Some expressed optimism and positive attitudes (11.1%), highlighting the potential benefits of global connection, while others proposed curriculum improvements (11.1%) such as specialization and authentic materials. Overall, the comments show both hope and caution, underlining the need for strategic, gradual implementation.

### **Thematic Analysis of the Semi- Structured Interview**

Thematic analysis followed Braun and Clarke's (2006) six-step framework, resulting in five major themes and several sub-themes. The themes reflect trainers' perceptions of the course's effectiveness, relevance, alignment with EMI goals, and the challenges faced by both trainees and trainers, along with suggestions for improvement.

#### **Perceptions of Course Effectiveness**

The analysis of the interview findings provide clear support for the positive perceptions shown in the questionnaire.

Teacher 1 stated *"The programme adopted by the governments, especially the curriculum, help the trainees to use English as a medium of instruction. It means that language is a means of communicating with us."*, teacher 7 added : *"somewhat effective"*

Teacher 4 echoed this general effectiveness, stating, *"Although the current course was not tailored specifically to the teachers' needs in EMI (English as a Medium of Instruction), I still think it was relevant to some extent. It helped strengthen trainees' grammar, writing, and basic language skills,"*

Teacher 5 added that the course addressed foundational aspects of EMI, noting, *"To evaluate how well the course supports trainees in using English as a medium of instruction, the course should include teaching the language needed to explain technical concepts clearly and effectively, including technical terms and phrases for simplifying concepts."*

These views confirm that trainers observed improvements in both language use and professional communication, aligning with participants' agreement in the questionnaire that the course increased their confidence and ability to teach in English.

### **Technical English Course Alignment with EMI Goal**

Interview data reveal that while the Technical English course supports general language development, it only partially meets the specific needs of in-service teachers for teaching in English.

Teacher 1 stated : *“The course doesn't really train them on how to teach in English. It just provides language improvement activities. There should be more teaching practice and content related to classroom language.”* , Teacher 6 noted : *“We teach general English most of the time that is not meant for preparing them for using it in professional contexts”*

Similarly, Teacher 2 commented, *“The trainees come from different fields, but the course treats them all the same. It lacks specialization. Teaching engineering students is different from teaching law students, it needs different vocabulary and approaches.”*

These concerns are echoed by Teacher 4, who acknowledged the course's general language benefits but criticized its lack of field-specific focus, stating: *“The TE course was standardized and not based on the specific needs of the trainees... a teacher in the Faculty of Science and Technology would not need the same training as someone in the Humanities.”*

Teacher 5 further supported this view, explaining :*“while the course covers important areas like vocabulary and communication, it lacks practical EMI applications, such as teaching simulations, classroom management strategies, and subject-specific content”*

These insights echo the survey results, most participants felt only moderately confident in the course's EMI relevance. Trainers' concerns about standard content, missing needs-based tailoring, and limited EMI-focused practice make clear that, despite a solid foundation, the course must be significantly redesigned to address the varied instructional demands of in-service teachers.

### **Curriculum Relevance**

Interview data supported the questionnaire results by confirming that trainees value practical, skill-based modules. All trainers highlighted the importance of Grammar, Oral and

Written Expression, Translation, and ESP, aligning with high ratings in the questionnaire.

For example, teacher 1 (Linguistics & Phonetics specialist) stated : *“All the modules suggested by the Ministry are useful ... language, you cannot acquire or learn a language without these means. Of course, we have the learning skills like listening, speaking, reading and writing.”*

Teacher 3 (Grammar & Oral instructor) commented:

*“The most helpful modules for students are written expression or grammar. Written expression helps them speak, helps them train and helps them reduce the fear of speaking publicly “*

Conversely, modules like Literature and Civilization rated as less relevant in the questionnaire were criticized by trainers.

Teacher 2 (Oral Expression & Technical English specialist) noted : *“All the modules are most useful ... except for literature. The students get bored of the literature module. It is irrelevant for their specialization in technical English.”*

Teacher 4 (Study Skills specialist) noted that : *“ From my expertise in ESP, some modules may be irrelevant for certain teachers, for example, what would a mathematics teacher do with modules on literature or civilization”.*

Teacher 5 (Civil Engineering background) observed : *“Topics that are overly focused on general English, literary studies, or non-professional writing may be less relevant for EMI preparation. Instead, the course should prioritize language use in professional and academic contexts.”.*

Teacher 6 and 7 (Literature specialist ) stated: *“The modules do not address students’ needs at all! Literature, civilisation, Social and Human Sciences and others are all irrelevant”*

These findings reinforce a clear trainee preference for professionally relevant content, highlighting a need to reduce theoretical components and focus more on applied language skills for EMI contexts.

## **Trainees and Trainers Challenges**

The interview data confirm the challenges identified in the questionnaire. A prominent issue was the lack of resources and support infrastructure, echoed by

Teacher 3, who stated: *“They need to provide... more teachers... laptops, headphones... I’m struggling right now.”*

This aligns with the widespread concern among trainees about the time constraints and teaching materials. Practice-related issues were also reflected in

Teacher 1 noted: *“The main challenge that can face learners is when they are not free all the time. They are not interacting with each other. They are not interacting with technology. Learning English needs collaboration and autonomy “.*

Teacher 4 stated: *“Trainees also face numerous challenges. Besides being full-time university teachers with several pedagogical and research responsibilities, they are expected to attend the course regularly, complete assignments, and take exams in a heterogeneous group (with no group streaming). Time constraints are a major issue, and the lack of attention to their individual needs and preferences only adds to the difficulty.”*

Teacher 5 observed *“ The main difficulties trainees face in using English for technical explanations and classroom interaction often stem from a combination of language barriers: vocabulary, pronunciation, academic discourse And Interpersonal challenges such as Confidence and cultural differences”*

Collectively, these qualitative insights reinforce the questionnaire findings and underscore the need for enhanced infrastructure, better instructional design, and stronger trainer support.

## **Proposed Enhancements to Course Delivery**

Interview data strongly reinforce the suggestions raised in the questionnaire. Interview responses strongly support the suggestions raised in the questionnaire.

Teacher 6 observed : *“They need to be divided into different subjects’ groups such medical English, business English and so on!”* ,teacher 7 added : *“ The course should focus on intensive general English training”*

Teacher 4 stated: “*Start by streaming trainees according to their fields (e.g., STEAM and STEM). Conduct continuous needs analysis to assess trainees’ lacks, wants, emerging needs, and preferences... Include practical EMI-focused content within the TE course, and provide trainers with hands-on techniques for transitioning into English-medium instruction.*”

Teacher 1 proposed: “*Maybe... it is time to focus and stick to artificial intelligence. Yes, AI. Because this new means of learning provides a lot, much to human beings.*”

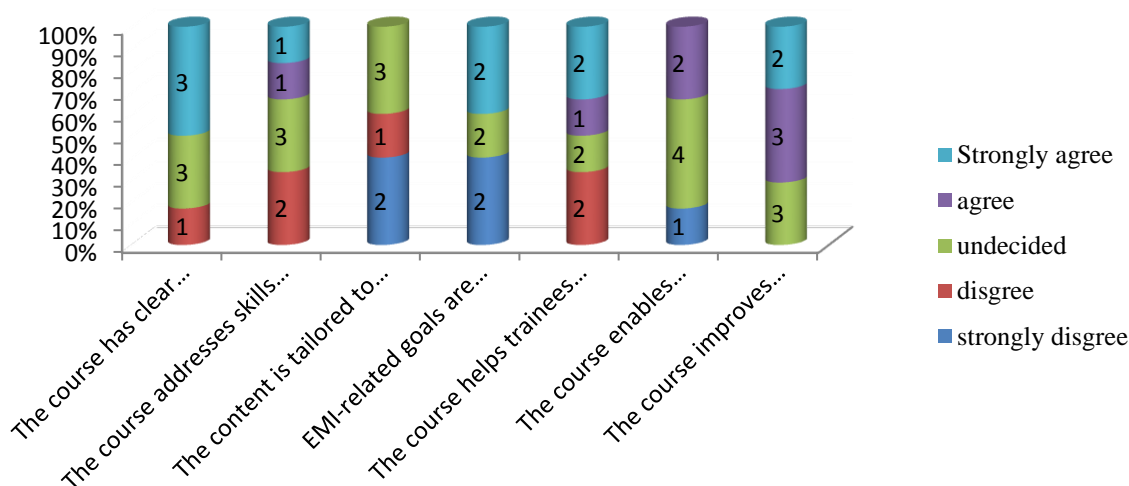
Teacher 5 noted : “*Incorporate subject-specific vocabulary with a focus on technical terms. Train on instructional communication skills—explaining concepts, managing interaction, asking questions. Introduce practical teaching simulations, use authentic teaching materials, and provide personalized support based on individual trainee needs.*”

Together, these insights confirm participants’ demand for a more practical, well-resourced, and instructionally responsive learning environment.

### Interview-Based Analysis of Course Objectives and Relevance (Likert-style)

**Figure 3.13**

*Trainers’ perspective of course objective and relevance*



**Figure [3.13]** shows that trainers largely agree the Technical English course has clear objectives (85% agree/strongly agree) and addresses EMI-relevant skills (60% agree/strongly

agree). However, only 25% feel the content is tailored to their technical fields, while 45% disagree and another 30% remain undecided. Similar uncertainty appears around EMI goals in the syllabus (40% undecided) and development of classroom-instruction language (30% undecided, 30% disagree). The course is recognized for its purpose and skill focus, but lacks customization for specific disciplines and practical EMI tasks, revealing a gap between content and subject-specific teaching needs and this align with the findings of the questionnaire.

### **3.2 Analysis and Interpretation**

This section analyzes the perceptions of in-service trainees and trainers regarding the Technical English (TE) course for English Medium Instruction (EMI) preparation, addressing the three research questions (RQs).

#### **RQ1: In-Service Trainees' Perceptions of the Technical English Course for EMI Preparation**

Trainee perceptions of course relevance were mixed. While 40.74% felt 'Moderately confident' the course met their needs, 51.90% found it 'not relevant' to their subject areas, and 44.40% found it 'partly relevant'. This disconnect was likely exacerbated by a lack of field-specific grouping (81.48% were not grouped by field). Trainees valued skill-oriented modules like Grammar, Oral/Written Expression, and ESP, but criticized theoretical modules (e.g., Literature, Civilization) as less applicable to EMI.

Confidence in EMI teaching remained a concern. Prior to the course, only 40.74% felt 'Moderately confident', with 40.73% expressing low confidence. Post-course, while some readiness improved, a significant number (44.44%) still felt unprepared, particularly for practical classroom strategies.

#### **Key challenges included:**

- Resource Limitations: 29.6% noted insufficient audiovisual tools and labs.
- Limited Practice: 18.5% cited inadequate opportunities for real-world language application.
- Course Design: 14.8% faced time management issues, and 18.5% criticized teaching quality.

- Lack of Specialization: 11.1% raised concerns about discipline-specific instruction and trained EMI professionals.

These issues highlight the need for a more tailored, practice-based, and technologically supported curriculum.

### **RQ2: Trainers' Perceptions of Technical English Alignment with EMI Goals**

Trainers recognized the course's effectiveness in enhancing general language fundamentals, such as grammar and communication. However, they criticized its lack of specific EMI training, including subject-specialized content and pedagogical components. Trainers strongly preferred practical modules like Grammar, ESP, and communication training, noting their direct applicability to EMI. In contrast, theoretical modules like Literature and Civilization were deemed "boring and irrelevant".

Trainers' suggestions for improvement aligned with trainee feedback, emphasizing:

- Field-Specific Streaming: Grouping trainees by discipline.
- Practical EMI Training: Incorporating teaching simulations, technical vocabulary, and authentic materials.
- Needs-Based Programmes: Conducting continuous needs analysis.
- Technological Integration: Utilizing AI for learning.

These insights call for a shift from general English instruction to specialized EMI pedagogy.

### **RQ3: Alignment of Technical English Syllabus with EMI Needs**

The syllabus partially addressed basic language needs through grammar and writing. However, trainers perceived only a partial alignment with EMI goals; only 25% felt content was tailored to technical fields, while 45% disagreed. Significant uncertainty (40% undecided) also existed regarding EMI goals in the syllabus and development of classroom-instruction language (30% undecided, 30% disagreed). This indicates a gap between syllabus design and the specific demands of EMI implementation in various disciplines. While some modules were highly valued for professional skills, others were seen as irrelevant to technical English expectations. This suggests a need for targeted content adjustments to meet in-service trainees' EMI instruction needs.

### 3.3 Comparison with Existing Literature

This study's findings are consistent with a growing body of work emphasizing the need of aligning EMI training to instructors' professional and disciplinary needs (Doiz et al., 2012; Macaro et al., 2018). As described in Chapter One, effective EMI preparation necessitates the use of English for Specific Purposes (ESP), Content and Language Integrated Learning (CLIL), and a thorough needs analysis to ensure course relevance and contextual appropriateness. This model involves the integration of language learning and content learning, with a focus on developing both language and subject-specific skills (Coyle, Hood, & Marsh, 2010). The current study reveals that the effectiveness of technical English courses is influenced by the in-service teacher's background and teaching experience, as mentioned in the literature review. Previous research has shown that teachers' beliefs and attitudes towards EMI can vary widely depending on factors such as their language proficiency, teaching experience, and cultural background (Lasagabaster & Sierra, 2009).

However, the current study found that many participants perceived the Technical English course as overly theoretical and insufficiently tailored to their specific teaching contexts. According to Aguilar and Rodríguez (2012), effective EMI-oriented language training requires contextualization and direct application in the classroom. Similarly, the literature examined in Chapter One highlights that without field-specific customisation and needs-based design, technical language training frequently fails to fulfil the actual demands of EMI instruction (Inbar-Lourie & Donitsa-Schmidt, 2020; Yuan et al., 2020).

The insufficient integration of discipline-specific information in the course under investigation reflects a larger problem raised by Kling (2013) and Airey (2020) about the mismatch between EMI course design and the difficult pedagogical realities of teaching technical subjects in English. Thus, the current findings support previous demands in the literature for EMI training programmes to be linguistically and pedagogically relevant to teachers' subject-matter contexts. Hu and McKay (2018) claimed that teachers must have the requisite pedagogical skills and language ability to effectively implement EMI and ensure success. The finding revealed that in-service trainees lacked the confidence to teach their subject in English and its impact on their personality identity to become effective EMI teacher as mentioned in the literature (Kling's model of teacher identity).

### 3.4 Pedagogical Implications

From an educational standpoint, the findings emphasise the crucial need of EMI training programmes that are both practice-oriented and discipline-specific. The moderate levels of participant satisfaction, combined with stated limitations, indicate that generic, one-size-fits.-All approaches are insufficient for preparing instructors to properly teach English.

Key implications for course design include prioritizing applied language skills directly relevant to academic contexts, such as writing technical reports, delivering subject-specific presentations, and explaining core disciplinary content in English. Furthermore, the use of collaborative projects, role-playing situations, and peer feedback mechanisms is critical for developing communicative competence and instructional confidence. These factors can bridge the gap between theoretical knowledge and real-world EMI teaching demands, resulting in more effective and contextually relevant teacher preparation

### 3.5 Recommendations

Based on the study's findings and pedagogical implications, the following recommendations are proposed to enhance the effectiveness of the Technical English course for EMI preparation:

- *Conduct a comprehensive needs analysis* at the beginning of the course to ensure content is aligned with the specific needs of the trainees.
- *Introduce field-specific groupings* to facilitate more targeted instruction and allow for greater relevance in language use and pedagogical practice.
- *Revise or replace non-essential modules*, such as *Literature and Civilization*, with practical content directly related to EMI contexts, including English for Academic and Professional Purposes..
- *Provide instructor training on EMI-specific pedagogies*, ensuring that course delivery is consistent, context-sensitive, and responsive to the linguistic and instructional challenges of EMI teaching.
- *Develop integrated assessment strategies*, combining both summative and formative approaches, to evaluate not only general language proficiency but also trainees' ability to deliver subject-specific content in English.

By implementing these recommendations, the improvement of the Technical English course in Algeria can be strengthened, ultimately supporting a more effective adoption of English Medium Instruction (EMI) in higher education. This will not only enhance the language skills of in-service trainees but also better prepare them to become successful EMI instructors.

### **3.6 Suggestions for Future Research**

Other researchers are able to conduct similar research in other universities of continuing education to know how technical English course practiced to support Emi in Algeria

- *Conduct longitudinal studies* to track the long-term impact of EMI training on teaching performance and instructional effectiveness in real classroom settings.
- *Compare the EMI preparedness* of trainees who participated in field-specific groupings with those who received generalized instruction, to assess the value of discipline-based course customization.
- *Investigate the effectiveness of EMI training* in other non-Anglophone contexts to establish comparative benchmarks and identify international best practices.

### **Conclusion**

This study has provided critical insights into the gaps and strengths of the Technical English course in preparing Algerian in-service trainees for EMI. While there were improvements in general language use and confidence, the course fell short in addressing field-specific EMI demands due to the absence of needs-based customization and limited practical application. Aligning course content to the reality of disciplinary instruction in English, supported by informed pedagogical practices and continuous feedback, is essential for successful EMI implementation. Future version of the course must address these structural flaws to fulfill its role in enhancing higher education quality through effective English-medium instruction.



# General Conclusion

## General Conclusion

The aim of this study was to evaluate the efficiency of the Technical English course in preparing in-service trainees at Algeria's University of Continuous Education with the skills required to implement English as a Medium of Instruction (EMI) in their respective fields of work. The study used a comprehensive methodology that included questionnaires, interviews, and document analysis to assess trainees' perceptions, the challenges they faced, and the alignment between course content and actual teaching demands. The findings clearly show the disconnect between the Technical English course's intended aims and the participants' expectations and professional realities. Although the course improved general language skills, it did not adequately address the practical and disciplinary problems that in-service teachers meet in EMI contexts. The overwhelming view among trainees was that the course lacked sufficient analysis of needs, did not provide field-specific training, and emphasised academic knowledge above practical application. These constraints are especially concerning in perceptions of the growing global trend towards EMI, which necessitates high levels of linguistic and pedagogical skills. The literature reviewed supports these findings, emphasising the necessity of professional development methods like ESP and CLIL that are adapted to EMI needs. Successful EMI implementation relies significantly on contextualised teacher training that tackles real-world classroom difficulties, which this course does not consistently provide. Trainees and trainers alike appealed for more interactive, applied learning opportunities and subject-specific modules to better prepare educators for the demands of teaching in English. As a result, this study emphasises the critical need to change the Technical English course so that it is more sensitive to trainee demands. Key recommendations include undertaking a thorough needs assessment prior to course preparation, organising trainees by field, incorporating practical teaching experiences, and ensuring that instructors are properly trained in EMI pedagogy. Such changes are required to match course delivery with the strategic goal of promoting high-quality English-medium education in Algerian universities. In conclusion, the Technical English course has considerable potential to promote Algeria's shift to EMI. However, realising this potential requires focused adjustments based on empirical evidence and participant input. Only by adopting such a responsive and dynamic strategy can higher education institutions assure that their teachers are well-prepared to meet the difficult linguistic and pedagogical demands of EMI. Finally, this alignment will not only serve individual educators but also contribute to the broader go.

## الملخص

يبحث هذا البحث الاستكشافي في المواءمة بين دورة اللغة الإنجليزية التقنية (TE) واحتياجات اللغة الإنجليزية كوسيلة للتعليم (EMI). ويسعى على وجه الخصوص إلى معرفة كيفية إدراك المتدربين أثناء الخدمة لدورة TE ومدى إعدادها لهم لتطبيق EMI في ممارساتهم التعليمية. نظراً للأهمية المتزايدة لـ EMI في تعزيز التعليم العالي في عالم معولم، يقدم هذا البحث تعليقات مفيدة حول تصميم دورة TE الحالية من خلال تحديد نقاط الضعف والقوة فيها. يمثل تقييم مواءمة دورة TE مع EMI فرصة قيمة لتحسين جودة تعليم اللغة الإنجليزية لتعزيز كفاءة المشاركين في اللغة الإنجليزية وتحسين الدورة. تم استخدام البحث المختلط من خلال دمج جمع البيانات الكمية والنوعية. ولضمان مصداقية وعمق التحليل، طبقت هذه الدراسة التثليث المنهجي من خلال الجمع بين الاستبيانات المنظمة مع 27 مشاركاً، والمقابلات التي أجريت مع سبعة مشاركين، وتحليل الوثائق. وقد تم تحليل البيانات إحصائياً وموضوعياً. كشفت النتائج عن وجود انفصال كبير بين الأهداف المقصودة لدورة TE والاحتياجات والتوقعات العملية للمشاركين فيها. على الرغم من أن الدورة ساعدت في تعزيز الكفاءة العامة للغة الإنجليزية، إلا أنها كانت تفتقر إلى معالجة القضايا العملية والموضوعية المحددة للمعلمين أثناء الخدمة في إعدادات EMI. ورأى أغلب المشاركون أن الدورة لم تتضمن تحليلاً مناسباً للاحتياجات، ولم تقدم تدريباً محدداً في مجال معين، وركزت على النظرية على المهارات العملية. يساهم هذا البحث في تقييم دورة التعليم التقني في الجزائر ويقدم توصيات عملية لمصممي المناهج لمواءمة المحتوى والتعليمات وممارسات التقييم بشكل أكثر فعالية مع احتياجات المتعلمين ومتطلبات EMI. يمكن لصانعي السياسات استخدام هذه النتائج لتشكيل سياسات تعليم اللغة التي تدعم EMI بشكل أفضل.

## الكلمات المفتاحية :

دورة اللغة الإنجليزية التقنية، المتدربون أثناء الخدمة، اللغة الإنجليزية كوسيلة للتعليم (EMI)

## Résumé

Cette recherche exploratoire étudie l'alignement entre le cours d'anglais technique (TE) et les besoins de l'anglais comme moyen d'enseignement (EMI). En particulier, elle cherche à savoir comment les stagiaires en cours de service perçoivent le cours TE et dans quelle mesure il les prépare à appliquer l'EMI dans leur pratique d'enseignement. Compte tenu de l'importance croissante de l'EMI dans la promotion de l'enseignement supérieur dans un monde globalisé, cette recherche offre une rétroaction utile sur la conception actuelle du cours d'EE en identifiant ses faiblesses et ses forces. L'évaluation de l'alignement du cours d'anglais technique sur le programme d'anglais professionnel présente une occasion précieuse d'améliorer la qualité de l'enseignement de l'anglais afin d'améliorer les compétences des participants en anglais et les améliorations apportées au cours. La recherche par méthodes mixtes a été utilisée en intégrant la collecte de données quantitatives et qualitatives. Pour assurer la crédibilité et la profondeur de l'analyse, cette étude a appliqué une triangulation méthodologique combinant des questionnaires structurés avec 27 répondants, des entretiens menés avec sept participants et une analyse documentaire. Les données ont fait l'objet d'une analyse statistique et thématique. Les résultats ont révélé un décalage important entre les objectifs visés du cours d'TE et les besoins pratiques et les attentes des participants. Bien que le cours ait contribué à améliorer les compétences générales en anglais, il n'a pas abordé les questions pratiques et spécifiques aux matières des enseignants en service dans les contextes EMI. La majorité des participants estimaient que le cours ne comportait pas une analyse adéquate des besoins, qu'il n'offrait pas de formation spécifique au domaine et qu'il mettait l'accent sur la théorie plutôt que sur les compétences pratiques. Cette recherche contribue à l'évaluation du cours de TE en Algérie et fournit des recommandations pratiques aux concepteurs de programmes d'études pour aligner plus efficacement le contenu, l'instruction et la pratique d'évaluation avec les besoins des apprenants et les exigences de l'EMI. Les décideurs politiques peuvent utiliser ces résultats pour élaborer des politiques d'éducation linguistique qui soutiennent mieux l'EMI.

**Termes clés :** Cours d'anglais technique, stagiaires en cours d'emploi, anglais comme moyen d'enseignement (EMI).

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## Appendices

### Appendix A

#### An Evaluation of Technical English Course

استبيان لتقييم مقرر اللغة الإنجليزية التقنية من منظور الأساتذة

**Dear Respondents,**

This questionnaire aims to evaluate the Technical English syllabus designed to prepare STEAM (Science, Technology, Engineering, Arts, and Mathematics) in-service teachers at the University of Continuous Education for English as a Medium of Instruction (EMI). Your honest feedback is crucial for improving the course and ensuring its effectiveness. All responses will be kept confidential and used for evaluation purposes only.

الأساتذة المشاركون

يهدف هذا الاستبيان إلى تقييم برنامج اللغة الإنجليزية التقنية لتدريب أساتذة الجامعات في مختلف التخصصات (العلوم، التكنولوجيا، الهندسة، الآداب والعلوم الإنسانية، والرياضيات) في جامعة التكوين المتواصل للتدريس باللغة الإنجليزية. مساهمتكم مهمة لتطوير المقرر وتعزيز فاعليته. ستكون جميع الإجابات سرية وستستخدم لأغراض التقييم فقط. يمكنكم الإجابة بالإنجليزية أو العربية. شكرًا جزيلًا على مساهمتكم .

1. Faculty : الكلية
2. Department : القسم
3. Discipline/Subject you teach : المادة/التخصص الذي تقوم بتدريسه
4. Your teaching experience in years : ( عدد سنوات الخبرة في التدريس )
5. Language of instruction: لغة التدريس  
 Arabic العربية  
 French الفرنسية  
 English الإنجليزية
6. Do you have any prior experience in teaching English? هل لديك خبرة سابقة في التدريس باللغة الإنجليزية؟  
 Yes نعم  
 No لا
7. If yes, how many years?.....
8. Self-assessed English proficiency level: تقييمك الذاتي لمستوى إجادتك للغة الإنجليزية:  
 Beginner مبتدئ  
 Intermediate متوسط  
 Advanced متقدم  
 Near native شبه أصلي

9. Currently you are, في حاليا انت طالب في :

- 1st year السنة الاولى  
 2 year السنة الثانية  
 3 year السنة الثالثة

**Section 2: Needs Related to EMI & the Current Course** القسم الثاني : الحاجات المتعلقة بالتدريس بالإنجليزية والمقرر الحالي

10. Were you streamed into groups during this course based on your field? هل تم تقسيمكم الى افواج حسب تخصصك؟

- Yes نعم  
 No لا  
 Unsure غير متأكد

11. Was any formal needs analysis conducted before the start of this Technical English BA Course to determine the specific needs of the participants? هل تم إجراء تحليل الاحتياجات اللغوية للمشاركين قبل بدء هذا التكوين؟

- Yes نعم  
 No لا  
 Unsure غير متأكد

12. Before taking this Technical English BA course, how confident were you in your ability to teach your subject in English? قبل الالتحاق بهذا التكوين، ما مدى ثقتك في قدرتك على تدريس تخصصك باللغة الإنجليزية

مقياس: 1 - غير واثق 5 واثق جداً (Scale: 1-Not at all confident, 5-Very confident)

- No at all confident  
 Slightly confident  
 Moderately confident  
 Very confident  
 Completely confident

13. How important are the following skills for teaching your subject in English ?

ما مدى اهمية المهارات التالية لتدريس مادتك باللغة الإنجليزية؟

قيم الاجابات من المقياس ( Scale: rate the answers from 1-Not important, 5-Very important )

1 غير مهم الى مهم جداً

1 2 3 4 5

-Understanding and using subject-specific terminology in English

- فهم و استخدام المصطلحات الخاصة بالموضوع بالإنجليزية -

-Explaining complex concepts in English clearly and concisely

- شرح المفاهيم المعقدة باللغة الإنجليزية بوضوح و ايجاز -

-Leading class discussions and facilitating student interaction in English

قيادة مناقشات الفصل و تسهيل تفاعل الطلاب بالإنجليزية-

-Developing and delivering presentations in English

تطوير و تقديم العروض التقديمية بالإنجليزية -

- Assessing student work (e.g., assignments, exams) in English

تقييم اعمال الطلاب (مثل الواجبات و الامتحانات) بالإنجليزية-

-Writing academic materials (e.g., syllabi, lesson plans) in English

كتابة المواد الاكاديمية (مثل المناهج و خطط الدروس ) بالإنجليزية-

-Understanding and responding to student questions in English

فهم أسئلة الطلاب و الرد عليها بالإنجليزية -

**14. To what extent did the Technical English BA course address your specific needs related to teaching in English ?**

كيف تقيم مدى تناول برنامج الإنجليزية التقنية احتياجاتك المحددة المتعلقة بالتدريس باللغة الإنجليزية ؟

(Scale: 1-Not at all , 5-completely)?

المقياس: من على الاطلاق الى واثق تماما

- Not at all confident لست واثق على الاطلاق
- Slightly confident واثق قليلا
- Somewhat confident واثق الى حد ما
- Very confident واثق جدا
- Completely confident واثق تماما

**15. To what extent do you agree or disagree with these statements relevance course the concerning?**

الى أي مدى تتفق مع العبارات التالية بخصوص البرنامج؟

- The course content is relevant to my teaching needs    
محتوى الدورة ذات صلة باحتياجاتي التدريسية
- The course improved my ability to teach in English    
الدورة حسنت من قرتي على التدريس بالإنجليزية
- The course materials are helpful and well designed    
مواد الدورة مفيدة و مصممة بشكل جيد
- The course provided enough practical teaching strategies    
قدمت الدورة استراتيجيات تدريس عملية كافية
- I feel more confident teaching in English after taking the course    
اشعر بثقة اكبر في التدريس بالإنجليزية بعد اخذ الدورة

**16. Do you think that the course content was relevant to your specific subject area ?**

هل تعتقد ان محتوى الدورة كان ذا صلة بمجال تخصصك ؟

- Yes نعم  
 No لا  
 Partly جزئيا

17. Which modules you found interesting and relevant to your needs?

ماهي المقاييس التي وجدتها مهمة وذات صلة باحتياجاتك؟

.....

18. Which module you found irrelevant and not interesting according to your needs ?

ما هي المقاييس التي وجدتها غير مهمة و لا تليي حاجاتك ؟

.....

### القسم الثالث: التحديات اثناء الدورة SECTION 3: CHALLENGES FACED DURING THE COURSE

19. What are the challenges that you faced during this course?

ما هي الصعوبات التي واجهتها في هذا التكوين ؟

.....

20. What are your expectations for using English as a Medium of Instruction in your field?

ماهي توقعاتك استخدام اللغة الإنجليزية كلغة للتدريس في تخصصكم؟

.....

21. What specific skills or knowledge do you feel you still need to develop to become a more effective EMI teacher ?

ما هي المهارات او المعرفة المحددة التي تشعر انك لا تزال بحاجة الى تطويرها لتستطيع التدريس باللغة الانجليزية ؟

.....

22. What suggestions do you have for improving the Technical English BA course to better meet the needs of future participants?

ما هي اقتراحاتك لتحسين محتوى اللغة الإنجليزية التقنية لتلبية احتياجات المشاركين في المستقبل بشكل أفضل؟

.....

23. Do you have any other comments or feedback regarding the course?

هل لديك أي تعليقات او ملاحظات اخرى بخصوص امكانية التحول للتدريس باللغة الانجليزية؟

.....

24. Thank you شكرا جزيلاً

.....

## **Appendix B.1**

### **Structured Interview for Technical English Trainers**

**Title:**

Evaluating The Alignment of Technical English Course with EMI from The Perspectives of In-Service Trainees: The Case Study of the University of Continuous Education ( UFC) , BBA .

**Purpose:**

To gather trainers' insights on the effectiveness of the current Technical English course in preparing in-service trainees to use English for teaching technical subjects.

**Section 1: Background Info (Short Answer)**

- Name (optional):
- Years of experience teaching Technical English:
- Your Academic background:
- The Subjects you are teaching/taught

**1. General viewpoint**

How would you describe the overall effectiveness of the current Technical English course in preparing trainees to use English in professional or instructional contexts?

**2. Relevance to EMI**

To what extent do you think the course supports trainees in using English as a medium of instruction (e.g., explaining concepts, managing interaction)?

**3. Meaningful Modules**

Which modules or components of the course do you consider most useful or meaningful for EMI readiness? Why?

**4. Irrelevant or Less Useful Topics**

Are there any topics or materials in the course that you find less relevant or ineffective for trainees' needs? Please explain.

**5. Trainees' Challenges**

What are the main difficulties trainees face when trying to use English to explain technical content or engage in classroom interaction

**6. Trainers' Challenges**

What challenges do you personally face in helping trainees prepare for EMI through this course?

## 7. Suggestions for Improvement

What specific changes would you suggest to make the course more aligned with EMI goals and practical teaching needs?

## 8. Final thoughts

Is there anything else you'd like to add about the course or EMI integration that hasn't been addressed?

## Section 3: Trainers' Attitudes of the Course Objectives and Relevance (*Likert Scale - 1 to 5*)

**Instruction:** Rate the following statements from 1 (Strongly Disagree) to 5 (Strongly Agree).

	1	2	3	4	5
<ul style="list-style-type: none"><li>The course has clear objectives that align with trainees' professional communication needs.</li></ul>					
<ul style="list-style-type: none"><li>The course addresses skills relevant for using EMI.</li></ul>					
<ul style="list-style-type: none"><li>The content is tailored to the trainees' technical fields.</li></ul>					
<ul style="list-style-type: none"><li>EMI-related goals are clearly reflected in the course syllabus.</li></ul>					
<ul style="list-style-type: none"><li>The course helps trainees develop the language needed for giving instructions in English.</li></ul>					
<ul style="list-style-type: none"><li>The course enables trainees to explain technical concepts clearly in English.</li></ul>					
<ul style="list-style-type: none"><li>The course improves trainees' ability to ask and answer questions in English.</li></ul>					

## Appendix B.2

### Consent Form for Interview participants

**Title of Study:** Evaluating The Alignment of Technical English Course with EMI from The Perspectives of In-Service Trainees

**Investigators:** Benouerkhou Mebarka – Meriem Chenafi – Haddad Malika

**Supervisor:** Dr. Tiaiba Imane

Dear teachers ,

You are invited to participate in a research study that aims to evaluate how Technical English BA Syllabus designed to prepare in-service trainees to use EMI . The study involves interview where you will be asked a series of questions regarding your honest feedback is crucial for improving the course and ensuring its effectiveness.

#### **Procedures:**

The interview will be conducted in a one-on-one setting and will take approximately 20-30 minutes. The interview will be audio-recorded for the purpose of transcription and analysis. Your name will not be used in any publications or reports. All data collected will be kept confidential, and the audio recordings will be destroyed once the research is completed.

#### **Voluntary Participation:**

Participation in this study is completely voluntary. You have the right to refuse to participate in the study, and you have the right to withdraw from the study at any time without penalty.

#### **Risks and Benefits:**

There are no known risks associated with participating in this study. However, the benefits of participating in this study include contributing to research on how improving the TE course and ensuring its effectiveness in preparing in-service trainees to use EMI and potentially gaining insights into your own experiences and perceptions toward TE syllabus .

#### **Confidentiality:**

All information collected in this study will be kept confidential. Any identifying information such as your name will not be used in any reports or publications , and only accessible to the research team.

#### **Contact Information:**

If you have any questions or concerns regarding the study or the interview process, please contact the investigators at [benouerkhou.mebarka@gmail.com](mailto:benouerkhou.mebarka@gmail.com)

#### **Consent:**

By signing this form, you confirm that you have read and understood the information provided in this form and that you agree to participate in the study. You also confirm that you understand that participation is voluntary, and that you have the right to withdraw from the study at any time.

Participant's Signature: \_\_\_\_\_ Date:

Investigator's Signature : \_\_\_\_\_ Date :

## Appendix C.1

### Canevas LMS content of the first year Technical English course

Semester 2												Common base domain "Letters and Foreign Languages"											
Course Units	Subjects		Credits	Coefficient	weekly course load			VHS (15 weeks)	Additional	Mode of assessment													
	Code	Title			Courses	Controlled work	practical work			Ongoing control	Exam												
CU Fundamental Code: UEF21 Credits: 10 Coefficient: 6	F211	Comprehension and written expression 2	6	4	1h30	3h00		67h30	45h00	X	X												
	F212	Comprehension and oral expression2	4	2	1h30	1h30		45h00	45h00	X	X												
CU Fundamental Code: UEF22 Credits: 8 Coefficient: 4	F221	Grammar of the language of study 2	4	2	1h30	1h30		45h00	45h00	X	X												
	F222	Corrective and articulatory phonetics 2	2	1	1h30	1h30		22h30	45h00	X	X												
CCU Fundamental Code: UEF23 Credits: 4 Coefficient: 2	F223	Introduction to Linguistics 2 (concepts)	2	1	1h30			22h30	45h00	X	X												
	F231	Literature of the language of study 1	2	1	1h30			22h30	45h00	X	X												
CU Methodology Code: UEM21 Credits: 4	M211	University work techniques 2	4	1	1h30	1h30		45h00	45h00	X													
	D211	Social and human sciences 2	2	1	1h30			22h30	45h00		X												
Interdisciplinary Code: UET21	T211	Foreign language 2 (French)	2	1		1h30		22h30	45h00	X	X												
	Total Semester 2		30	15	12h00	10h30		337h00	450h00														

## Appendix C.2

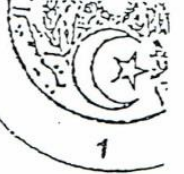
### Modules of Technical English Course

First year	Second year	Third year
Corrective and articulatory phonetics	comprehension expression and oral	Translation
Comprehension and oral expression	grammar	Advanced grammar
Comprehension expression	written foreign language ( French )	writing report
Introduction to linguistic	communication	communication and professional terms
Social and human sciences	introduction to translation	comprehension written expression
Introduction to Literary text	comprehension written expression	Comprehension oral expression
University work techniques	culture civilization of languages	English for specific purpose
Culture(s) of languages	introduction to library text	Library research
	university work techniques	Ethics

### Checklist for document analysis

Criteria	Present in the document	Details / comment
Development of technical English Vocabulary	<b>Yes</b>	Emphasised in Technical English course
Focus on Reading and understanding Technical text	<b>Yes</b>	Course focus on comprehension of technical text
Focus on speaking skills for EMI context	<b>Partially</b>	Oral expression is practiced , but not specifically for teaching
Preparation for Teaching in English ( EMI English )	<b>No</b>	No training for delivering technical subject content in English
Professional communication skills ( Report , Emails )	<b>Partially</b>	Some focus on writing and understanding document , but not business communication explicitly
Classroom English ( Giving instructions , Managing class )	<b>NO</b>	Completely missing . No pedagogical skills covered

\* ملحق بالقرار رقم 1082... المؤرخ في .....  
الذي يحدد القواعد المتعلقة بالوقاية من السرقة العلمية ومكافحتها



الجمهورية الجزائرية الديمقراطية الشعبية  
وزارة التعليم العالي والبحث العلمي

مؤسسة التعليم العالي والبحث العلمي:

نموذج التصريح الشرقي  
الخاص بالالتزام بقواعد النزاهة العلمية لإنجاز بحث

أنا الممضي أسفله،

السيد(ة): بن خور ميارلة ..... الصفة: طالب، أستاذ، باحث ..... طالبة

الحامل(ة) لبطاقة التعريف الوطنية رقم: 401186101 والصادرة بتاريخ: 03/03/2022

المسجل(ة) بكلية / معهد ..... الاسفندل الأجنبية قسم ..... اللغة الإنجليزية

والمكلف(ة) بإنجاز أعمال بحث (مذكرة التخرج، مذكرة ماستر، مذكرة ماجستير، أطروحة دكتوراه)،

عنوانها: "An Evaluation of the Technical English course for EIT Preparation: Perspective of In-service Trainees and Trainers at the U.C.F"

أصرح بشرفي أنني التزم بمراعاة المعايير العلمية والمنهجية ومعايير الأخلاقيات المهنية والتزامه الأكاديمية  
المطلوبة في إنجاز البحث المذكور أعلاه .

التاريخ: 30/06/2025 بن خور ميارلة

توقيع السيد: بن خور ميارلة  
بطاقة التعريف رقم: 401186101

بتاريخ: 03/03/2022  
مصادق عليه 30 جوان 2025

برج بوعربريج، في: 30 جوان 2025  
رئيس المجلس الشعبي البلدي،

ع، رئيس المجلس الشعبي البلدي  
وتفويض من

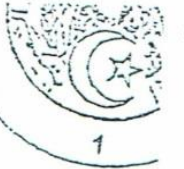
المدون الرئيسي للإدارة الإقليمية  
المسؤول عن الإدارة الإقليمية



توقيع المعني (ة)

*(Handwritten signature)*

\* ملحق بالقرار رقم 10821... المؤرخ في .....  
الذي يحدد القواعد المتعلقة بالوقاية من السرقة العلمية ومكافحتها



الجمهورية الجزائرية الديمقراطية الشعبية  
وزارة التعليم العالي والبحث العلمي

مؤسسة التعليم العالي والبحث العلمي:

نموذج التصريح الشرقي  
الخاص بالالتزام بقواعد النزاهة العلمية لإنجاز بحث

أنا المضي أسفله،

السيد(ة): مزار صليحة ..... الصفة: طالب، أستاذ، باحث .....  
الحامل(ة) لبطاقة التعريف الوطنية رقم 104792265 والصادرة بتاريخ 2017  
المسجل(ة) بكلية / معهد اللغويات والآداب قسم لغة الإنجليزية  
والمكلف(ة) بإنجاز أعمال بحث (مذكرة التخرج، مذكرة ماجستير، أطروحة دكتوراه)،

عنوانها: An evaluation of the Technical English Courses for EMT Preparation: Perspectives of in-service Trainees and Trainers at the NCC, Bordj, Algeria  
أدبح بشرقي أنني التزم بمراعاة المعايير العلمية والمنهجية ومعايير الأخلاقيات المهنية والنزاهة الأكاديمية

المطلوبة في إنجاز البحث المذكور أعلاه .

التاريخ: 2025.10.7.01

توقيع المعني (ة)

مزار صليحة

أطلع عليه لتأكيد التصريح

السيد(ة) مزار صليحة

مين وليمان 10 جويلية 2025

ع/ رئيس المجلس الشعبي البلدي

الموظف المفوض

قداري مزار صليحة



\* ملحق بالقرار رقم 10821... المؤرخ في .....  
الذي يحدد القواعد المتعلقة بالوقاية من السرقة العلمية ومكافحتها



## الجمهورية الجزائرية الديمقراطية الشعبية وزارة التعليم العالي والبحث العلمي

مؤسسة التعليم العالي والبحث العلمي:

نموذج التصريح الشرقي  
الخاص بالالتزام بقواعد النزاهة العلمية لإنجاز بحث

أنا المعني أسفله،

السيد(ة): بشيرا في حريم ..... الصفة: طالب، أستاذ، باحث ..... طالبة  
الحامل(ة) لبطاقة التعريف الوطنية رقم: 406577850 والصادرة بتاريخ: 09-08-2023  
المسجل(ة) بكلية / معهد الدراس واللغات قسم اللغة الإنجليزية  
والمكلف(ة) بإنجاز أعمال بحث (مذكرة التخرج، مذكرة ماستر، مذكرة ماجستير، أطروحة دكتوراه)،  
عنوانها: An Evaluation of the technical English Course for EMI preparation: perspectives of in-service trainees and trainers at the UCF  
أصرح بشر في أنني التزم بمراعاة المعايير العلمية والمنهجية ومعايير الأخلاقيات المهنية والنزاهة الأكاديمية  
المطلوبة في إنجاز البحث المذكور أعلاه.

Berdj Bou  
Amridj ?

01 جويلية 2025

التاريخ:

توقيع المعني (ة)

Berdj Bou Amridj

أطلع عليه لتأكيد التوقيع  
السيد(ة): بشيرا في حريم  
406577850  
01 جويلية 2025  
الإدارة غير مسؤولة  
على ما يثبت في الوثيقة  
منا تسمى في  
المسروح في 2025

رئيس المجلس الشعبي البلدي  
الموظف المنصوص  
عليه في المرسوم رقم 19  
المرسوم رقم 19  
المرسوم رقم 19