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BOLU ABANT İZZET BAYSAL ÜNİVERSİTESİ
INSTITUTE OF GRADUATE STUDIES
DEPARTMENT OF ENGLISH LANGUAGE TEACHING



EXPLORING PRE-SERVICE EFL TEACHERS'
COMPETENCIES IN DIFFERENTIATED INSTRUCTION: A
CASE STUDY IN PRACTICUM

MASTER OF ARTS

CANSU ÖĞRÜCE

THESIS SUPERVISOR
Assoc. Prof. Dr. Anıl RAKICIOĞLU-SÖYLEMEZ

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ACCEPTANCE AND APPROVAL PAGE

The thesis title “**EXPLORING PRE-SERVICE EFL TEACHERS’ COMPETENCIES IN DIFFERENTIATED INSTRUCTION: A CASE STUDY IN PRACTICUM**” prepared by **Cansu ÖĞRÜCE** has been accepted by our jury as a Master’s Thesis in English Language Teaching Major Foreign Language Education Department with unanimity/majority vote. 12/27/2024

Jury Members

Signature

Supervisor

Assoc. Prof. Dr. Anıl RAKICIOĞLU
SÖYLEMEZ

Bolu Abant İzzet Baysal University

Member

Dr. Seda COŞAR ÇELİK

Bolu Abant İzzet Baysal University

Member

Assoc. Prof. Dr. Betil ERÖZ

Middle East Technical University

Institute of Graduate Studies Approval

Prof. Dr. İbrahim KÜRTÜL

Director of the Institute of Graduate Studies

ETHICAL DECLARATION

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CANSU ÖĞRÜCE

ABSTRACT

EXPLORING PRE-SERVICE EFL TEACHERS' COMPETENCIES IN DIFFERENTIATED INSTRUCTION: A CASE STUDY IN PRACTICUM

**MA THESIS
CANSU ÖĞRÜCE
BOLU ABANT İZZET BAYSAL UNIVERSITY
INSTITUTE OF GRADUATE STUDIES
DEPARTMENT OF ENGLISH LANGUAGE TEACHING
(SUPERVISOR: ASSOC. PROF. DR. ANIL RAKICIOĞLU-SÖYLEMEZ)**

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This study explores the competencies and perceptions of 65 pre-service EFL teachers regarding the implementation of differentiated instruction (DI) during their Practicum 1 course at Bolu Abant İzzet Baysal University. Utilizing a mixed-methods approach, quantitative data was collected through a DI Questionnaire, while qualitative data emerged from reflective journal entries and semi-structured interviews. Findings reveal varied levels of competency in addressing diverse student needs, including those related to cultural backgrounds, language abilities, and inclusive education. Teachers demonstrated adaptive strategies like differentiated lesson planning, materials design, and the use of technology, though challenges in balancing classroom diversity, material availability, and time constraints persisted. The study emphasizes the need for more targeted professional development and comprehensive DI training to bridge gaps between theoretical knowledge and practical application. Through data triangulation, the study provides insights into how pre-service teachers navigate the complexities of DI, while recommending enhanced support for improving their instructional capabilities in diverse classroom settings.

KEYWORDS: Differentiated instruction, diverse student needs, pre-service EFL teachers, diversity, practicum, inclusive education, teacher competencies

ÖZET

YABANCI DİL ÖĞRETMEN ADAYLARININ FARKLIlaştırILMIŞ ÖĞRETİM YETERLİKLERİNİN ARAştırILMASI: ÖĞRETMENLİK UYGULAMASI ÜZERİNE BİR VAKA ÇALIřMASI YABANCI DİLLER EđİTİMİ

CANSU ÖđRÜCE
BOLU ABANT İZZET BAYSAL ÜNİVERSİTESİ
LİSANSÜSTÜ EđİTİM ENSTİTÜSÜ
İNGİLİZ DİLİ EđİTİMİ ANA BİLİM DALI
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Bu çalışma, Bolu Abant İzzet Baysal Üniversitesi'ndeki 65 İngilizceyi yabancı dil olarak öğreten (EFL) öğretmen adayının Farklılaştırılmış Öğretim (DI) uygulamasına yönelik yeterliklerini ve algılarını, Uygulama 1 dersleri kapsamında incelemektedir. Karma yöntem yaklaşımı kullanılarak, nicel veriler DI Anketi aracılığıyla toplanırken, nitel veriler yansıtıcı günlükler ve yarı yapılandırılmış mülakatlardan elde edilmiştir. Bulgular, kültürel geçmişler, dil yeterlilikleri ve kapsayıcı eğitimle ilgili çeşitli öğrenci ihtiyaçlarına yönelik yeterlik seviyelerinin farklılık gösterdiğini ortaya koymaktadır. Öğretmenler, farklılaştırılmış ders planlama, materyal tasarımı ve teknoloji kullanımı gibi uyarlayıcı stratejiler sergilemiş olsa da, sınıf çeşitliliğini dengeleme, materyal temini ve zaman kısıtlamaları gibi zorluklar devam etmiştir. Çalışma, teorik bilgi ile pratik uygulama arasındaki boşlukları kapatmak için daha hedefe yönelik mesleki gelişim ve kapsamlı DI eğitimi ihtiyacının altını çizmektedir. Veri üçlemesi yoluyla, çalışma, öğretmen adaylarının farklılaştırılmış öğretimin karmaşıklıklarıyla nasıl başa çıktıklarına dair içgörüler sunarken, öğretim becerilerini geliştirmek için daha fazla destek sağlanmasını önermektedir.

ANAHTAR KELİMELEER: Farklılaştırılmış öğretim, farklı öğrenci ihtiyaçları, İngilizce öğretmen adayları, çeşitlilik, uygulama, kapsayıcı eğitim, öğretmen yeterlilikleri

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LIST OF ABBREVIATIONS AND SYMBOLS

EFL	: English as a Foreign Language
ESL	: English as a Second Language
TEFL	: Teaching Language as a Foreign Language
TESOL	: Teaching English to Speakers of Other Languages
DI	: Differentiated Instruction
ZPD	: Zone of Proximal Development
RTI	: Response to Intervention
ELT	: English Language Teaching
SEN	: Students with Special Educational Needs
RJ1	: Reflective Journal Entry 1
RJ2	: Reflective Journal Entry 2
INT	: Interview
ITE	: Initial Teacher Education

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1. INTRODUCTION

This chapter provides the background, purpose, and significance of the study. Subsequently, the definitions of key terms are presented.

1.1 Background of the Study

Classrooms are increasingly diverse, reflecting the evolving nature of education (Lucas, 2011). This paradigm shift highlights the unique characteristics of individual learners. In contemporary educational settings, classrooms are vibrant centers of diversity where students from various backgrounds with different learning needs come together (Rock et al., 2008). Diversity has become the norm rather than the exception. This is especially evident in Teaching English as a Foreign Language (TEFL), where English serves as the common thread connecting these diverse learners. This shift from homogeneity to diversity in classrooms has made understanding and addressing individual learner differences more crucial than ever.

In the modern educational environment, classrooms are not merely spaces for instruction; they have evolved into dynamic hubs of cultural and intellectual diversity (Lucas, 2011). Within English Language Teaching (ELT), students exhibit diverse linguistic competencies, learning preferences, and varying levels of proficiency (Dörnyei, 2009). For instance, some students may have been exposed to English at an early age, while others might be encountering it for the first time—a factor significantly influencing their aptitude for learning the language. (Skehan, 2012). Additionally, each student possesses a distinct learning style and thrives under certain circumstances. According to Mercer (2019), various factors influence their learning, including the classroom environment, teaching methods, interpersonal relationships, and their sense of belonging within the classroom. In addition, the diverse cultural backgrounds that students bring into the classroom contribute to the richness of the learning environment. (Duc Chinh, 2013). However, this diversity also presents unique challenges, such as adapting teaching styles, managing language barriers, and fostering mutual respect among teachers and students in the TEFL classroom. By recognizing and understanding the diversity of learners, teachers can address the students' language development,

create materials and activities that are relevant and engaging. By considering the individual-level variation, teachers are expected to support varying learner needs effectively (Dörnyei, 2009).

In the Turkish context, it is inevitable for teachers to build up relevant lesson plans as there is a wide variety of ethnic and linguistic backgrounds in students considering the current sociological situation of Türkiye. The Turkish Ministry of Interior (2019) reported that there were 3.643.870 refugees registered in Türkiye, and 44.7% under the age of 18. However, the schools do not follow a unique intervention to support the diversity of student profiles, instead, there is a fixed central curriculum that the Ministry of National Education (MoNE) prepares. Even though all schools are encouraged to use the national curriculum, some private schools are implementing the curriculum within the body of the institution. As a result, teachers frequently face the challenge of aligning this standardized curriculum with the unique needs of their students. This makes it imperative for all teachers in the workforce to understand, adapt to, and be equipped with strategies that embrace the diversity mentioned (Sobel et al., 2011). While the 21st Century Türkiye Education Model emphasizes individual differences, flexible grouping, and continuous assessment through differentiated instruction (MoNE, 2024), its effective implementation requires time and resources that are not always readily available.

Therefore, it is crucial for teachers to possess a thorough understanding of theoretical knowledge and how to apply it effectively in the classroom. However, translating this theoretical knowledge into effective action can be challenging (Haan et al., 2017). When engaging with a varied group of students, it becomes even more demanding to change teachers' dispositions and assumptions towards linguistically, socioeconomically, and culturally distinct students (Vázquez-Montilla et al., 2014). This requires a commitment to reflection and an intentional effort to create an inclusive educational environment that caters to the needs of all students. It is crucial for teachers to recognize the unique needs of each student and approach their teaching with an open mind, considering their diverse backgrounds and experiences. This approach allows teachers to build inclusive and supportive learning environments which encourage all students to succeed. Given this, the role of teacher education becomes pivotal in preparing teachers to meet these challenges effectively.

The role of teachers is addressed, yet the relevance of teacher education to the context of the study should be elaborated upon.

In light of these considerations, the core competencies of EFL teachers (e.g. cultural sensitivity, intercultural competence, linguistic and cultural responsiveness (Lucas et al., 2011), as well as their ability to provide opportunities distinctively makes it essential for them to be aware of past and current pedagogical approaches and create a pathway accordingly (Hidayah & Morganna, 2019). In their work, Richards and Rodgers (2014) provide a comprehensive analysis of various approaches to teaching. Considering this, it is crucial to understand that the approaches are not static, but rather, continuously evolving (Cameron & Larsen-Freeman, 2007). As such, teachers should have the necessary skills to modify their teaching identity to align with contemporary circumstances (Kumaravadivelu, 2006). Indeed, in this dynamic context, the need for a more responsive teaching method that can meet the various needs of the learners arises. It is a clear fact that considering and acknowledging learner differences produce positive outcomes extending beyond academic achievement, ranging from an enhanced well-being of the students to the classrooms' overall climate such as the cultivation of empathy, and the satisfaction of helping others (Gibson, 2005; Molina Roldán et al., 2021)

As also stated by Brownlie and Schnellert (2009, p. 14): “When individual teachers make time to understand and build from the learning profiles of their students, they can make a difference in the school success of those students and thus in their life opportunities”.

This necessity of recognizing the uniqueness of each student paves the way for the emergence and adaptation of Differentiated Instruction (DI) in EFL classrooms. In DI, teachers “accept and act on the premise that they must be ready to engage students in instruction through different learning modalities, by appealing to different interests, and by using varied rates of instruction along with varied degrees of complexity”, as stated by Tomlinson (1999, p.9). At its core, differentiated instruction is a philosophy that recognizes each student as distinct, with individual learning styles, strengths, and areas needing development. Implementing DI involves an intricate balance of instructional differentiation to ensure that students' readiness levels and diverse backgrounds are aligned with the content, process, and product. Rather than a standardized one-size-fits-all approach

(Bondie et al., 2019), DI focuses on deliberately customizing teaching methods to suit the distinct nature of individual students.

Although the concept of DI is relatively new, its principles have been emphasized under various terms such as individual differences, Vygotsky's Zone of Proximal Development (ZPD), social constructivism (Vygotsky et al., 2012), and Gardner's Multiple Intelligences (Gardner & Hatch, 1989). The principles of individual differences provide the basis for contemporary discourse on DI. DI applies these principles practically in the classroom to create a more dynamic and responsive learning environment. ZPD ensures that tasks are appropriately challenging for each student, considering their different paces and abilities, which align with their individual learning styles. According to Gardner's theory, students possess various types of intelligences, and teachers should be aware of this and prepare accordingly (Gardner & Hatch, 1989). Therefore, by embracing these foundational theories, DI creates a more adaptable and dynamic learning experience.

As research continues to evolve and transform theory into concrete practicalities, DI emerges as a powerful tool that reshapes classrooms to accommodate diverse learning needs and styles. Consequently, every student is given the opportunity to reach their full potential (Brevik et al., 2018; Morgan, 2013). Therefore, exploring pre-service EFL teachers' (PTs) competencies in DI during practicum becomes essential in addressing diverse learning needs, which is the focus of this study.

1.2 Statement of the Problem

Providing high-quality teacher education for effective language teaching practices is of paramount importance in today's diverse educational landscape. To achieve inclusive and equitable education for all, UNESCO (2015) asserts that teacher education programs must prepare teachers to meet diverse students' needs. Similarly, the OECD (2018) highlights that traditional one-size-fits-all approaches are insufficient, advocating for teacher training that equips educators with strategies to address varying learning needs.

Nevertheless, language teaching programs often follow standardized curricula, which do not cater to the various language learning needs of students

(OECD, 2019). A significant challenge arises from this oversight, as teachers with a variety of training backgrounds are expected to demonstrate similar levels of competence in addressing their students' unique language learning requirements. Teaching is a complex profession, particularly in language education, so pre-service language teachers should be examined during their practicum experiences for their adaptability and flexibility. As UNESCO (2017) points out, preparing teachers to handle classroom diversity is crucial for fostering inclusive education systems.

Moreover, this inquiry is crucial in shedding light on the preparedness of pre-service teachers to respond to the complexities of diverse classroom settings. The Sustainable Development Goals (SDGs) outlined by UNESCO (2015) are aligned with the commitment to ensuring every student receives an inclusive and equitable language education. Goal 4 aims “ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.” (UNESCO, 2015, p. 7). By exploring how pre-service teachers adapt to diverse learning needs, we can better understand how to support them in creating effective learning environments.

In this regard, it is imperative to refine teacher education programs to provide pre-service language teachers with the skills to recognize and address students' individual language learning requirements. Improvements in teacher education would not only elevate the quality of language teaching but also promote a more inclusive and impactful learning environment for all students (OECD, 2018; UNESCO, 2015). By examining pre-service language teachers' perceived competencies in implementing differentiated instruction during their practicum experiences—especially focusing on students with diverse learning needs—this study aims to contribute valuable insights. These insights will help in aligning teacher education programs with international recommendations, ultimately fostering educational practices that are responsive to the needs of the learners.

1.3 The Purpose of the Study

In light of the growing diversity in educational settings and the imperative need for inclusive teaching practices, this study aims to address a critical gap in teacher education. The overarching purpose of this research is twofold: First, it aims to investigate and comprehend the existing competencies of pre-service English

teachers in applying differentiated instruction during their practicum course. This involves examining the specific strategies these teachers employ to adapt their instructions to meet the diverse learning needs of their students. In doing so, the study supports the UNESCO (2015) directive, which highlights the importance of training teachers to meet the diverse needs of the learners, thereby fostering inclusive and equitable quality education.

Secondly, the study seeks to gather the views of pre-service English teachers on the perceived effectiveness of differentiated instruction. It specifically aims to understand their perceptions of how DI influences the integration and academic advancement of students with diverse learning needs. This aspect resonates with the OECD's (2018) advocacy for moving beyond one-size-fits-all approaches and equipping teachers with strategies to address varying learning needs effectively.

In connection with the previously mentioned points, this study highlights the importance of improving teacher education programs to better equip pre-service teachers for the challenges of contemporary, diverse classrooms. It acknowledges the complexity of the teaching profession, particularly in language education, where educators are expected to demonstrate adaptability and flexibility (OECD, 2019). The study recognizes that while the 21st Century Türkiye Education Model emphasizes individual differences and continuous assessment through DI (MoNE, 2024), its effective implementation requires competencies that may not be fully developed in current teacher training programs.

To close this gap, the study focuses on the practical implementation of DI strategies by pre-service language teachers during their practicum experiences—a critical period where theoretical knowledge meets practical application (Haan et al., 2017). It seeks to provide insights into how these future educators navigate the challenges of diverse learning needs, thereby contributing valuable information to enhance pedagogical training and professional development.

Specifically, it is aimed to address the following key questions:

1. What are the current competencies of pre-service English teachers regarding the implementation of DI in their Practicum 1 course?

2. Which strategies do pre-service English teachers employ in Practicum 1 to adapt instruction and address the diverse learning needs of the students?
3. According to the pre-service English teachers, what is the perceived effectiveness of differentiated instruction on the integration and academic progress of students with diverse learning needs?

By exploring these research questions, the study aims to improve teacher education programs. This strategy ensures that pre-service language teachers are equipped with the skills necessary to identify and address the specific language learning needs of every student. This aligns with the international guidelines proposed by UNESCO (2017) and the OECD (2021), which focus on cultivating educational practices that are responsive to all learners' needs.

Ultimately, the study aims to create an inclusive and effective learning environment for all students by improving the competencies of EFL teachers in DI. By offering a thorough understanding of the practical application of DI strategies and the perceptions of their effectiveness, the research provides valuable insights for policymakers, teachers, and teacher trainers. It emphasizes the necessity of adaptability in teaching methods and the importance of continuous professional development to address the changing needs of diverse educational settings.

1.4 The Significance of the Study

The global refugee crisis has significant implications for education systems worldwide. In 2022, children made up 40% of the 34.6 million refugees worldwide, with many spending over a decade displaced (Calaycay, 2023). This significant statistic highlights the pressing need to incorporate refugees into the national education systems to guarantee fair access to quality education and promote social cohesion. To promote equity and inclusion, education systems should adopt a multidimensional and intersectional approach, focusing on governance, resources, capacity building, interventions, and monitoring (OECD, 2021).

In view of these challenges, it is important to acknowledge how differentiated instruction can support the inclusion of marginalized students, particularly in the context of learning English. DI is recognized as a practical approach to addressing diverse learning needs (Marzano & Tomlinson, 2010), and its principles are crucial for the integration of diverse students. This study focuses

on the competencies of pre-service EFL teachers during their practicum, highlighting the significance of deliberately designing learning experiences that address the individual needs and abilities of each student. By linking inclusive education with DI, we can better understand how to develop the potential of all students in increasingly diverse classrooms (Santangelo & Tomlinson, 2012).

Despite the recognized importance of DI, studies regarding teachers' perceptions of implementing differentiated instruction vary considerably (Gaitas & Alves Martins, 2016; Gibson, 2005; Moosa & Shareefa, 2019; Santangelo & Tomlinson, 2012). Some researchers have found it challenging due to difficulties in adapting curricular elements (Gaitas, 2017). Factors that enhance teachers' ability to apply DI include knowledge and experience, staff development, planning time, and availability of materials. However, these same factors can also hinder their ability to implement DI when they are lacking, indicating a need for support in these areas (Papanthymou, 2022). While acknowledging the complexities involved, studies identify various factors influencing DI implementation among teachers, including their confidence, beliefs, experiences, class size, and professional development opportunities. Furthermore, although teachers generally perceive DI positively, they still encounter barriers.

Similarly, in the domain of English language education, studies have explored EFL teachers' perceptions and competencies in implementing DI at different levels. For instance, Chien (2015) focused on a summer course where teachers faced challenges in applying DI due to a lack of confidence, time constraints, and inadequate collaborative planning, which are fundamental to DI. In their study, Suprayogi et al. (2017) explored factors influencing DI implementation among EFL teachers and found that approximately 39% of the variability was linked to teachers' confidence in DI, their attachment to constructivist teaching philosophies, and the sizes of their class groups. Even though the implementation rates are relatively high, they still do not reach the ideal level.

On the other hand, some studies have found differing results. For example, Moosa and Shareefa (2019) found no significant difference when integrating DI content into teacher training programs to enhance overall efficacy in implementing DI. In the Turkish context, according to Gülay (2022), Turkish EFL teachers faced obstacles in implementing DI but had positive attitudes towards it. Likewise, Gülay and Altun (2022) researched primary school teachers and found that those who

received DI training, graduated from education faculties, and were female had higher perceptions of DI.

Although many studies concentrate on the implementation and competencies of in-service EFL teachers, there is a clear lack of research regarding pre-service teachers, especially pre-service EFL teachers in Türkiye. Notably, the articles discussed do not pertain to EFL pre-service teachers. In this context, Brevik et al. (2018) pointed out deficiencies in PT's confidence in applying differentiation while also recognizing its importance by stressing the necessity for teacher education on the subject. Tulbure (2011) provided evidence showing improved academic achievements among pre-service teachers who were exposed to differentiated instruction methods. Yenmez and Özpınar (2017) examined the competence level of pre-service elementary mathematics teachers in implementing DI and revealed a high level of competence and its positive effects on students' academic achievements and attitudes. Although these studies successfully showcase the importance of exposing PTs to DI, they are not conduct

In conclusion, despite the considerable body of research on the implementation and competencies of EFL teachers in differentiated instruction, there remains a noticeable gap concerning pre-service EFL teachers in Türkiye. Specifically, limited attention has been given to the practical implementation and perceptions of DI among EFL pre-service teachers during their practicum experiences. Understanding how pre-service teachers perceive and adapt lesson plans to effectively address students' learning needs is crucial, as it can offer valuable insights into their instructional practices. Furthermore, examining the challenges they encounter, such as time constraints and resource limitations, is essential to identify the types of support required for early intervention. Bridging this gap is essential for improving the effectiveness of teacher education programs and better equipping pre-service teachers to meet the varied needs occurring in the natural flow of the classroom.

1.5 Definition of Terms

Differentiated Instruction (DI): It is the practice of designing and adapting learning experiences to meet the unique needs of individual students to ensure their success (Santangelo & Tomlinson, 2009).

EFL (English as a Foreign Language): It refers to the English language that is taught and learned in a country where English is not the official language. (Ma, 2015).

Language Teacher Education: It is a multifaceted process that involves preparing and developing language teachers through a variety of roles and responsibilities, aimed at equipping them with the specialized knowledge, skills, and reflective practices necessary for effective teaching (Roberts, 1998).

Practicum: It refers to a component of teacher education programs where PTs engage in natural school environments to practice and develop their teaching skills (Tuli & File, 2010).

Individual Differences: It refers to the various characteristics and attributes, such as level of motivation, attitudes, learning styles, and intellectual development levels, that distinguish one student from another in an educational context (Felder & Brent, 2005).

Teacher Competency: It encompasses the knowledge, skills, attitudes, values, motivations, and beliefs that teachers require to effectively carry out their roles. This emphasizes the necessity for teachers to adjust to the changing demands of education to ensure they are adequately prepared to face challenges. (Selvi, 2010).

Diverse learning needs: They refer to the varying and unique educational, social, and emotional requirements that each student brings to the classroom. These needs can change over time and across different subjects (Tomlinson & Burchard, 2022).

1.6 Theoretical Framework of the Study and Related Research

This section will initially examine Differentiated Instruction (DI) as a theoretical framework. Subsequently, it will address the integration of the Zone of Proximal Development, Response to Intervention model, and Multiple Intelligences theory within DI. The final segment will present a literature review encompassing the historical background of DI, DI in teacher education, and DI in English Language Teaching (ELT). The diverse needs of students will be analyzed under the DI and ELT subsections, including individual differences, students from diverse cultural backgrounds, students with special educational needs, and students with varying abilities. Following this, an in-depth exploration of teachers' capacities to

design activities and materials, as well as create differentiated assessments, will be conducted.

1.6.1 Differentiated Instruction as a Theoretical Framework

Tomlinson (1999) defines differentiated instruction as acknowledging that each student is unique. Given that all students have a shared goal, they should each receive the resources, guidance, and support necessary to achieve it (Tomlinson, 1999). It is clear that everyone has a right to be educated, and the circumstances of this education process should be individualized since today's children are diverse and living in a world of personalization (Tomlinson & Imbeau, 2010). Tomlinson's work emphasizes the significance of creating classroom environments built on empathy, respect, and positivity (Kuhr & Geier, 2023). Explained this way, DI may seem like a vague philosophical concept, rather, it is applicable, and teachers are the agents who discover and implement its practicalities with the help of professional development sessions.

The effectiveness of implementing differentiated instruction relies on teachers' ongoing reflective thinking about their classroom practices in the classroom throughout the day since the very core of success is autocriticism. In this sense, when teachers try an approach for the first time, this will be the trial stage. In an ordinary classroom, not everything will go as expected. The effective results of freshly tried practices will appear in the reflection stage. It is a critical phase where teachers assess the effectiveness of their strategies. They assess what worked, what did not work, and why. It is not solely based on failures; rather, it is about understanding the dynamics of classroom that is encountering a new strategy. While it is not compulsory, thorough preparation is essential for effective future implementation. Understanding differentiated instruction is ultimately a continual process involving trial, reflection, and adjustment (Tomlinson & Imbeau, 2010). Figure 1 shows this process of reflective thinking of the teaching practices.

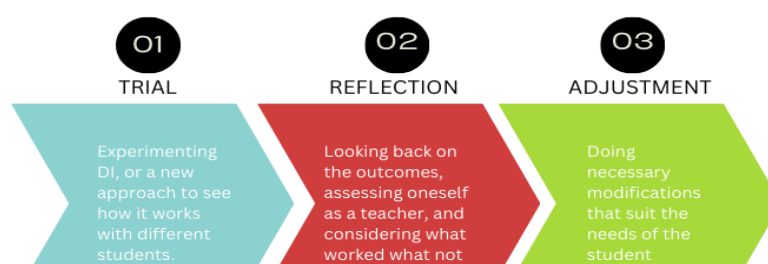


Figure 1 The Reflective Thinking Process

Teachers' beliefs, as well, play a significant role in shaping a differentiated classroom, as differentiation is not solely based on a set of rules and strategies to follow but also a mindset that teachers adopt to foster a more inclusive and supportive environment for effective teaching. (Tomlinson & Imbeau, 2010; Whitley et al., 2019). The current situation of the classrooms that need differentiation can no longer be ignored and teachers' attitudes towards a change profoundly influence their instructional choices (Nicolae, 2014). In this regard, Tzanni (2028) analysed teacher beliefs concerning the implementation of DI with TESOL practitioners. Despite teachers generally having positive promising attitude about differentiation, they performed weaker implementation especially in the areas that needed more preparation time. This suggests that teachers using differentiated instruction will view themselves as effective practitioners and will be open to adjusting their teaching methods to address students' needs. (Wertheim & Leyser, 2002).

All things considered; the current educational setting requires differentiation. Teachers should shift from one standard of way of teaching to more personalized and inclusive methods where all students can learn well with the help of cooperation among other teachers (Lindner & Schwab, 2020). Creating a differentiated classroom is not just about adapting a set of strategies; rather, it is a shift in the belief system as well as in the mindset (Marzano & Tomlinson, 2010; Maia & Freire, 2023). This acknowledgment underscores the value of continuous professional development as well as reflective practices to achieve successful implementation.

1.6.2 Integrating Zone of Proximal Development and Differentiated Instruction

In the context of DI, the zone of proximal development becomes a significant guide by aligning the students' learning needs with appropriately challenging tasks (Tomlinson & Imbeau, 2010). Both ZPD and DI are based on the theory that learning is a socially driven process. and that learners bring diverse abilities, experiences, backgrounds, mindsets, and needs (Tomlinson, 1999; Vygotsky, 1978;). This shared foundational belief emphasizes that learning is inherently social and that recognizing diversity among learners is crucial.

Within this framework, the ZPD guides the teachers to scaffold learning experiences that are sufficiently challenging to promote development without

overwhelming students (Vygotsky, 1978). Similarly, DI allows teachers to offer a spectrum of learning pathways that acknowledge each student's potential and capacity for task achievement (Tomlinson, 2010). Vygotsky's concept of ZPD emphasizes collaborative, interactive learning as opposed to static assessments (Poehner & Lantolf, 2005), suggesting that what learners can achieve today with some help, they can master independently in the future (Vygotsky, 1978). This idea aligns with the principles of DI, which focus on recognizing and nurturing students' potential. Both concepts stress that effective instruction should concentrate on students' current and future capabilities rather than their past development. Consequently, through DI, teachers can create learning experiences that suit the students' ZPD while guiding them towards an independent capability with necessary support and guidance (Shabani et al., 2010).

Consequently, differentiated instruction allows teachers to design learning experiences that match students' ZPD, guiding them toward independent capability with the necessary support and guidance (Shabani et al., 2010). Within this approach, responsive instruction acknowledges learners' prior knowledge before introducing new skills or information. Integrating the principles of ZPD with DI equips teachers with a framework to mediate each student's ZPD effectively. In practical application, this integration facilitates learning progression while preventing cognitive overload through the strategic scaffolding inherent in ZPD (Chien, 2015; Subban, 2006).

1.7 Response to Intervention and Differentiated Instruction

From the inception of formal education to the present, classroom populations have consistently comprised students with a wide range of learning capacities. Given the responsibility of teachers to provide the best possible learning experiences, it becomes a collective obligation to adapt strategies that best suit each student's individual capabilities. In light of this, Response to Intervention (RTI) serves as a framework designed to offer early support to students facing academic, social, or behavioral challenges (Fuchs & Fuchs, 2006). RTI gained institutional prominence with the reauthorization of the Individuals with Disabilities Education Improvement Act (IDEIA), which paved the way for differentiated and appropriate instructional methodologies (Walker-Dalhouse et al., 2009; Yell et al., 2017). It was

designed as a proactive approach to diagnosing learning disabilities and preventing academic failure by offering precise support to students (VanDerHeyden et al., 2005). The core of RTI involves identifying and implementing the most effective strategies to achieve desired outcomes in a child's performance and behavior, utilizing a series of diagnostic decisions made by the school's stakeholders (Fletcher & Vaughn, 2009; Greenwood et al., 2011; VanDerHeyden et al., 2005).

RTI is different from special education, primarily aiming to lower the number of culturally and linguistically diverse students who are placed in special education. Additionally, the RTI model features a multi-tier structure: the primary intervention (tier 1) involves classroom instruction with a core curriculum for all students, the secondary intervention (tier 2) includes targeted, intensive small-group intervention, and the tertiary intervention (tier 3) represents the most intensive level, akin to special education (Fuchs et al., 2007). Notably, RTI does not include special education services in its first two tiers and is primarily intended for diagnosing and preventing learning disabilities (Björn et al., 2015)

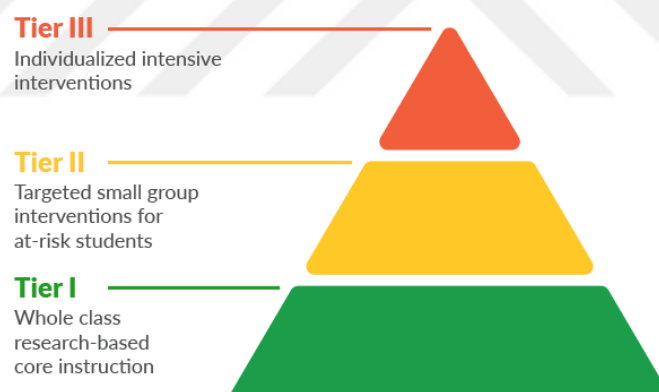


Figure 2 The 3 Tiers of RTI Support (Fuchs et al., 2007)

The dynamic nature of RTI aligns remarkably with differentiated instruction. Since students bring diverse cultural, linguistic, and cognitive experiences that may not align with those of other students and teachers in school (Deppeler et al., 2010), the emergence of RTI is a response to this inherent diversity in classrooms. Students do not respond uniformly to instruction due to their differing needs, making a single instructional program inadequate (International Reading Association, 2010). An understanding of RTI facilitates the provision of DI for each student, potentially preventing learning disabilities before they manifest (Mathes et al., 2005). As

Watts-Taffe et al. (2012, p. 305) suggest, “In an RTI framework, providing differentiated and responsive instruction is an important prerequisite to referring a child for special educational services.” Thus, RTI serves as a framework that both supports and is supported by differentiated instruction interventions, tailored to each student’s observed and professionally determined unique needs (Greenwood et al., 2017).

1.8 Multiple Intelligences and Differentiated Instruction

Each student is a unique learner who possesses distinct learning styles, preferences, and aptitudes (Algozzine & Anderson, 2007; Felder & Brent, 2005; Pashler et al., 2008; Reid, 1987; Tomlinson, 1999). Therefore, the classroom is a mosaic of individual minds, each with its own way of processing information, solving problems, and expressing creativity. This notion that students exhibit diverse intellectual abilities paved the way for Howard Gardner’s theory of Multiple Intelligences (Gardner & Hatch, 1989). This theory was introduced in the early 1900s and challenged the main acceptance of a single general intelligence. Gardner identified eight distinct intelligences, each representing a different facet of human cognition (Gardner, 2021). He emphasized research from multiple fields rather than focusing on psychometric instruments when establishing criteria for identifying distinct intelligences (Davis et al., 2011). This way, he fostered a richer understanding of intelligence across various domains. All in all, the acknowledgment of Gardner’s work has influenced curriculum design and teaching methods that encourage the teachers to adopt a more inclusive and individualized approach to working with varied learning styles.

The practical implication of this concept offers a potential bridge with the domain of differentiated instruction. If every student receives the same material, their experiences will differ based on their background, strengths, challenges, and learning styles (Moran et al., 2006). Therefore, the implementation of multiple intelligences theory principles in differentiated instruction will not only enrich the learning experience but also contribute to the development of individuals each equipped with a diverse set of cognitive skills (Eissa & Mostafa, 2013; Gangi & Barnhart, 2011; Gomaa, 2014; Moran et al., 2006)

Even though Multiple Intelligences theory (Gardner & Hatch, 1989) has had its foundations in education for decades, it is also a topic of debate among researchers considering its lack in terms of empirical support. Critics contend that Gardner's neuromyth is his assertion that humans have separate brain-based intelligences corresponding to different cognitive abilities as this conflates with talents and skills (Rousseau, 2021; Waterhouse, 2023; Klein, 1997). Gardner himself has responded to some criticisms by arguing that they misunderstand and oversimplify his theory (Gardner & Moran, 2006). Despite the debates, the integration of multiple intelligences theory into the practice of DI offers a pragmatic solution as this relationship emphasizes the adaptability of educational approaches and highlights the ongoing need for a nuanced understanding of intelligence in the context of diverse learning environments.

1.9 Historical Background of Differentiated Instruction

In the field of education, DI serves as a key practical strategy for addressing the needs of all types of learners. It is founded on teachers' commitment to meet these needs and accommodate the different readiness levels of students. The nuances between the students, the comprehension of their uniqueness, and respect for their needs and wants are the basic principles that paved the way for this concept. Its history dates back to the early stages of education, when one-room schoolhouses were common, and a single teacher was responsible for instructing students of different grades and ability levels with no technological tool or specifically designed curriculum (Dewalt & Troxell, 1989; Mydland, 2011). The schoolhouses were a symbol of rural virtues of the U.S.A. and were influenced by societal needs and democratic heritage (Cutler, 1989; Lackney, 2015; Zimmerman, 2009). Even though the number of these schools is fewer now, the diversity of abilities is positioned in our standard classrooms.

In terms of the Turkish context, the number of refugees, geographic location, and immigration movements are significant elements of multiculturalism in the classrooms according to the report published by General Directorate of Migration Management of Türkiye [GİGM], (2016). Both domestic and international diversity are the representation of the varied demographic composition within Turkish classrooms. In this respect, classrooms act as a microcosm of a diverse society,

bringing together students from different cultural, linguistic, and socio-economic backgrounds, which necessitates adapting instruction to individual differences (Acar-Çiftçi, 2019; Aydın, 2012; Eshabil & Sabri, 2019; KONDA, 2006; Şimşek et al., 2019; Tonbuloglu et al., 2016).

In the early 1990s, The concepts of differentiated instruction were articulated by Carol Ann Tomlinson. Her approach is based on the idea that students have different learning styles, and interests, and that teachers should provide them with different ways to learn the same material (Tomlinson, 1999). In an environment where one teacher is responsible for providing instruction to students across a range of levels, the birth of DI becomes inevitable. With this paradigm shift, the teachers can be effective classroom leaders, and the students will get a chance to engage in personalized learning experiences (Tomlinson & Imbeau, 2010). This approach is fundamental to the teaching profession, reflecting a commitment to the growth and development of each student under the teacher's care. As Sousa and Tomlinson (2010, p. 9) describe the importance: “Differentiation is neither revolutionary nor something extra. It is simply teaching mindfully and with the intent to support the success of each human being for whom we accept professional responsibility.”

The development of DI is ongoing as teachers and policymakers cumulatively work on its effectiveness. Collaborative efforts encompass professional development initiatives that promote differentiated learning and provide resources to empower the teachers. These initiatives seek to establish inclusive learning environments that address students' needs. As teachers continue to refine their understanding and implementation of differentiation, ongoing research and continuous evaluation will serve to inform the best practices and thus enhance their effectiveness. By embracing a collaborative approach and investing in professional development, stakeholders are encouraged to continually improve the educational experience for all learners.

1.10 EFL Teacher Education

EFL teacher education is essential for equipping teachers to address the increasing need for English proficiency. With English acknowledged as a global lingua franca, EFL teachers are required to be equipped with a broad set of skills—not only in language proficiency but also in cultural sensitivity, instructional

strategies, and adaptable teaching methods. Modern EFL teacher education programs aim to develop educators who can effectively engage learners from varying backgrounds, navigate different levels of language proficiency, and integrate both theoretical knowledge and practical skills to foster meaningful language learning experiences. Day (1991) suggests that effective teacher education should encompass four essential areas of knowledge: content knowledge, which covers the specific subject matter being taught, such as elements of the English language; general pedagogic knowledge, focusing on classroom management and instructional strategies; pedagogic content knowledge (PCK), which addresses how students learn a subject within a teaching context; and support knowledge including interdisciplinary insights from fields like psycholinguistics, research methods, and linguistics. These knowledge areas collectively equip teachers with the tools needed to create an effective and responsive learning environment. This framework for teacher knowledge is well-rounded, emphasizing that teaching a language is far more than simply knowing the subject matter; it involves knowing how to deliver content in a manner that connects with diverse learners.

In alignment with this framework, Türkiye's EFL teacher education program, redesigned by the Council of Higher Education (CoHE) in 2006, addresses the demands of the social, educational, and political landscape and aligns with both local and global standards (Karakaş, 2012). The updated curriculum includes both required and elective courses, emphasizing linguistic competence, pedagogic skills, general knowledge, and hands-on teaching practice. Notably, this program dedicates a significant portion of its hours to teaching methodology and practice-based courses, distinguishing it from the previous program (1998-2006), which placed less emphasis on practical teaching skills. Students begin by focusing on core language competencies in their first year, then advance to more professionally oriented courses covering pedagogy and linguistic proficiency. In their final year, they engage in supervised teaching practice within primary or secondary schools, applying what they have learned and gaining critical real-world experience.

The preparation of future teachers requires a careful examination of teacher education programs to ensure they meet the evolving demands of the profession. In this aspect, an evaluation study conducted by Coşkun and Daloğlu (2010) found that teachers feel the program is insufficient in developing the linguistic skills of

PTs, suggesting a need for more focus on language proficiency. In contrast, PTs believe that the pedagogical aspects of the program such as teaching methods and classroom management—require further improvement. Overall, the study underscores the importance of gathering feedback from both educators and students to ensure that teacher education programs adequately equip future teachers. Complementing these findings, Göksel and Rakıcıoğlu-Söylemez (2018) investigated self-constructed concepts of effective EFL teachers and assess the impact of an EFL teacher education program on these perceptions. Their findings reveal that EFL pre-service teachers place a greater emphasis on proficiency and language usage rather than pedagogical skills, particularly highlighting the significance of pronunciation. Furthermore, the study suggests that while some aspects of professional knowledge develop over time, the structure and coherence of the teacher education program significantly influence PTs' learning processes.

The voices of PTs themselves reveal an essential fact: the pathway to becoming an effective EFL teacher is still being paved. Their feedback is calling for stronger language proficiency support and enhanced pedagogical training, reflecting an evolving vision of the role of a teacher today. In listening to these insights, EFL programs can continue adapting to better equip teachers, not just to teach English but to connect and empower learners in a global context.

1.11 Practicum

The practicum is a fundamental element of teacher education programs, designed to bridge theoretical knowledge with in-class experience. During practicum, PTs observe, participate, and eventually lead teaching activities under the guidance of experienced mentors, allowing them to apply their learned knowledge in real classroom settings. This hands-on experience is crucial for developing professional skills, confidence, and competence essential to the teaching profession, providing pre-service teachers opportunities to practice lesson planning, classroom management, and student engagement in an authentic environment (Farrell, 2008). A study conducted by Görgen et. al. (2012) revealed that while approximately 30% of teacher candidates view the teaching practicum as the most crucial course for gaining professional competencies, a significant portion (over 50%) does not see it as functional, with around 70% indicating that other courses are more effective.

To this extent, supervisors during the practicum process significantly influence PTs' development by modeling critical reflection and aligning their beliefs with educational philosophies, which enhances the learning experience and promotes effective teaching practices (Bates et. al. 2009). Karaman et al. (2019) highlighted the potential of practicum to become a multi-directional, productive learning environment. This is achievable through ongoing dialogue and collaboration among all stakeholders, which not only supports the student teacher but also enhances the professional growth of mentor teachers. However, high workloads for mentors can limit their ability to provide ongoing guidance, highlighting the need for sustained, inquiry-based professional development for mentors.

Mentor teachers are central to the practicum experience, serving as primary in-school guides who provide daily feedback and support. Effective mentoring enables pre-service teachers to experiment, reflect, and grow from their mistakes within a safe environment (Hobson et. al. 2009). Mentors not only model best practices but also provide practical advice on classroom management, helping PTs to gradually build competence and confidence. However, as noted by Uysal and Savaş (2021), inconsistent feedback quality from cooperating teachers (CTs), CT attitudes, and the disparity between theoretical understanding and practical implementation in the classroom remain significant issues. Improved feedback mechanisms and structured mentoring training can make a profound difference in the overall practicum experience. However, Görgen et. al. (2012) highlights issues such as inadequate guidance from mentors, communication problems between practicum teachers and candidates, and the candidates' lack of observation opportunities, leading to recommendations for increasing practicum duration and enhancing awareness of teaching processes among students. Therefore, addressing these challenges through enhanced mentor training, improved feedback mechanisms, and extended practicum durations will cultivate a more conducive and effective learning atmosphere.

Research highlights the importance of equipping mentors with tools for reflective practice and establishing regular collaborative sessions where mentors, PTs, and supervisors can exchange insights and strategies. Such collaborative environments help pre-service teachers develop a deeper understanding of the

multifaceted challenges they will encounter in diverse classroom settings (Hudson, 2013). Further, this collaborative approach provides an essential support network that addresses challenges pre-service teachers often face, such as classroom management, effective teaching practices, and integration into the school culture. Consequently, embracing the relational and contextual approach to practicum can lead to a richer, more engaging learning environment that prepares PTs to innovate their teaching styles in diverse classrooms.

1.12 Differentiated Instruction in Teacher Education

Teacher education is crucial in determining the quality of education and, consequently, student learning outcomes. It includes the process by which teachers learn diverse methods and techniques, while also building skills in critical thinking and problem-solving (Yavuz et al., 2015). Given that teachers' content knowledge and pedagogical expertise greatly enhance student outcomes, (Bold et al., 2017), appropriate teacher education includes how the teachers develop the attitudes suitable for them. In other words, it is a teacher identity formation process that helps teachers discover their unique approaches to teaching (Friesen & Besley, 2013). As Tomlinson (2015) advocates, showcasing effective leadership principles is essential for lasting educational growth. Due to the fact that the quality of the teacher education system depends on its efficacy in preparing teachers who can effectively implement the most suitable method for their target students.

Equally important is the professional development that follows initial teacher education, as it ensures that teachers remain up to date with the latest pedagogical strategies. In order to promote ongoing skill development of the teachers, teachers should foster a culture of continuous learning and improvement (Kennedy, 2016). By embracing ongoing professional growth, teachers not only enhance their instructional effectiveness but also contribute to a dynamic and responsive environment that benefits students' academic and personal development (Hunzicker, 2011). In this way, teachers are encouraged to learn more about different approaches to teaching, such as differentiated instruction.

Differentiated instruction plays a vital role in teacher education, preparing teachers to address the varied and complex needs of modern students. Embedding DI into teacher training is key to empowering educators to implement it effectively,

fostering more inclusivity and equitability in the classroom environment. Studies highlight that the earlier DI is paid attention to during teacher education, the more likely teacher candidates will gain the necessary knowledge and the skills, consequently effectively implementing it during practicum (Brevik et al., 2018; D’Intino & Wang, 2021; Dee, 2010). Teacher education programs frequently provide only a basic introduction to the theory of DI, but this initial exposure might not be adequate for teachers to apply DI in practice (D’Intino & Wang, 2021). Likewise, when teachers encounter challenges of a real classroom environment, they feel incompetent to utilize DI, which shows that there is a need for additional support and preparation for teachers to overcome the challenges and increase teacher efficacy (Dixon et al., 2014). The most common challenge in implementing differentiated instruction is the lack of adequate training and guidance for teachers (Lavania & Mohamad Nor, 2020; Lunsford, 2017; Melesse, 2016; Siam & Al-Natour, 2016). Additionally, the complexity of DI, including time-intensive planning and resource management, further complicates its implementation (Joseph et al., 2013). Therefore, addressing DI during the teacher education process is essential.

After teachers have gained theoretical knowledge of DI through teacher education, it is vital that this knowledge is put into practical application during their practicum process. Without preparing the teachers practically, it cannot be assumed that the teachers will be effective and innovative practitioners. Highly effective teacher training programs prioritize ‘active, experiential, practice-based learning’ that emphasizes outcomes over inputs (OECD, 2018). The programs should encourage teachers to learn through both practical experience and thoughtful reflection on their teaching practice. As pointed out by UNESCO (2018, p. 102): “European countries have been increasingly realizing the need to adapt ITE (initial teacher education) systems to prepare student teachers to embrace and teach about diversity related issues in the classroom.”

Without implementing it during the teacher education process, teachers, when they actually start teaching, may find it challenging to apply theoretical knowledge in real-world classroom situations. The gap between the theory and the practice can be significant without opportunities for practical experience and reflection during their education (De Coninck et al., 2018; Rasmussen & Rash-Christensen, 2015).

A literature review study conducted by Langelaan et al. (2024) revealed that teacher education programs that incorporated DI focused on active learning, collaboration and reflection. According to the researchers, effective DI implementation requires balancing school ambitions with realistic expectations. The study further indicates that despite its inclusion in policy agendas, a unified version of DI is lacking. Teacher training courses, schools, and education professionals must collaborate in order to achieve this. Differentiation is complex and challenging for novice teachers, but Dack (2019) argues that in-depth training in differentiation is essential early in their education to develop foundational skills and break away from one-size-fits-all teaching models, ultimately supporting effective future practice. Yenmez and Özpınar (2017) also claim that when pre-service teachers move beyond general concepts and learn the actual procedures and practices of DI, they become competent enough to implement it effectively. Ultimately, the future of education relies on the ability to equip teachers with not just theoretical foundations of DI, but the practical skills and reflective practices needed to bring it to life in the classroom.

1.13 Differentiated Instruction and English Language Teaching

English language teaching is an indispensable part of contemporary education as it serves as a basis for fostering effective communication, and cultural exchange in this increasingly interconnected world (Canagarajah, 2013; Jenkins, 2006; Makhmudov, 2023). Equipping learners with the skills to manage linguistic diversity, English Language Teaching (ELT) fosters a deeper understanding of various cultures, thereby promoting greater global empathy. Due to the inherent nature of communicating in a language other than one's native tongue, intercultural communication is inevitably involved (Holliday, 1994). Considering this vivid nature of culture, English language classrooms will be the most appropriate places for social exhibition in many forms, and thus, will be the source of various identities to be celebrated and appreciated (Breen, 1985; Holliday, 1994). This diversity between cultures needs to be recognized as a part of the natural process of English language instruction, and students should learn how to understand and appreciate one another's similarities and differences (Duc Chinh, 2013; Galante et al., 2016)

Having stated the relevance of multiple intelligences with the implementation of differentiated instruction, it is not surprising to mention that English classes are

one of the most suitable contexts where the students can show their potential, strengths and weaknesses without fearing that they will be judged because the lessons mostly involve activities that can benefit all types of learners. Besides, as the cognitive psychology community has stressed the importance of using instruction that facilitates students' reflection on their own learning, it becomes important to make students aware of their own learning systems which may be possible by separating a lesson for introducing this concept (Armstrong, 2009; Marzano, 1988). After an introduction for students to explore their learning styles, the activities can be selected. For instance, kinesthetic learners can perform better with the Running Dictation activity, while verbal-linguistic learners can be successful with free writing activities, which is the very core of multiple intelligences theory. If the assessment strategies are conducted with observation throughout the semester and/or carrying out a portfolio process, their learning system will allow them to participate in the activities that are most suitable for them. In this way, students with various proficiency levels in English can be supported by recognizing and incorporating the diversity of English (Suzuki, 2010). It is also possible to make students adapt to the classroom environment by using appropriate assessments to determine their literacy backgrounds and needs (Lenski et al., 2006). In conclusion, integrating differentiated instruction into English classes not only acknowledges the significance of the students' various learning styles but also fosters an environment where each student can freely showcase their own potential.

In the same way, DI is more than an instructional strategy; it is a shared process that can balance classroom inequalities because it contributes to a notice of equality in educational policy (Outselling & Agathangelou, 2009). As indicated above, English classes are opportunities for all students coming from various communities to flourish and be understood; however, there are many cases in which students in minority groups are bullied by their peers inside or outside the classroom. The instances of bullying can be observed in Türkiye's classes as well, because Türkiye hosts a significant number of refugee students, particularly from Syria, ranging from 390.000 to 3.3 million (AFAD, 2017). As a result, minority students are not only disadvantaged academically, but also feel alienated and isolated. Nevertheless, English classes are the most suitable place since a child learns the semantic and syntactic systems together with cultural knowledge

(Widdowson, 1998). Besides, appropriate language for learning is the language that can be made real and authenticated by the learner community as Widdowson (1990) argues. He emphasizes the importance of using language that learners can relate to and verify within their own social life and cultural contexts. Therefore, students' lived experiences within their contexts enrich the classroom atmosphere by contributing to a more vibrant and dynamic learning environment, which can bring about many opportunities to differentiate instruction.

In summary, integrating DI into ELT acknowledges diverse student needs. Their collaboration in language classes fosters the creation of a learning environment that is inclusive of all students who have distinct needs. The forthcoming part will concentrate on how DI is applied to promote different aspects of language teaching as well as how it is perceived by EFL teachers.

1.13.1 Individual Differences

In a random classroom no matter where it is located in the world, the range of students is quite different from each other. Let's assume that there is an observer visiting a random classroom in the world; at the first look, the observer will realize a difference in their physical appearance, which will be the first indicator of diversity. When the observer tries to interact with them, he will realize that their interests, talking habits, and personalities are quite different from each other. Now that the observer is a part of the classroom and has spent a significant amount of time with them, he will come to an understanding that each has its own unique universe. This is a scenario that almost all teachers are experiencing throughout their professional career. The core common ground is that they are all children. But they have their little unique worlds carrying inside. Therefore, it is inevitable that they will be addressed as one individual and that their teaching styles will be diversified accordingly. As Gregory Chapman (2013, p. 27) mentions;

Could we buy clothing for children we didn't know? We would need to find out about them as individuals, ask about their likes and dislikes, preferences for color and style, and of course their sizes. We would never consider buying just anything and hope that it would fit and appeal to the recipient. So in classrooms, we need to know the learners so that we can make sure the curriculum fits.

Having considered the unique features of the student, it is apparent that the differences they bring together affect the language learning and teaching process

(Polat, 2013; Pawlak, 2012; Tanjung & Ashadi, 2019). Dörnyei (2009) indicates the complexities of language acquisition within a dynamic systems framework by focusing on the roles of the learner, the environment, and their interactions. He criticizes traditional individual difference-based approaches, and advocates for a more dynamic understanding of learner characteristics and contextual influences. Because apparently, traditional individual difference-based approaches oversimplify the language acquisition process by neglecting the dynamic interplay between the learner and their environment. Sousa and Tomlinson (2018, p. 137) indicate:

Although individual preferences for learning are probably somewhat fluid, depending on the circumstances or context, a mismatch between how a student learns best in a particular context and how the teacher expects the student to learn can greatly impede the learning process.

On this wise, effective foreign language instruction requires the acknowledgment of the complexity of individual differences and their influence on teaching methods and materials (Yawen, 2023). Nevertheless, teachers may lack the expertise and resources to effectively address individual differences, and practical constraints such as time limitations and curricular demands may hinder intervention (Biedroń & Pawlak, 2016). Despite the challenges, adapting teaching methods to accommodate individual preferences is essential, thus fostering flexibility in syllabus design through group, peer, and individual activities (Naka, 2017). Şallı-Çopur (2005) highlights the challenges of mixed-ability classes, with various factors such as learning styles, cultural backgrounds, and interests contributing to differences among students. Her study indicates various problems in such classes including ineffective learning, varied reactions to materials, participation disparities, waning interests, and discipline issues. However, when coping strategies are implemented, significant positive outcomes are observed. The coping strategies include emphasizing the need for inclusive teaching methods, contingency plans, flexible assessment approaches, open-ended tasks, personalization, games, group work, extra homework, portfolios, and self-access centers to address the diverse needs of students and promote effective learning.

In closing, it is noteworthy to mention that the differences between students have significant implications for the classroom and the teachers play a crucial role in recognizing them (Felder & Brent, 2005). Therefore, embracing these differences

promotes a culture of respect, empathy, and appreciation of individuality within the classroom community (LaDuke, 2022). If the aim is to form authentic communities within a school that values respect, embracing differences without marginalizing perspectives and promoting open dialogue should be advocated (Shields, 2000).

1.13.2 Students with Different Cultural Backgrounds

A classroom atmosphere is shaped by the variety of students coming from various parts of a country. Each student brings about a unique cultural identity that shapes their characteristics. Understanding students' unique needs has already been mentioned; however, it is important to remember that it is not possible to understand a child without taking into consideration his or her culture. It is important to look at this issue from two perspectives: those of students from different cultural backgrounds, and those of EFL teachers who are faced with setbacks during their teaching career.

The way students learn a language differs depending on their cultural background, and a study by Lengkanawati (2004) examines the differences in the use of language learning strategies between EFL learners in Indonesia and Indonesian English learners in Australia. It found that foreign learners favor cognitive, compensation, and social strategies while local learners prefer memory and affective strategies more. According to the researcher, cultural factors and norms influence these differences. In order to address these cultural differences, the schools should ensure that all students feel included. Schachner et al. (2019) test a model where the impact of the school's cultural diversity climate on student outcomes is mediated by the students' sense of belonging, both individually and at the classroom level. It is found that promoting equality and inclusion positively impacts student outcomes through increased school belonging. These benefits apply to both immigrant and non-immigrant students. The study highlights the value of constructive approaches to diversity in multiethnic schools. Consequently, by acknowledging and accommodating cultural differences the schools can create more inclusive environments that empower all students to succeed academically and socially (Cerna et al., 2021; Nishina et al., 2019)

The teachers, on the other hand, struggle when interacting with these students, especially because they lack multicultural teacher competencies (Başbay & Bektaş,

2009). Particularly, pre-service teachers tend to be more disposed and accepting diversity, but programs that aim to improve their multicultural competencies may help. In order to gain this competency, it is crucial to be a part of multicultural teacher education programs that enhance teachers' multicultural practices (McNeal, 2005). This is mostly because teachers experience significant challenges in multicultural classrooms that involve students from Iran, Afghanistan, and Syria (Sarı & Yüce, 2020). This study by Sarı and Yüce focuses on the issues related to teachers' classroom management, communication due to language barriers. It concludes that it is essential to address these problems through professional development, curriculum adaptation, and increased parental involvement. Besides, the PTs are sensitive, and they demonstrate a willingness to engage with diversity as well as viewing it as a resource even though they seem uninformed about the challenges and opportunities cultural diversity presents (Stunell, 2020). In order for novice teachers to be as sensitive as experienced teachers about what is happening around the classroom, there is a need for pre-service teacher education that focuses on training the PTs to develop a sensitivity towards factors such as successful classroom management (Krull et al., 2007).

One important competency that each teacher should have is cultural awareness and sensitivity. Teachers must recognize and respect cultural differences, understand the cultural contexts of their students, and reflect on their own cultural assumptions to make learning more engaging and meaningful (Gay, 2018). Effective teachers need to be knowledgeable about culturally responsive teaching. As Gay (2001) highlights, there are five key elements to integrating students' cultural backgrounds into the curriculums: developing cultural knowledge, including diverse content, building a caring learning community, effective communication, and adapting instruction. Therefore, for refugee students who face significant discrimination and educational challenges, TESOL practitioners can support them by fostering cultural inclusion (e.g., addressing xenophobia) and employing responsive teaching practices that empower their voices and identities (Duran, 2019) because fostering cultural awareness is not just an option, but a necessity of teaching.

Communication skills are another crucial cultural competence for teachers to effectively interact with these students. This includes being able to understand and

use culturally appropriate communication styles and practices. In order to cultivate bilingual and intercultural individuals who can effectively function in diverse local and international settings, the materials and activities used in the classroom should reflect local and international content relevant to the students, while minimizing the exclusive focus on the native speaker discourse (Alptekin, 2002).

As evident, the teachers should engage in ongoing professional development and training to develop an understanding and sensitivity towards these students. Given that the objective of DI is to enhance the potential of each student by intentionally creating learning experiences that meet their unique needs and capabilities (Santangelo & Tomlinson, 2012), research and self-reflection should be ongoing responsibilities for teachers. This approach will benefit the diverse students' needs.

1.13.3 Students with Special Educational Needs (SEN)

The Ministry of National Education's statistics reveal that there are approximately half a million students with special needs enrolled in formal education in Türkiye (Çitil et al., 2020). In light of this fact, it is imperative that inclusive education strategies are used to provide effective support to these students. Students of special needs have increasingly entered mainstream classrooms, but the quality of their education remains a contentious issue (Strogilos, 2018). Therefore, schools should create an environment that fosters warmth among learners, implement a curriculum that addresses the needs of diverse learners, and employ teachers with the necessary competencies to support a conducive teaching and learning atmosphere (Rachmawati et al., 2016).

Considering the fact that DI is designed to integrate all learners for better educational outcomes, it necessitates hard work and dedication (Morgan, 2013). To achieve this, teachers should assess each student's needs and implement varied teaching strategies. With this regard, Tomlinson (1999) emphasizes that effective administrators guide teachers and insist on progress. Teacher leaders, for instance, special education leaders provide guidance but cannot apply pressure. They should be supported by those who can. When teachers are supported in implementing DI, the outcomes are generally positive, as shown in the study conducted by Sandra and Kurniawati (2020) who designed interventions specifically for students with autism

in English classes. Additionally, outside-class assistance was provided to support behavior and learning, where students could express concerns and receive guidance. The findings indicated that DI reduced anxiety and fostered a positive learning environment, leading to increased confidence and less stress for students with autism spectrum disorder during class activities. A different study by Sari et al. (2020) displayed a case study carried out on a teacher teaching a disabled student. Results indicate that the teacher was effective in providing different types of content for students to learn but struggled to offer varied approaches or options in how students completed their tasks, which resulted in similar outcomes for everyone.

In this respect, teachers' attitudes occur as a significant issue in the implementation of successful DI. Boer et al. (2011) undertook a literature review examining teachers' views on inclusive education for students requiring special education and found that generally, teachers hold neutral or negative views on inclusion, contradicting some earlier more positive reports. They explored that attitudes vary based on the disability type, with teachers being less supportive of students with learning abilities, ADHD, and behavioral issues. This variability affects their willingness to implement inclusive education. Conversely, Avramidis et al. (2000) found that PTs have positive attitudes even though they face significant challenges with students having emotional and behavioral difficulties. The study suggests that effective teacher training should include substantial field experiences and a focus on mixed-ability teaching skills to enhance teachers' confidence and competence in inclusive settings.

Keeping these attitudes in mind, research indicates that despite the importance of DI, it is often inconsistently or minimally used for both developing students and those with special needs (Strogilos, 2018). Consequently, it is necessary to differentiate the curriculum according to the needs of inclusive students. Studies show that when curriculum modifications are applied, student engagement and behavior increase while teachers' classroom management practices decrease (Kurth and Keegan, 2014; Lee et al., 2010; Morningstar, et al., 2015).

When considering students with special educational needs, gifted students often are overlooked even though they are critical elements of the term. Hertberg-

Davis (2009) discusses the myth that differentiation in regular classrooms is sufficient to meet the needs of gifted students. She argues that it is not an effective substitute for specialized gifted programs. The reason is that many teachers lack the training and resources to implement it. There is also a huge misconception that gifted students do not need differentiation, which leads to neglect in addressing their unique needs. Besides, there are challenges such as limited curriculum differentiation, insufficient support, relevant pedagogical training, and classroom management skills (VanTassel-Baska & Stambaugh, 2005). With this regard, the study by Brevik et al. (2018) examines PTs' challenges and intentions regarding differentiated instruction for high-achieving students. It underlines the critical role of establishing supportive classroom spaces and suggests that teacher education should focus on helping future teachers identify students' diverse needs and confidently implement differentiated instruction.

Ultimately, DI is a dynamic and adaptable teaching approach that adjusts teaching methods to meet each student's learning needs and preferences, aiming for maximum growth for those who require extra attention. As inclusive classrooms become more common, the application of DI strategies is foreseen to develop, supporting teachers in managing the challenges posed by students with learning disabilities. (Thakur, 2014). As Gibson (2013) suggests, with the right support, DI can significantly benefit all students, including those with disabilities; without it, teachers may dismiss these strategies as another educational field.

1.13.4 Students with Different Abilities

Since students with diverse cultural backgrounds and students with special needs are explored, it is now noteworthy to understand the complexities of diverse abilities in one classroom. It cannot be presumed that all the students' progress at an identical pace and have the same educational background. Undoubtedly, a classroom typically involves two types of students: the advanced ones and the struggling ones. Employing a singular teaching style is unlikely to cater adequately to both groups at the same time. The advanced students will get bored and disengaged if the teacher uses an easier, repetitive teaching style, while the struggling students will not understand if the teacher uses a complex, rapid style. Since the primary goal of DI is to meet each student's individual needs and maximize their growth from their current "learning position", it is required for

teachers to understand the learning profiles and provide scaffolding to support their success (Tomlinson, 2001).

Research indicates that DI is particularly effective for addressing the diverse academic levels present in classrooms (Hu, 2024). DI offers a framework to enhance student engagement and academic growth with key components such as choice, flexibility, and ongoing assessment that empower the teachers to personalize instruction according to various learning abilities (Algozzine & Anderson, 2007). Conversely, the commentary work by Delisle (2015) argues that differentiation fails in practice due to its complexity in implementation. The study further notes that the mixed-ability and heterogeneous nature of classrooms and unclear guidance on differentiation contribute to its ineffectiveness. On the other hand, Magableh et al. (2020) found that DI effectively addresses the needs and maximizes the potential of the students by offering appropriate challenge levels based on abilities, interests, and preferences. However, successful application requires teacher commitment and administrative support for training and resource provision. Another study conducted by Shareefa et al. (2021) examines the implementation of DI in a small-sized multi-grade class. The findings highlight four major elements enabling successful DI: positive teacher perception, teachers' knowledge about DI, support from school management, and multi-grade teaching. Despite the challenges, such as lack of time and high workload, the study indicates that proactive management support results in successful student outcomes. It is also possible to differentiate instruction with digital tools for students with varying abilities. Haelermans et al. (2014) highlight the benefits of digital differentiation and suggest that while the effects are modest, the approach can positively impact student performance. Another study conducted by Kotob and Ali Abadi (2019) investigated the impact of DI on English language learners of varying abilities. The findings showed that low-achieving learners benefited significantly from DI, as evidenced by improved test scores and academic performance.

All in all, acknowledging the varying abilities of students in one classroom is essential as students do not progress at an identical pace and possess varying educational backgrounds. Academically diverse students often find one-size-fits-all classes inadequately challenging; therefore, clear definitions and consistent support are essential for teachers to implement proper differentiation (Tomlinson,

1995). If provided with the necessary support, teacher qualifications will improve, leading to enhanced student outcomes.

1.13.5 Differentiated Activity and Material Design

Differentiation of the activities and the materials is an integral part of DI as the content of teaching is the basis of ensuring all students engage with and understand the material (Tomlinson, 2017). Differentiated activities cater to diverse needs by offering various ways to interact with essential content. It might be determined by readiness, interest, and learning profile (Tomlinson, 2017). During the learning process, materials play a significant role because the students are shifting from being passive agents of their learning, to actively participating by linking the newly acquired information with prior knowledge and reconstructing their understandings through the material (Kılınç & Sözer, 2024). Students are more inclined to perceive the materials as relevant and suitably challenging and tend to have higher engagement levels in a differentiated classroom (Tomlinson & Imbeau, 2010)

It is a fact that how the lesson content is presented influences the potential and outcomes of the students (Remillard et al., 2014). Therefore, teachers should modify what students learn and how they access knowledge and skills rather than lowering expectations. This can involve using texts at different reading levels, and employing flexible grouping where students work in similar groups using various sources such as the classroom library, and the internet (Algozzine & Anderson, 2007). Levy (2008) discusses the importance of grouping in DI based on various criteria such as ability levels, learning styles, and interests. The researcher emphasizes that grouping should align with students' needs and the teachers' goals to meet the desired standards effectively. Consequently, employing these strategies allows teachers to cultivate a dynamic and adaptable learning environment that respects each student while maintaining high expectations for achievement.

Differentiated activities and materials satisfy the cognitive, emotional, and social needs of the students and increase collaboration between teachers according to the study conducted on mathematically gifted students by Özdemir (2016). With this regard, the multiplication of the activities and materials would benefit student achievement. Among these activities, discussions, debates, and brainstorming stand

out as highly effective in fostering critical thinking skills, collaboration, and stimulating intellectual curiosity. Considering the necessities of raising children in a globalized world, it is crucial for teachers to create debating activities to prepare students to be able to analyze, argue, conclude, decide, and express their views effectively. With this regard, Alasmari and Ahmed (2012) found that debating helps students engage in using all English and presentation skills while boosting their confidence in academic, social, and professional settings. Another study conducted by Marimuthu (2024) highlights the potential benefits of panel discussions, including enhanced speaking skills, collaborative learning, and critical thinking in ESL (English as a Second Language) classes. Brainstorming is another method that improves the comprehension of the matter subject as examined by Ghabanchi and Behrooznia (2014), who conducted a study on the impact of brainstorming techniques on EFL learners' reading comprehension and found that the participants who undertook brainstorming outperformed those confirms that it positively effects EFL reading. In light of these findings, it becomes evident that incorporating these varied and dynamic teaching strategies is essential for enhancing students' critical thinking as well as their sense of belonging in a rapidly evolving world.

One differentiated type of material that teachers utilize frequently is drama as it can increase student engagement and motivation by making the learning environment more interactive (Cawthon et al., 2011). Drama activities are particularly effective in developing social-emotional skills such as empathy, collaboration, and self-awareness (Mavroudis & Bournelli, 2019) which are the core principles of the successful implementation of DI. Research indicates that when students engage in drama activities, they often exhibit better comprehension and retention of academic content (Akyüz & Tanış, 2020; Güngör, 2008; Law, 2021). This is because drama activities make learning more meaningful and contextually relevant, allowing students to connect with the material on a deeper level. These activities also encourage creativity and critical thinking by allowing students to explore different perspectives. This engagement allows students in drama to experience a sense of inclusion and connectedness within educational settings.

Digital materials, also, play a significant role in addressing the needs of diverse learners. Students with disabilities often struggle to meet general education

standards, but technology can offer DI strategies and engaging activities to support their needs, as mentioned by Mahoney and Hall (2017). A study conducted by Kakoura and Driga (2023) utilized a digital tool named ToSakidio for a group of students, among them a student with autism spectrum disorder. The findings indicate that using the tool improved learning outcomes, reduced anxiety, and enhanced collaboration. The tool also helped the students manage their cognitive processes. Moreover, technological devices enhance online learning and retention for deaf learners, fostering greater engagement and creativity compared to traditional teaching methods (Shepherd & Alpert, 2015). Güvenç (2021) explored student perceptions of virtual DI activities and teacher reflections on planning and implementation in higher education English preparatory programs. Findings showed that DI positively influenced students' attitudes toward language learning, while teachers noted beneficial outcomes despite facing challenges related to time and curriculum. One study by Karatza (2019) examined the teachers' views on using Information and Communication Technology (ICT) for DI and found that they generally use familiar technology and see its positive impacts on learning. Though teachers understand the value of differentiation, they struggle with its implementation, and successful implementation relies on factors such as class size and ongoing training both in ICT and DI. As noted so far, technology integration into differentiated classrooms is valuable; however, to better achieve this, schools must have the necessary systems and infrastructure. Johler and Krumsvik (2022) carried out a study in a technology-rich primary school and examined the teachers' perspectives on DI. Teachers noted that these tools enhance engagement and collective practices while promoting student strengths. However, they also expressed concerns about over-reliance on technology and the need to prioritize pedagogy over mere usage.

In conclusion, the effective design of differentiated activities and materials is essential for fostering an inclusive and engaging learning environment in diverse classrooms. By addressing varying student needs through relevant content and interactive strategies, teachers can promote active participation and higher achievement levels. The integration of technology, drama, and collaborative activities not only enhances students' critical thinking and social-emotional skills but also supports learners with diverse abilities. While teachers recognize the

benefits of differentiated instruction, ongoing professional development and strategic planning are crucial to navigating challenges and maximizing the potential of these approaches. All in all, creating a dynamic and responsive classroom environment is vital for preparing students to achieve their unique goals.

1.13.6 Differentiated Assessment

Assessment in DI plays a pivotal role in understanding the student outcomes after the implementation of DI by providing critical data that informs the effectiveness of instructional strategies. Through continuous and varied assessment methods, teachers can gather insights into how well students are meeting the learning objectives, identify areas where adjustments are needed, and measure the overall impact of DI on student achievement (Guskey, 2003). By regularly analyzing this data, teachers can refine their approaches to better accommodate diverse learning needs.

It should be noted that the student success is determined by the type of assessment conducted. Sousa and Tomlinson (2010, p. 65) commented that:

Testing of all kinds creates stress because many students perceive testing as a judgment of their intelligence. Students are under greater stress when they take summative assessments than when they take formative assessments because they know that summative assessments generally carry far greater weight in determining their grades and performance.

Therefore, quality assessment is integral to differentiation, and it involves pre-assessment, ongoing assessment, summative assessment, and student self-assessment, as Tomlinson and Moon (2014) describe. The purpose of the pre-assessment is to determine the students' existing knowledge, skills, and understanding before starting a new unit or lesson. It can be done through quizzes, surveys, and informal discussions. Ongoing assessment monitors students' progress and understanding through the instructional period. It can be employed with observation, quizzes, class discussions, and portfolios. The third assessment type is a summative assessment, which evaluates students' learning at the end of the instructional unit by comparing it against some standard. Self-assessment aims to engage students in reflecting on their own learning. To do this, students might be asked to complete reflective journals, self-rating scales, or conduct peer-review. A differentiated assessment tool, dynamic assessment, is another successful way to blend teaching and assessment to understand and support student development, as

it helps learners go beyond what they can do alone with the right support (Lantolf & Poehner, 2010). Overall, combining these various methods creates a comprehensive approach to understanding and enhancing student learning by ensuring that each student's potential is effectively addressed.

Moon (2016) indicates that differentiated assessment is supported by several fields, including special education and cultural diversity studies. Successful adaptations, such as curriculum-based assessments and dynamic assessments, highlight the importance of maintaining consistent learning objectives while accommodating diverse student needs. This means that the shift towards equitable practices in assessment aims to support student learning more effectively. However, it can be challenging to implement assessments successfully. With this regard, Campbell and Evans (2000) evaluated 309 lesson plans and revealed significant gaps in how pre-service teachers apply assessment principles. The plans did not involve the necessary criteria for evaluating learning, and many lacked a clear connection between instructional goals and assessment. This study highlights the need for better teacher training to help pre-service teachers understand and apply critical assessment principles in their classrooms. A rather new study conducted by Liao (2015) investigates the perception of differentiated assessment among EFL learners with a focus on aspects such as validity, backwash, and methods to enhance task construction. Results indicate generally positive perceptions that support the use of DI assessment to help language development in mixed-ability classes. Varsavsky and Rayner (2013) highlight the importance of differentiated assessment tools in enhancing learning for diverse student groups because the students appreciated the availability of different assessment tools and supported their inclusion. To conclude, the findings underscore the necessity of ongoing teacher development and the strategic implementation of differentiated assessment practices.

Ultimately, assessment is crucial for differentiation in the classroom because it informs and shapes instruction. Furthermore, consistent and reflective assessment practices empower teachers to adapt their strategies in real-time effectively, ensuring that every student is challenged and engaged at an appropriate level. Therefore, well-designed and effective use of various tools will ensure that all learners receive the support and opportunities they need for success (Moon, 2005).

1.14 Conclusion

This chapter explored the study's background, purpose, significance as well as its theoretical framework, which was Differentiated Instruction itself as a framework, ZPD, which highlighted the capabilities and potentials of the students; and RTI provides systematic support for the needs of the students, Gardner's Multiple Intelligences as it supports the academic characteristics of each student. Precedingly, the historical background of DI is explained. The chapter notes the significance of teacher education and its place in DI by delving into the professional growth process of the teachers. DI's significance in the ELT context is discussed and the variety of student characteristics is explored under this title. Individual differences discusses that Each student possesses distinct characteristics and merits individual attention. Among these differences, culture is prominent as it shapes the core values of a person. The students with special educational needs are also explored. One last characteristic of the students is different levels of abilities. As a final point, the abilities of the teachers to design activities and assess students' outcomes are argued. Overall, the chapter emphasizes the need for DI to meet the diverse abilities and backgrounds of all students.

2. MATERIALS and METHOD

2.1 Overview of the Chapter

This chapter presents the methodology that was used in the study. It first provides an overview of the study's participants, and setting, followed by a description of the data collection tools and procedures, as well as the data analysis techniques that were employed. Additionally, this chapter discusses the study's trustworthiness and the researcher's role in carrying out the study.

2.2 Research Design

To effectively explore the multifaceted phenomenon of differentiated instruction within a language-educational setting, this study employs a mixed-methods case study design. By incorporating both qualitative and quantitative methods, we aim to provide a comprehensive understanding of DI as implemented by pre-service English teachers during their practicum. This design allows us to capture the complexity of DI by examining it from various perspectives and methodologies, thereby engaging all stakeholders involved.

Multimodal strategies hold the potential to assist people in understanding deep concepts through numbers, charts, graphs, words, diagrams, and textual explanations, thereby broadening comprehension of complicated issues (Creswell, 2004). Differentiated instruction, likewise, is a phenomenon requiring focused attention. in various ways, by focusing on its various aspects. Consequently, a mixed-methods approach is used to illustrate the nature of DI by incorporating qualitative language as well as quantitative natural data. In order to comprehend the intricate aspects of societal dynamics and human perspectives, it is necessary to engage in a multifaceted exploration, thus, perceiving the notion through various perspectives and employing various methodologies that effectively address the stakeholders involved, rather than focusing only a singular approach (Rossman & Wilson, 1985).

The mixed methods approach integrates qualitative and quantitative research methodologies (Creswell, 2004). Rather than sticking to one method, it seeks to strengthen the data by offering a more comprehensive understanding of complex issues (Creswell, 1999). Even though qualitative and quantitative research methods may seem incompatible, using both enriches the study by revealing

nuances of human experiences (Creswell & Creswell, 2023). This methodology has its roots in the late 1980s and was called “*the third methodological movement*” (Teddlie & Tashakkori, 2010, p. 671). It was initially developed independently across different domains, then, it gained recognition through seminal works and scholarly articles (Creswell & Creswell, 2023). Over the years, it has evolved into a well-established field with journals, and professional associations. Today, it is widely utilized across various fields to facilitate a more integrative study.

Alternatively, case studies are comprehensive analyses of particular situations in real-world settings intended to provide a nuanced, all-encompassing perspective of a singular instance (Yin, 2018). They are commonly described in this way; “A case study is an empirical inquiry that investigates a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident.” (Yin, 2009, p. 18). Even though case studies involve fewer units of study, they offer greater depth of detail for each case (Fraenkel et al., 2023; Rowley, 2002). Case studies can focus on a range of subjects, including individuals, beliefs, or actions, and may involve multiple observations of individual entities across different periods within the same study (George & Bennett, 2007)

Given this, exploratory research was used to delve deeper into DI within a language-educational setting. Exploratory research examines a phenomenon of interest in detail while seeking to understand its broader context implications (Cohen et al., 2018; Hunter et al., 2019). Consequently, the exploratory, descriptive method offers the potential to investigate and delineate the aspects of DI in language education.

Ultimately, this research qualifies as a case study as it focuses on a specific group of PTs within the context of their practicum. Integrating the quantitative and qualitative methods within a case study framework with the exploratory, descriptive strategy allows for a comprehensive exploration of the participants’ experience. Therefore, this study framework provides a structured yet flexible approach that enables to capture the multifaceted nature of the participants’ experiences while also considering the contextual factors involved. Consequently, this study aims to answer the following research questions:

1. What are the current competencies of English teacher candidates in the Practicum 1 course regarding differentiated instruction implementation?

2. What strategies do English teacher candidates use in the Practicum 1 course to adapt instruction and meet the diverse learning needs of students?

3. According to English teacher candidates, what is the perceived effectiveness of differentiated instruction on the integration of students with different learning needs and their academic progress?

2.3 Participants

The study engaged 65 PTs enrolled in their initial Practicum 1 course, all of whom voluntarily participated. The participants, whose ages ranged from 21 to 26, all completed the DI Questionnaire designed to gauge their understanding and application of DI principles. Among them, 32 participated in follow-up interviews, revealing a range of emotions and reflections about their teaching experiences. Notably, 13 interviewees brought prior teaching experience from private courses and lessons, while the remaining 19 had no teaching background. In addition to the interviews, the study also utilized reflective journals to capture more profound insights into the teachers' experiences during their practicum. A total of 53 participants responded to questions in their initial reflective journal entries, focusing on their immediate experiences and reactions to the practicum environment. Subsequently, 27 of these teachers completed post-practicum reflective journals, offering further perspectives on their development and the challenges encountered.

The participants who were involved in the data collection process are presented in Table 1.

Table 1 *Participants Involved*

Data Collection Tool	Number Of Participants
DI Questionnaire	65
RJ1	53
RJ2	27
Face-To-Face Interview	32

2.4 Setting

The study was conducted at Bolu Abant İzzet Baysal University, Faculty of Education, Department of Foreign Language Education. The participants were all

PTs who were involved in the Practicum 1 course in which they were required to teach at public schools. These schools encompassed primary, secondary, and high school levels.

The objective of the Practicum 1 course is to apply the theoretical knowledge they have gained throughout their major in real classroom situations, gain practical experience and develop their teaching skills. At the beginning phase of the Practicum 1 course, the pre-service teachers observe the classroom environment within the natural flow of the lesson in which the main teacher is in control. Proceeding with this, pre-service teachers begin to teach. Typically, each prospective teacher is allocated 20 minutes of teaching time, resulting in a total of 40 minutes for both teachers. However, the mentor teacher can decide on this duration. In certain instances, prospective teachers may be assigned to teach for a full hour.

Pre-service teachers attend their seminar lessons throughout their Practicum 1 course. In these seminar sessions, they reflect on their experiences under the supervision of the professor. Similarly, in this research, the participants did not receive any information about DI before completing the DI questionnaire, ensuring that their behaviors during the practicum remained natural. The DI questionnaire subsequently provided them with an initial familiarity with the concept.

2.5 Data Collection Procedures

The data was gathered throughout the fall semester of the 2023-2024 academic year. The process started in November 2023 and ended in February 2024. In the first phase of the process, participants filled out DI Questionnaire, which is the quantitative data of the study that scaled their perceived competency in applying DI in their classrooms. In the second phase, the participants were enrolled in interviews conducted by the researcher which aimed to grasp PTs' experiences and insights regarding the Practicum 1 course as some participants had started to observe the classrooms, and most of them began to teach during this time. In parallel with the second phase, the participants began writing the beginning step of reflective journal entries. The questions were about their perspectives on the classroom observation process and the implementation of DI in their target classrooms. The final phase involved participants completing their reflective

journal entries for the Practicum by offering their overall reflections on the competency and perceptions towards the concept of DI. Eventually, the three-step data collection process ended with a significant number of insights coming from first-hand fresh experiences of PTs.

2.6 Data Collection Instruments

This section presents details regarding the instruments utilized for data collection. Initially, written data sources will be introduced, followed by a detailed explanation of the audio-recorded interview process.

2.6.1 Written Data Sources

Teachers, as reflective practitioners, consistently assess the impact of their decisions on the stakeholders within the learning community and actively pursue professional growth with reflective journals that serve as tools to foster a self-awareness in their teaching practices (Farrell, 2013). The self-awareness that reflective journaling facilitates allows teachers to criticize their teaching methods, identify areas of strength and weaknesses, recognize the unique nature of each learner which is the very core of DI, set goals, and lastly experiment new instructional approaches (Bolton & Delderfield, 2018; Campbell & Groundwater-Smith, 2007; Churchill et al., 2022; Göker, 2016; LaBelle & Belknap, 2016; Lowe et al., 2013). In conclusion, the integration of reflective journals into teaching practices successfully underscores the fundamental principles of DI. For this reason, participants involved undertook two structured journal entries: one during and one after practicum. There were 5 questions in each entry (see Appendix 3 & 4). Within these entries, they documented their observations and firsthand experiences regarding their perspectives and implementation of DI. The journals were hand-written in the native language in order to avoid any foreign language anxiety that the participants may have experienced, which would affect the trustworthiness of the data. Later, the gathered data were transcribed by the researcher verbatim. In cross-cultural research, transparent translation decisions enhance the quality of the work (Abfalter et al., 2020). Thus, it is necessary to indicate that direct translation benefits when transferring quotes into results.

Another written data source is the DI Questionnaire which is the quantitative element of this mixed-methods research. The quantitative component in research involves systematically collecting and analyzing numeric data to investigate

relationships, patterns, and trends. Distinct from qualitative research, which aims to grasp subjective experiences and meanings, quantitative research employs statistical methodologies to measure variables and test hypotheses (Fraenkel et al., 2023). This type of research is beneficial for documenting prevalence and testing hypotheses as well as generating generalizable, predictable explanations (Mohajan, 2020). Therefore, in order to examine PTs' competencies in implementing differentiated instruction, a quantitative research method was used. To gather data, Differentiated Instruction Scale developed by Gülay (2021) was used. It was developed and used by Gülay (2021) to determine classroom teachers' perceptions of their levels of implementing differentiated instruction.

The development process of the scale took place in four stages: the creation of the item pool, submission to expert opinion, preliminary application, and pilot application. While creating the item pool, a literature review was conducted, and expert opinions were consulted. The original items of the scale were written to include differentiation elements. By obtaining expert opinions, adjustments were made to the scale and scale items were determined.

To ensure the validity and reliability of the Differentiated Instruction Scale, necessary procedures were followed in developing, administering, and analyzing it. The process involved drafting scale items that reflected all characteristics differentiating students, seeking expert opinions for revisions, conducting a pilot test with a large sample of teachers from different regions, performing factor analysis, and checking reliability using Cronbach's Alpha. The final sample was selected through random sampling, and data were thoroughly checked and analyzed to ensure accuracy and consistency. The pilot application was conducted with 371 classroom teachers and the data was analyzed using the SPSS program. As a result of exploratory factor analysis, it was determined that the scale was grouped under six factors and the Cronbach's Alpha values of the factors were high. It was observed that the construct validity of the scale was achieved as it explained 71.635% of the total variance. Considering the internal consistency and distinctiveness of the items, it was concluded that the scale's reliability was high.

After granting necessary permissions for its use and adaptation, a systemic modification was undertaken to facilitate its implementation for EFL pre-service

teachers. The survey included 33 items rated on a scale from 1 to 5, where 1 indicates “lack of competence” and 5 indicated “complete competence. (see Appendix 1 for sample items). The scale was filled on paper by the participants and gathered later. It provided a structured framework for assessing the participants’ perceived competencies in implementing DI, which allowed for quantitative analysis and comparison of responses across different dimensions of teaching practice.

2.6.2 Oral Data Sources

In language education, it is essential for EFL teachers to meticulously address the individual needs of each student to enhance their linguistic proficiency. Needless to say, interviewing is a valuable tool for understanding, explaining, and negotiating meaning in its naturally occurring context (Alshenqeeti, 2014; Cohen et al., 2018; Rabiee, 2004). For this reason, the interviews regarding their competencies in implementing DI were conducted in each participant’s mother tongue.

In total, there were seven pre-determined questions along with two additional sub-questions designed to elicit comprehensive insights. (see Appendix 2) The interviews were semi-structured, which enabled the researcher to further the discussion. Semi-structured interviews are appropriate in situations where the open-ended questions require follow-up queries (Adams, 2010). The semi-structured format of the interviews provided the flexibility to explore particular areas of interest while ensuring uniformity among participants. As mentioned earlier, there were a total of 32 interviewees, divided into groups of 8 participants each, with four sessions in total. Each interview session lasted approximately 30 minutes. Each session was audio-recorded and transcribed verbatim. The quotes transferred to the results were directly translated to English.

2.7 Data Analysis Procedures

This chapter outlines the procedures obtained from a mixed-methods approach and presents each phase of analysis in detail.

2.7.1 Quantitative Data Analysis

This study utilized quantitative data to complement the insights gained from interviews and reflective journals, aiming to provide a more holistic understanding of the research questions. The quantitative aspect involved the analysis of the DI Questionnaire using the Statistical Package for the Social Sciences (SPSS, Version 27). The questionnaire was designed to assess the perceived competency of PTs in implementing DI. Prior to analysis, the data underwent a thorough cleaning process to address any missing values and ensure the accuracy of data entry. Responses were coded and scored according to the questionnaire's guidelines to prepare for statistical analysis. Descriptive statistics, including mean scores, standard deviations, and frequency distributions, were computed to summarize the data and identify patterns related to the perceived competencies. Additionally, the internal consistency reliability of the DI Questionnaire was assessed using Cronbach's alpha, providing a measure of the scale's reliability. The analysis also involved examining measures of central tendency and variability to understand the distribution of responses. Where appropriate, inferential statistical tests such as t-tests or ANOVA were conducted to compare groups within the sample and explore relationships between variables.

The data is used with descriptive approach, integrating both qualitative and quantitative findings to offer a comprehensive understanding of the research questions. Although the questionnaire was originally designed for in-service teachers, it has been carefully adjusted to suit pre-service teachers, ensuring that it aligns with their experiences and competencies in DI. The DI Questionnaire was selected due to its cultural relevance and appropriateness within Türkiye's educational context, making it a reliable tool for gathering accurate, context-specific data. Additionally, the data is presented through a nested data analysis approach (Figure 3), allowing for an in-depth exploration of patterns and relationships between the qualitative and quantitative results. This method provides a richer insight into pre-service teachers' perceptions and practices concerning differentiated instruction, supporting the study's aim of offering a nuanced perspective on their competencies in implementing DI.

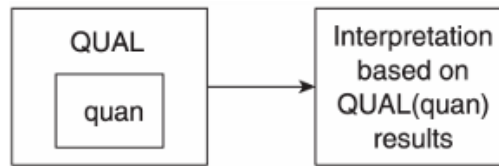


Figure 3 Embedded Design (Creswell & Guetterman 2019)

These analyses helped in classifying themes and understanding the extent to which pre-service EFL teachers felt competent in implementing DI strategies. By integrating these quantitative findings with the qualitative data from interviews and reflective journals, the study aimed to offer a comprehensive analysis of pre-service teachers’ experiences and perceptions. While this quantitative analysis provides valuable insights, the study recognizes limitations concerning sample size and the breadth of the questionnaire, with further details elaborated upon in the limitations.

2.7.2 Qualitative Data Analysis

The qualitative data analysis of the interviews and reflective journal entries employed a descriptive thematic analysis approach, following the iterative phases outlined by Braun and Clarke (2006). This method involved several key steps: familiarizing with the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the final report.



Figure 4 Braun and Clarke (2016) Thematic analysis

For the reflective journal entries, entries 1 and 2 were examined separately to identify the main themes, supported by relevant quotations from the participants.

Sub-themes were also extracted during the process to provide a more nuanced and detailed understanding of the main themes derived from the qualitative data. This detailed coding process allowed for capturing explicit and implicit meanings within the participants' reflections.

In relation to the interviews, the audio recordings were initially transcribed and subsequently translated verbatim from Turkish to English. This translation process was conducted meticulously to preserve the original meanings and nuances of the participants' responses. The transcriptions were then reviewed for accuracy and completeness. Following this, the same thematic analysis procedure was applied to the interview data used for the journal entries. This included coding the data, identifying patterns, and developing themes and sub-themes that represent the participants' perspectives on differentiated instruction. The qualitative findings were then integrated with the quantitative data analysis to provide a comprehensive understanding of PTs' perceptions and competencies regarding DI. This triangulation of data sources ensured a richer and more robust analysis, offering insights into how pre-service teachers perceive and implement DI in their practice.

2.8 The Trustworthiness of the Study

This section explains the study's trustworthiness by providing details about the researcher's role and triangulation

The study integrates findings from both quantitative and qualitative analyses to provide an extensive understanding of the concept of DI in English language education. While the use of reflective journals is appropriate for eliciting the self-reflective experiences of EFL pre-service teachers, conducting interviews allows for direct interaction and clarification responses, therefore enhancing credibility of the study's findings. This approach allows for triangulation of data, reduces inappropriate certainty and inconsistency, and provides rich insights the researcher carefully interpreted.

2.8.1 Researcher Role

The role of the researcher in a study is crucial for ensuring the integrity, reliability, and validity of the research findings (Hatch, 1996; Slembrouck, 2015). When conducting a qualitative study, researchers must demonstrate precision, consistency, and comprehensiveness in the data analysis process in order to

establish credibility (Elo et al., 2014; Nowell et al., 2017; Shenton, 2004). The researcher's role, therefore, extends beyond mere data collection and analysis, and encompasses a broader responsibility towards the generation of reliable and meaningful knowledge.

The researcher followed methodological transparency throughout the data collection and analysis procedure by documenting every step of the research process. The participants involved in this study were unfamiliar with the researcher which is a crucial measure in semi-structured interviews (Cohen et al., 2018). This allowed for an impartial investigation and the approach of the data without preconceived notions or expectations. By employing semi-structured interviews as a primary methodological approach, the researcher asked further questions to elicit responses that were in line with the research objectives. This helped to uncover rich and detailed data that may not have emerged from surface-level responses. Int, detailed notes were systematically recorded to ensure accuracy and comprehensiveness. After this process, the collected data was carefully examined by going through multiple rounds of coding and interpretation to identify emerging themes and patterns.

Throughout the depictions of the study's methodology, comprehensive clarity was maintained regarding all facets of data collection and analysis. Participants and researcher roles were delineated in detail which supports the integrity of the study. Additionally, this level of transparency allowed for a thorough understanding of the study's procedures, making it easier for future researchers to replicate or build upon the findings.

2.9 Triangulation

Triangulation in research entails employing various methods or data sources to gain a thorough insight into phenomena (Carter et al., 2014). It validates findings by converging information from different perspectives (Patton, 1999). By combining quantitative and qualitative data, the researchers can enhance the validity, credibility, and richness of their findings (Hussein, 2009).

In this research, the researcher employed the DI Questionnaire for quantitative data and structured reflective journals, along with semi-structured interviews for qualitative data. The questionnaire assesses the participants' abilities

in implementing DI during practicum while the qualitative data sources capture the participants' perceptions, experiences, and nuances related to the differentiated instruction concept. The researcher compares and contrasts the data and identifies areas of agreement, differences, or/and complexities. This triangulation process provides a more holistic understanding of the pre-service teachers' comprehension of DI.

2.10 Conclusion

A mixed-methods approach was conducted with 65 participants who completed a DI questionnaire. 32 participants were enrolled in semi-structured interviews, 53 participants completed reflective journal entry¹, and 27 of them entry 2. Quantitative data was analyzed with SPSS. A thematic content analysis approach was utilized to analyze written data and interviews. All the themes were carefully examined by the researcher. Thus, data triangulation was ensured as more than one piece of data was received. Making sure the data was accurate and trustworthy from collection to analysis was a top priority. This helped to strengthen the credibility of the overall study.

3. RESULTS

3.1 Introduction

The aim of this study was to investigate the competencies of EFL pre-service teachers' (PTs) competencies in implementing differentiated instruction during their practicum process. It seeks to investigate and comprehend the current abilities of PTs in applying DI during their Practicum phase. This study provides a comprehensive understanding of both the practical implementation of DI strategies by pre-service language teachers and their perceptions of the effectiveness of these strategies in diverse classroom settings. With this regard, quantitative data was obtained through a DI questionnaire (Gülay, 2021), and qualitative data was gathered through two reflective journal entries and an interview with the participants. The collected data were analyzed to identify the perceptions of PTs about DI, their competencies in working with students with diverse learning needs, their lesson planning, material and activity designing, assessment, and evaluation.

This chapter consists of three sections to seek answers to three research questions.

1. What are the current competencies of pre-service English teachers regarding the implementation of DI in their Practicum 1 course?
2. Which strategies do pre-service English teachers employ in Practicum 1 to adapt instruction and address the diverse learning needs of the students?
3. According to the pre-service English teachers, what is the perceived effectiveness of differentiated instruction on the integration and academic progress of students with diverse learning needs?

The first section will present an analysis of EFL teachers' competencies in various aspects of implementing DI. The second section examines the strategies that PTs use. The last section investigates the insights of PTs about the effectiveness of DI.

3.2 The Current Competencies of EFL Pre-service Teachers on the Implementation of DI

The items in the DI survey aimed to examine the competencies of the participant group (i.e., EFL pre-service teachers in the practicum). However, they are categorized by the researcher in order to better understand distinct nuances of DI implementation. The items are categorized into three groups, the first being competent to implement DI for different students' characteristics, with three different sub-themes (e.g. students with different cultural backgrounds, inclusive students, students with different language abilities). The subsequent title is their competence in lesson planning, which has one sub-theme: material and activity design. The last title is assessment and evaluation.

Before delving into a detailed analysis of each specific category, the results of the overall competencies of the participants are presented above.

Table 2 Descriptive Statistics of Overall Competencies

<i>Descriptive Statistics</i>					
	N	Minimum	Maximum	Mean	Std. Deviation
competency	65	2,88	4,52	3,7380	,38944
Valid N (listwise)	65				

As illustrated in Table 2, the total number of participants is 65. The lowest mean score recorded is 2.88, suggesting that even the lowest-performing PTs still demonstrates some perceived competency. The highest score is 4.52, which is the indicator of the PTs who regard themselves as highly competent in providing the essentials for implementing DI. The resulting mean value stands at 3.7. According to the results, PTs, on average, demonstrate a moderate level of competency, with some reliability in individual competency levels.

Building on these quantitative findings, it is crucial to delve deeper into the participants' reflective journal entries to better understand their perspectives. To this end, the participants' reflective journal entries are examined. In parallel with the quantitative findings, some of the PTs seem to have an understanding of the concept of DI and the underlying reasons for its use in EFL classes. The participants

agreed on the necessity of implementing DI and originating strategies according to the needs of the students.

I assumed it is necessary to use different instructional methods for students with different needs. I think teaching a language with only one material or method will not be enough for all the students. (RJ1)

Throughout my practicum, I tried to get to know my students and discover their common interests. I adapted the content of the courses accordingly in a way that could bring them all to a common ground. (RJ2)

While many participants acknowledge the importance of DI, implementing it in practice can be challenging. A pre-service teacher explains the difficulty of implementing DI but she also notes the strategies she uses as follows;

It was not easy to prepare and provide materials that appealed to all learning styles, language abilities, and different interests simultaneously. One activity appealed to some students while others did not. At the same time, their levels are low. It was also difficult to simplify my instructions and the language when speaking for the students. For this reason, I tried to use visual clues, gestures, and facial expressions to make it easier for them to understand... (RJ2)

On the other hand, participants assume differentiating the instruction means dealing with each student individually; therefore, he can't conduct a differentiated lesson. PTs explained their insights regarding this issue.

Because the classrooms are so crowded, it was not possible to take care of each student individually. That's why while I was creating the activities, I tried to find the ones that everybody could actively engage in at the same time. (RJ1)

In my practicum, the number of students varies between 35 and 40. That's why I don't think I can get enough of each of them. We are being focused, but it may not mean anything to them. I don't think I am very effective in this regard. (Int)

To be honest, no, I can't have a differentiated lesson because I have just started teaching, and there are 40 students in a classroom. To be self-critical, I don't think I am enough. (Int)

During the practicum, I only addressed the general public, because of the limited teaching time I experienced and because most classes had around 40 students. (RJ2)

Despite recognizing the importance of DI, many participants face significant obstacles in its implementation, particularly due to large class sizes and limited teaching time. These constraints often result in a generalized approach to teaching rather than individualized instruction, making it difficult for pre-service teachers to effectively address the diverse needs of all students. They express concerns about their ability to engage each student adequately and the overall effectiveness of their teaching methods in such challenging environments. Another misconception about DI, according to a participant, is that differentiated instruction means employing different methods rather than the traditional methods.

I incorporated various teaching methods; for instance, using guitar playing and lighting incense to employ the Suggestopedia technique and integrating Charades to incorporate the Total Physical Response technique. (RJ1)

The practicum process can be particularly challenging for pre-service PTs as they begin to translate theoretical knowledge into practical application. This transition often requires substantial guidance, especially when it comes to implementing DI without prior knowledge. As one pre-service teacher expressed during an interview,

I don't think I can create a differentiated lesson plan but as a teacher, eventually, it is a necessary to do so with the help of the internet or my colleagues.

Another pre-service teacher echoed similar challenges, stating,

To be honest, I try to prepare according to the average level of the students. This is mostly due to negative factors such as crowded classrooms.

This response brings to light the significant challenges faced when trying to cater to diverse learning needs within the limitations of large class sizes.

In summary, the practicum phase for PTs often involves navigating the complexities of applying theoretical concepts, such as differentiated instruction, in real classroom settings. These challenges are compounded by factors such as classroom size and a lack of initial training, underscoring the importance of support and resources in preparing effective and inclusive lesson plans.

One participant has a misconception about what a differentiated lesson is and notes his insights with this quote:

I ensured the participation of my students who have different needs or learning difficulties by not showing any different treatment towards them. I communicated with them in the same way I spoke with everyone else and gave them equal opportunities to speak. (RJ2)

While the intention is to treat all students equally, this approach overlooks the necessity of addressing individual differences in the classroom.

To conclude, the aforementioned quotes illustrate the diverse perspectives respondents had regarding their DI implementation competencies. The core belief is that effective differentiation is essential, but some challenges may occur in the process.

3.2.1 DI Implementation for Students with Different Cultural Backgrounds

Considering the descriptive analysis of the total DI questionnaire for PTs, how these results vary for their competencies when working with students from other cultures will be outlined in this section.

Table 3 Descriptive statistics of competency to respond the students across various cultural backgrounds

<i>Descriptive Statistics</i>					
	N	Minimum	Maximum	Mean	Std. Deviation
culture	65	1,67	4,67	3,5267	,68772
Valid N (listwise)	65				

The participants, on average, perceive themselves as competent in implementing DI for students with different cultural backgrounds with the mean value being 3.5 in implementing DI for students across various cultures. This indicates that the participants feel fairly competent with some variability.

In the qualitative data sources, the PTs reflected on their experiences regarding responding to students from other cultures. The PTs highlight the importance of recognizing and being sensitive to cultural differences in their classrooms, not just among students from different countries or ethnicities but also among students from diverse regions within Türkiye. This awareness allows teachers to address the unique needs and perspectives of all students. The reflections

below demonstrate a commitment to cultural inclusion by adapting teaching practices to celebrate diversity, promote empathy, and create a welcoming classroom environment. These practices help students appreciate different cultures and develop a shared sense of community. The quotes in question are presented below.

We need to pay attention if there are students from different cultures in our class. If there is, we should be a little more sensitive. However, we need to think not only about different races but also about cultures from different regions living in Türkiye. In other words, the culture of the child living in the Mediterranean region may be different from the culture of the child living in the Black Sea region. We can pay attention to these in your lesson plans. (Int).

I make arrangements in the classroom environment to make them feel included in subjects that reflect their own culture, such as hanging items related to their culture on the wall, marking students' cultures on the world map, and drawing attention to the globality of our class. (Int)

Pair work and drama studies have contributed greatly because they develop empathy skills in children. Sometimes I ask them to give examples from their own culture. Hearing different things attracted the attention of the whole class and gave our foreign students a sense of belonging. (Int)

Yes, although not most of the time, I tried to include differentiation as much as I could, brought clothes from other cultures to the classroom, tried to use different visuals and attracted the attention of the students. (RJ1)

It is imperative to establish a common point between different cultures and East-West syntheses and place this awareness in them. After all, English is a world language, and we do not take sides in it. (Int)

In conclusion, the data underscores the importance of cultural sensitivity and inclusivity in the classroom. The pre-service teacher's reflections reveal a conscious effort to acknowledge and incorporate the diverse cultural backgrounds of students. They display specific strategies such as bringing cultural items, integrating cultural references, and fostering empathy through group work. On the other hand, one participant, Gizem teacher, indicated this subject as follows;

So, there is no need to lie. Since the class we teach is large and we cannot do one-on-one research with all of them, I look at the general cultural structure; I act according to the majority. (Int)

This highlights the balance pre-service teachers face between the ideal inclusive practices and the realities of classroom management. Due to class size constraints, addressing the needs of foreign students can be difficult. However, the challenges of implementing DI for foreign students are not limited to these.

Trying to convince foreign students who did not want to come to school was the most difficult. I still haven't succeeded. Because children feel stuck and overwhelmed between different cultures. (RJ2)

I feel sad when I see a few foreign students like that in my class. You know, the child doesn't understand Turkish yet. You are trying to teach English to someone who does not understand Turkish. There is nothing you can give him. It also bothers me when I see that those students are not cared for very much during the Practicum process. That's why we want to include those students, but how much can you do? (Int)

These students did not understand what I was saying because they spoke a different language than mine and did not know Turkish. We could not find a solution because there was nothing we could do. (RJ1)

Sometimes, I have difficulty in communicating. They don't fully understand English. Sometimes, they do not attend the class. First, I established healthy communication by making them like me, and then I ensured their participation in the lesson. (RJ1)

A participant, Canan teacher, emphasizes her experiences by highlighting the importance of communicating with students from diverse cultural backgrounds.

Actually, I think I am a little lucky in this regard, because I grew up in a different culture for the first 10 years of my life, and in a different culture in the West for the last 10 years of my life. I think I have some control over both sides. If I somehow feel that the students are close to the East, I can talk to them a little more in a way that they can understand. So, this is not just about using accents; somehow, if I know something that the student knows, he can feel close to me. So, I'm trying to establish a little more emotional closeness at this point. (Int)

This bicultural experience allows the pre-service teachers to interact effectively by using cultural references that resonate with the students, which fosters a sense of trust. She is in the role of cultural mediator who bridges the gaps between different cultural understanding with a sense of empathy.

The data indicates the challenges faced by pre-service teachers, including the difficulty of addressing individual cultural needs in large classes and the complexities of engaging foreign students who may feel overwhelmed by cultural differences. The language barrier, on the other hand, is another level of difficulty as the pre-service teachers feel helpless under this responsibility, and incompetent to address them within twenty minutes of instruction time. In conclusion, despite all the challenges that the participants face, they still recognize the necessity to differentiate instruction accordingly.

3.2.2 DI Implementation for Inclusive Students

Although the DI questionnaire did not include specific items addressing the competencies of pre-service teachers in managing inclusive students, this topic emerged organically in the participants' reflections during interviews and journal entries. These reflections provide valuable insights into how PTs navigate the challenges of inclusive education within the context of differentiated instruction. One participant's journal entry illustrates the proactive approach taken toward inclusivity:

Yes, I included it (for DI strategies). In some of our classes, there were inclusive students and students from different cultures. We supported these students in the classroom and prepared separate exams for inclusive students. (RJ1)

Another participant highlighted the individualized attention given to students with diverse needs;

One student had a learning disability, and one was an inclusion student. Each of them is very valuable, so I aimed to take various features into consideration as I wanted them to be given extra attention. (RJ1)

Further emphasizing the importance of supported classroom environment, PT observed:

The important thing is to be more friendly towards the silent inclusion students and to ensure that their focus is on me, the teacher, both inside and outside the classroom. (RJ1)

Additionally, one participant reflected on the necessity of personalization in instruction:

I realized that it is not important, but necessary to prepare different and personalized materials and lesson plans for each special education student. (RJ2)

These reflections underscore the emerging understanding among pre-service teachers of the significance of differentiated instruction in addressing the needs of inclusive students. Despite the DI questionnaire not explicitly covering this area, participants' experiences during their practicum revealed an intuitive recognition of the importance of personalized and adaptable teaching methods for diverse learners.

The implications of these reflections are noteworthy. They suggest that, through their practicum experiences, PTs are developing an awareness of the complexities inherent in applying DI in inclusive classrooms. The entries indicate a growing recognition of the need to establish a fair and inclusive learning environment that addresses the varied needs of the students, including those with learning disabilities and from varied cultural backgrounds. This realization is critical, as it emphasizes the necessity of preparing differentiated materials and adopting inclusive practices to ensure that all students obtain the attention and support they need to succeed.

In conclusion, the reflections from the PTs highlight the challenges and the importance of implementing DI strategies for inclusive students. They recognize the value of each student and the necessity of adopting a personalized approach to instruction. These insights suggest that while pre-service teachers may not have initially been trained explicitly for inclusive classrooms, their practicum experiences are fostering a deeper understanding of the principles of DI and its application in real-world educational settings.

3.2.3 DI Implementation for Students with Different Language Abilities

The quantitative results of the questionnaire items asking about the efficacy of dealing with students with different abilities will be presented below.

Table 4 Descriptive Statistics of the Competency in Dealing with Students with Different Language Abilities

<i>Descriptive Statistics</i>					
	N	Minimum	Maximum	Mean	Std. Deviation
ability	65	2,60	4,80	3,8146	,45738
Valid N (listwise)	65				

The data presented shows that there is a reasonably high level of self-reported competency among respondents when dealing with students of varying language abilities, with a moderate amount of variability in their responses. This indicates that while most respondents feel quite capable, there are differing levels of perceived competency among the group, with the mean score being 3,8.

In line with these findings, journal entries and interview transcripts demonstrate consistency. For example, one participant, PT Büşra, highlights the challenge of implementing DI alongside other strategies. Although this excerpt was previously cited in section 4.2, it is also relevant to the central theme of this section, illustrating the practical difficulties and the varying degrees of confidence among pre-service teachers in applying DI effectively.



It was not easy to prepare and provide materials that appealed to all learning styles, different language abilities and different interests at the same time. (...) At the same time, their levels are low. It was also difficult to simplify the instructions and the language I used when speaking for the students. For this reason, I tried to use visual clues, gestures and facial expressions to make it easier for them to understand. Besides, some classes were more active and more difficult to manage. It was necessary to make changes in the activities for such classes. Activities that would cause them to become very active did not go well in these classes. (RJ2)

This excerpt reveals the adaptive strategies employed by the PTs, suggesting a well-rounded picture of the teaching environment. Likewise, some participants seem to have an understanding of diverse student abilities and are capable of differentiating instruction as needed. These strategies include modifying lesson plans, using a variety of teaching methods, and creating individualized materials to meet the diverse needs of their students. Such adaptability demonstrates a practical application of differentiated instruction despite the initial challenges they face.

Moreover, the following excerpts provide insight into how some participants have developed a nuanced understanding of the diverse abilities within their student populations. These pre-service teachers showcase their ability to modify instructional methods to accommodate a diverse array of learning needs. This includes adjusting the pace of lessons, offering additional support to individual students, and designing alternative assessments to ensure all students have the opportunity to demonstrate their understanding. Their reflections illustrate a

thoughtful approach to differentiation, indicating an awareness of the complexities involved in addressing varied learning preferences and abilities in the classroom.

I realized that not every student learns in the same way. While some students learn quickly, others can learn slowly. Therefore, there is a need for more and varied activities. (RJ1)

I ensured the participation of students with varying levels of needs in the class by creating activities that would appeal to and engage everyone. I brought materials that would enhance their motivation and capture their interest in the classroom environment. (RJ2)

The biggest problems were the lack of attention and understanding of the subject. To address these issues, we tried teaching specific students using different methods and engaging their interests. The music and video materials were especially helpful to us. (RJ1)

Providing materials and explanations that match their levels is very important. When the material is above their level, they struggle and tend to give up quickly. On the other hand, when it's too easy, they find it boring. Therefore, activities should be given at a level that matches theirs, but of course, slightly challenging. (Int)

The data presented reveal a generally high level of self-reported competency among respondents in managing students with differing language abilities, though some variability in responses exists. The insights from PTs, captured in their journal entries and interview responses, shed light on the strategies they employ to adapt their teaching to meet diverse needs. These reflections indicate a recognition of individual differences and a willingness to adapt to foster meaningful learning experiences. The participants' ability to identify and implement tailored instructional methods, such as varying activities, adjusting materials, and utilizing engaging resources, underscores their developing proficiency in differentiated instruction. This competence is crucial for creating inclusive learning environments where all students are supported and challenged appropriately.

3.2.4 Differentiated Lesson Planning Abilities of Pre-service EFL Teachers

Since lesson planning is central to all activities undertaken by the participants, and all items essentially inquire whether they can design a differentiated lesson plan, each item in the DI Questionnaire represents a component of the overarching lesson planning framework. Consequently, the analysis results are detailed in

Section 4.2. However, the participants provided extensive feedback regarding the pre-implementation stage of a differentiated lesson, which is planning. Their insights have been thematically analyzed and are presented below.

The excerpts provided below offer a comprehensive view of varying abilities and perspectives regarding the preparation of differentiated lesson plans. Several PTs exhibit a high level of confidence and capability.

I tried to include different types of activities in my lesson plan, incorporating teaching and practices that appeal to the visual and auditory senses. I aimed at all language skills.” (RJ1)

A lesson plan can be prepared according to the students’ profiles. How can this be done? Those who are very quiet or unrelated to the lesson become the first to raise their hands when I try to create a playful environment. (Int)

I believe I can prepare a lesson plan, but first, it is necessary to get to know the students. A lesson plan can be prepared according to the students’ profiles. (Int)

A significant number of PTs acknowledge the difficulties they face in creating effective differentiated lesson plans, but they remain optimistic about overcoming the challenges with support.

I believe I can create a lesson plan, but of course, at the beginning, I also need professional support. I need to consult my friends or colleagues. In this way, I think I can create such a plan. (Int)

I observed my friends’ lessons in my practicum group and made a lesson plan. They struggled a lot to engage all the students. Participation was very low. So, I adjusted myself accordingly. (Int)

On the other side, some participants expressed challenges and a lack of confidence in their ability to prepare lesson plans.

If you ask me now, I don’t think I can create it. I don’t think I have enough equipment. (Int)

At this stage, I can’t say I can entirely create it, but in the future, with the help of the Internet or my colleagues, I will eventually do it. This is something I must do as a teacher. (Int)

The analysis of the excerpts reveals a spectrum of experiences and attitudes towards the preparation of differentiated lesson plans. There is a clear recognition of the need for guidance, especially at the early stages of their teaching careers. PTs

express a desire for mentorship, peer consultations, and professional development opportunities to help them overcome their initial struggles. Despite the challenges, several PTs remain optimistic about their ability to create such plans with support. They highlight the importance of collaboration with colleagues, observing peers, and using external resources like the Internet to enhance their skills.

3.2.5 Differentiated Material and Activity Designing Abilities of Pre-service EFL Teachers

Descriptive statistics of the DI questionnaire items regarding the competencies of PTs in creating differentiated materials and activities are presented.

Table 5 Descriptive Statistics of the Competency to Create Differentiated Materials and Activities

<i>Descriptive Statistics</i>					
	N	Minimum	Maximum	Mean	Std. Deviation
material	65	2,30	4,82	3,7940	,54025
Valid N (listwise)	65				

The average score of 3.7 suggests that PTs generally perceive themselves as having a relatively high level of competency, though there is notable variation among individuals. In line with these quantitative findings, participants have demonstrated the ability to create and utilize a diverse range of materials to accommodate the varied needs of their students. The following excerpts illustrate the perceptions of pre-service EFL teachers regarding the creation of materials and activities. They also highlight the diverse approaches these PTs implement to boost student engagement and accommodate diverse learning preferences within the classroom.

Additional materials should be developed to meet the needs of each student group and individuals, as their needs and learning objectives vary. (RJ1)

Activities can be prepared with more options. For example, instead of giving everyone the same writing activity in a writing session, it may be expected for each student to

engage in a writing activity in an area based on their interests. (RJ1)

When a method suitable for each student's interest and learning style is selected, I believe we can see an impact, and by providing additional visual support for some students and auditory materials for others, students' interest in the class will increase. (RJ1)

I prioritized preparing materials according to different learning styles, and I observed that these materials maximized classroom participation. I also saw that the richness of activities motivated the students. (RJ1)

The excerpts below highlight the importance of designing inclusive and engaging activities to address diverse learning styles and maintain student motivation. It reflects a shift towards student-centered, interactive teaching approaches that actively involve all students. They try to create localized activities.

Since not every activity caters to the learning styles of all students, some may disengage during lessons or activities, leading to a drop in motivation. It is essential to create activities that can appeal to and engage every student, thereby boosting their motivation. To address this, I designed a bingo game and prepared a reading passage about Koroğlu, a local hero in Bolu. (RJ1)

I adopted a student-centered approach. In the activities I organized, I used fun activities that addressed the needs of the students. Instead of using the presentation method while teaching, I used the discovery method. By involving each student in the lesson, I created a more active classroom environment. In my lesson content, I integrated the four basic skills into both my teaching and practical applications. (RJ1)

These reflections emphasize the pre-service teachers' commitment to developing and employing a variety of materials and strategies to meet the diverse needs of their students. The focus on creating activities that cater to different learning styles, interests, and motivational factors reveals a student-centered approach aimed at maximizing engagement and participation. The participants recognize the importance of individualized learning experiences, whether through the use of varied writing activities, incorporating visual and auditory supports, or designing interactive games. This ability to adapt teaching methods and materials to the unique requirements of each student underscores the PTs' growing

proficiency in differentiated instruction. Their approach not only fosters a more inclusive and motivating learning environment but also aligns with the principles of effective EFL teaching, promoting active involvement and skill integration.

As reported by the quotes above, the PTs express high expectations about differentiating the materials they are using. Likewise, most of the participants underscored the importance of incorporating group and pair work activities, as illustrated in the narratives below.

Students learn best from each other, and this positively affects their interaction in the classroom, so I prefer group activities.
(RJ1)

I believe that activities where students can express themselves more are necessary, I also believe that group work is beneficial for socialization. (RJ1)

I tailored the materials I used in class and our activities according to the needs of my students, selecting activities and content that they would enjoy. I included both individual and group activities.
(RJ2)

As reflected by the participants, a strong awareness of the importance of differentiating materials and employing various instructional strategies to meet the diverse needs of their students is demonstrated. The emphasis on group and pair work activities indicates an understanding of the value of peer learning and social interaction in the classroom. By fostering collaborative learning environments, these pre-service teachers aim to enhance student engagement and provide opportunities for students to express themselves more freely. This approach not only strengthens differentiated instruction but also cultivates a sophisticated classroom culture that encourages socialization and mutual support, essential elements in language learning and overall student development.

Besides, most PTs create their own differentiated materials under the belief that they are accountable for knowing the students' characteristics and needs. Consequently, they express their opinions about the development of original materials.

I believe it is crucial for us to prepare [materials] ourselves. We know the classroom. Those who prepare materials are people who do not know the students in the classroom, unlike us, who know

each student in the classroom. When we prepare the materials, there is a significant increase in students' performance. (Int)

When I looked at the materials prepared by teachers in the past, I understood why I got bored in my English classes. That's why I usually prepare them myself because I know the level of the class, which questions they will respond to, or where they will struggle. Therefore, materials prepared by others generally lack originality. (Int)

Almost all PTs designed activities and reflected their experiences in their journals. The variety of strategies, materials and activities that the pre-service teachers employed to integrate students with diverse needs are presented in the excerpts below.

I preferred larger fonts in the materials I use for students with visual impairments. For students with a slower learning pace, I prepared simpler and more reinforcing assignments and quizzes. (RJ2)

During the process, I developed materials encompassing different learning styles, predominantly targeting students' various preferences. Additionally, I provided them with the chance to select activities that best suited their individual needs. (RJ2)

Since fifth-grade students tend to be very active, I make an effort to incorporate physical activities into our lessons. I encouraged them to get up and actively participate by frequently inviting them to the board during most activities. (RJ1)

I utilized various teaching methods, such as creating interactive word cards, watching a video at the beginning of the topic, and having them create their own posters. (RJ1)

One dominant strategy that the PTs employ is incorporating technology with online tools. By incorporating technology-supported materials, they make lessons more dynamic and appealing to learners with different preferences. According to the PTs, the use of interactive and engaging activities not only caters to diverse learning styles but also creates an inclusive classroom environment where all students can feel involved and motivated.

By integrating technological tools and online exercises into the lesson, I developed activities such as videos, pictures, and games to increase student engagement and cater to their diverse needs. I primarily utilized technology-supported materials, such as smart boards, along with worksheets. When preparing activities, I made sure to include tasks that encompassed all four skills. (RJ2)

Differentiating instruction to address the various dimensions and forms of language, as well as catering to differences in difficulty levels, I believed it was necessary to develop a wide range of diverse materials and activities, including visual, auditory, physical, or interactive ones. Examples of such activities and materials could include reading passages, listening exercises, illustrations, and technological interactive activities. (RJ1)

Having mentioned the various strategies and activities utilized in the practicum lessons of the participants, some participants also raised concerns about the challenges they faced, including difficulties in acquiring materials and students' reluctance to try new materials.

I noticed that students were hesitant to accept unfamiliar approaches for a while. This is due to our educational system's culture. Because they have been accustomed to traditional classroom environments for a long time, students were relying on the outcomes of local committees. (RJ2)

I realized that obtaining materials that would appeal to every student could sometimes be challenging. (RJ1)

In summary, the descriptive statistics and reflective journal entries indicated that the participants demonstrated proficiency in designing differentiated materials to meet the needs of diverse learners. Their strategies varied, reflecting their belief in differentiation's importance and dedication to its practice. However, alongside these positive outcomes, some participants expressed concerns, particularly regarding the availability of suitable materials and student apprehension toward differentiated learning approaches. These concerns highlight the need to address logistical challenges and student acceptance as part of ongoing support for effective differentiation.

3.2.6 Differentiated Assessment and Evaluation Abilities of Pre-service EFL Teachers

The participants' abilities to use differentiated evaluation and assessment strategies are measured, and the results of the descriptive analysis are illustrated below.

Table 6 Descriptive Statistics of the Competency to Implement Differentiated Assessment Strategies

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
assessment	65	2,50	5,00	3,6500	,56292
Valid N (listwise)	65				

The mean score of 3.6 indicates that, on average, participants demonstrated a moderate level of ability in using differentiated assessment strategies. There was a variability in the scores, which shows that while some participants had higher or lower abilities, the majority clustered around the mean score. In line with these results, data obtained from the interviews provide further evidence about the real-world use of assessment.

Among strategies employed by the participants, observations emerge as the most common assessment method. The teachers who either use or regard it as the most effective have shared their insights and experiences as follows.

I preferred to conduct evaluations within the process. It is not just a single day or a single exam, but rather, it is observing how the student engages throughout the process. It is not just about how they speak or write, but also about how actively they participate in the learning process. For instance, I would sketch a student profile in my mind by observing, and then evaluating accordingly. (Int)

I mostly rely on observation-based assessments. I observe how students engage in the lesson, how each student participates, to what extent they engage, and how eager they are to participate. Essentially, I observe these aspects, and at the end of each lesson, I ask questions such as “What did we learn today?” or “What did we do today?” to gauge their understanding. Then, students provide me with feedback. (Int)

I conduct evaluations through observation because conventional methods measure things like class participation or who studies more or less diligently for knowledge. I believe that what is important is not just measuring knowledge but also measuring application. (Int)

The prevalent use of observational strategies highlights PTs’ emphasis on nuanced, process-oriented assessments. This paves the way for an exploration of another strategy employed, which is portfolios. Hereby are the excerpts regarding the portfolio technique.

Portfolios are essential to me because they show the beginning, the end, and what was done in the process, as well as what contributions were made and how the information was used. It is important to me to see if the provided information was utilized. (Int)

I would conduct process-oriented evaluations based on my own observations. For example, portfolios are more process-focused, which is better as they can provide better feedback. (Int)

A subsequent method is based on the preferences of the students and according to the necessities that emerge during the lesson. The participants who adjust their assessment techniques based on these requirements share their experiences.

Our exam formats may vary based on the sensory organs that students with special needs cannot utilize due to their disabilities. Whatever we assess in exams or measure in students, it should align with what we have actually taught. (Int)

It would be unfair to subject assessment of students with special needs to the same standards as other students. In fact, it entirely depends on the student. Whatever the students' needs are, I personally develop a customized system for them. (Int)

Before exams, I could have administered a diagnostic test. This way, I could easily pinpoint where students excel or struggle, making it easier for us to identify areas of difficulty. Let the students themselves tell us what they have not learned, and then we can adjust our approach accordingly. (Int)

Actually, self-assessment, which directly solicits their opinions, could have been another option. However, in this educational system, it may not be very feasible. (Int)

Some of the participants highlight the challenges associated with differentiating assessment through these narratives. PTs adopt practical strategies, such as quick assessment tools and focusing on participation, to manage these challenges. However, the data also points to a desire for more efficient and inclusive methods, like surveys, to better address the needs of all students.

Unfortunately, I have to address the majority of the students in a class of 30-40 students. I use exam systems that provide quick results. (Int)

Yes, definitely. I think the physical capacity of the classroom plays a crucial role when designing such frameworks. For instance, conducting performance assessments in a class of 15

students is different from doing so in a class of 35 students; the same methods may not be applicable to the teacher. Occasionally, I believe I could have used methods like surveys, which could yield quicker and more efficient results. (Int)

I mainly focus on in-class participation. Otherwise, it is impossible to measure different students. (Int)

In conclusion, there is a consistency between the quantitative and qualitative data. The analysis of pre-service teachers' abilities to implement differentiated assessment and evaluation strategies indicates a moderate overall competence, with a mean score 3.6. Based on the interviews, observational assessments emerged as the most prominent strategy, with participants emphasizing the importance of evaluating students' engagement and participation throughout the learning process. Portfolios were also valued. Additionally, some participants adjusted their assessments to accommodate the needs of the students with special requirements. However, challenges were noted, including large class sizes and time constraints.

3.3 Differentiated Instruction Strategies that Pre-service EFL Teachers Utilize

In this section, the various differentiated instruction strategies employed during the practicum are examined. The data revealing these strategies was derived from reflective journal entries and interviews. It should be emphasized that common strategies such as material and activity design will not be addressed here, as they were thoroughly analyzed in the preceding chapter. Instead, this section focuses on the subthemes of needs analysis, effective communication, and positive reinforcement and feedback. These strategies are discussed with excerpts obtained from the journal entries and interviews, providing insight into how pre-service teachers implemented DI in their classroom practices.

3.3.1 Effective Communication

Upon analyzing the qualitative data transcripts, it was found that the most frequently employed strategy was effective communication. Participants emphasized that if they believed in the potential to establish a rapport with each student in the classroom, they could provide better educational outcomes for them. Regarding this, hereby are their insights and experiences.

The most important thing is not to scare them and not to make them feel incapable. Because if they feel lacking in confidence,

especially students whose level is slightly lower, they tend to withdraw completely, and it can be much more difficult to regain their confidence compared to others. (RJ1)

At first, I acted like their friends and always kept smiling; the main purpose was to show that I was not an authority figure. I learned about their interests and talked about these topics whenever I went to each class. I also participated in their extracurricular activities, such as taekwondo matches or soccer games. (RJ1)

During breaks, I engaged in conversations with students in the classroom and communicated with them by practicing English whenever possible. When they saw me in the schoolyard, they started coming up to hug me. (RJ1)

Likewise, the data below highlights how building a friendly and supportive rapport with students can enhance their classroom engagement and confidence. By valuing individuality, fostering a non-intimidating environment, and addressing specific needs, PTs create a positive and inclusive learning atmosphere that promotes both academic and personal growth.

I, as a teacher, interact with students not just as a teacher, but more as a friend, utilizing conversation and chatting. Because when they see me as one of their own, their participation in the class, listening to the lesson, taking notes, and all of these aspects show a significant increase. (Int)

I did not put up big barriers between them and me. My first goal was to learn all their names, so that they would feel valued as individuals. I talked to them during breaks, sharing my humble opinions about the course and exams. (RJ2)

To capture their interest, and because the age groups are young, I try to progress by not intimidating them and by giving them the confidence that they will not encounter anything wrong if they make mistakes. (Int)

While in communication with them, I addressed my students' needs, I listened to them frequently, I went through a brief thinking process. I supported them in seeking help from their peers according to their needs, and I also requested assistance from the administration myself or as teachers. (Int)

As evident from the quotations above, the PTs underscored the importance of creating a supportive and non-intimidating classroom environment. EFL PTs were acutely aware of how sensitive students can be and showed a genuine interest in their emotional well-being of their students. This focus on fostering a positive

learning atmosphere reflected the participants' commitment to ensuring that students feel comfortable and valued. Additionally, there is a significant effort to address individual student needs, with participants actively seeking ways to provide further support and accommodations where necessary. This dedication underscores the participants' holistic approach to teaching, aiming to educate and nurture their students' personal and academic growth during the practicum.

3.3.2 Needs Analysis

The participants acknowledged the importance of recognizing the needs of the students and devising a plan according to those needs. Their insights support the idea of catering the educational practices to suit the students' needs, and their experiences highlight the positive outcomes observed in the students' progress after implementing a needs analysis. The quotations pertinent to these perspectives are presented.

Although the classes I teach are often quite crowded, I believe the most critical aspect is firstly determining the students' proficiency levels, and secondly, understanding their reasons for learning. Adjusting the instruction according to their goals, which can vary widely, does not seem particularly difficult to me. (Int)

Understanding the student is essential for creating lesson plans. Once I am familiar with all my students, I select activities that suit them and strive to explain the subject matter in a manner tailored to their needs. I believe that understanding the student is crucial for addressing their needs effectively. (Int)

Conducting surveys to determine the majority's interests in specific areas proved to be highly beneficial. I also found it useful to gather feedback from students to understand what they find interesting or engaging. This method helps us grasp what captures their attention and what does not. (RJ1)

I believe it is essential to get to know the students first. Conducting a needs analysis can undoubtedly aid in this endeavor. Materials and activities can then be tailored based on the responses we gather from the students. (Int)

Besides the needs analysis strategy, Erdem teacher explains the importance of diagnostic tests as well.

I think it is necessary to conduct diagnostic tests. After administering diagnostic tests, we can determine the needs, preferences, and the condition of each student. Based on this information, it is important to plan activities accordingly. (Int)

The findings indicate a collective recognition among participants regarding the significance of assessing the students' needs and using educational approaches accordingly. Insights gathered from the data emphasize the role of understanding the proficiency levels, reasons for learning, and the interests. Their approach to do this is employing surveys and getting feedback from the students. These perspectives illuminate that the common ground is the commitment to student-centered practices.

3.3.3 Positive Reinforcement and Feedback

In the classroom, the students need motivation and a feeling of joy. The participants also highlighted the strategy of using positive reinforcement as it motivates the students to keep going and not to give up.

PTs focus on including foreign students in class activities by providing verbal support before asking questions. This scaffolding approach reduces anxiety and encourages active participation. Praising their efforts, even when mistakes are made, builds confidence and fosters a sense of belonging. PTs also use verbal praise (e.g., "well done" or "good job") and tangible rewards like stickers to reinforce desirable behaviors and achievements. PTs note the importance of taking a personal interest in students. By providing focused attention and acknowledging even small successes, they observe significant improvements in student engagement and cheerfulness. They shared their experiences about this notion as follows:

In my practicum, I have two foreign students. I generally strive to encourage their participation in class. If I am going to ask a question, I first try to provide verbal support to them. If they make mistakes, I try to encourage them by praising them with words like "well done" or "good job" to boost their confidence. Eventually, by doing so, they started to do their homework and developed an intrinsic motivation towards the class. (Int)

I provide feedback and can sometimes give stickers. Even when they correct a small portion of their mistake, I try to provide positive reinforcement as a form of encouragement. (Int)

In my classroom, I observed a definite increase in a child's interest when I provided positive verbal reinforcement, especially when I took a particular interest in them. I witnessed this firsthand. I noticed that when I paid a bit more attention to the child, they became more cheerful, and I realized that my acknowledgment of their success was more effective. (Int)

During practicum sessions, I communicated with each of my students, boosting their motivation and increasing their participation in the class. I never neglected the use of reinforcement. (RJ2)

These results indicate that participants acknowledge the value of motivation and employ strategies to encourage students to maintain their engagement with positive reinforcement and feedback. They illustrate how verbal praise, feedback, and other forms of reinforcement contributed to students' participation.

3.4 The Perceptions of the Pre-service EFL Teachers on the Use of Differentiated Instruction

This present study aimed to find out the perceived effectiveness of DI implementation by PTs during their practicum. In order to elicit answers, the questions are asked during the interviews and in the reflective journals.

Before delving into the experiences of the participants, it is noteworthy to clarify their understanding of the term DI, as their perceptions are formed on an accurate comprehension of the concept. To this end, the researcher inquired about the participants' understanding of DI during the interviews. Presented below are the responses from those who demonstrated an accurate comprehension.

In the class we teach, there are different students. Their backgrounds may vary, and their learning styles and their needs may differ. It can be defined as an educational model that we provide to suit these differences.

Differentiated instruction is a process that can be defined by acknowledging that if there are 30 people in a class, each of them has different desires, expectations from us, and learning styles. In this context, I can describe it as the process that addresses these differences.

When I consider differentiated instruction, what comes to mind is an educational system that accounts for the differences in students' prior knowledge and cultural backgrounds, aiming to address and adapt to these various levels of differences.

In our class, there are children with different types of intelligence and from various cultures and backgrounds. It is not feasible to prepare a separate lesson plan for each one, but through certain adaptations and modifications, we try to make the activities suitable for them. I can describe it as a term that allows for the differentiation of activities.

When the definitions of the participants are compared to the definition of DI by Santangelo and Tomlinson (2009), which is the practice of designing and adapting learning experiences to meet the unique needs of individual students in order to ensure their success, they show a similarity particularly in the aspect of meeting the needs of individual students. Conversely, some participants exhibited misconceptions about DI.

It may be the involvement of social media content that is more modern and focused on contemporary life.

It could be a type of education where students are more active, and technology is integrated.

I would describe it as education centered around conversation.

I can define it as innovation. I can't think of anything else.

In conclusion, the responses revealed understandings that were notably aligned with Santangelo and Tomlinson's (2009) definition of differentiated instruction, as well as misconceptions influenced by modern social media content and notions of innovation. Overall, the responses demonstrated a spectrum of understandings among the participants, highlighting both accurate perceptions and areas of misunderstanding.

Having discussed the participants' understanding of the term of DI, it is crucial to consider their insights regarding its effectiveness on student outcomes, particularly within the EFL context. Reflective Journal 2 (RJ2) completed at the end of the practicum, prompted participants to share their thoughts on the effectiveness of DI. The excerpts regarding their perceptions are varied; some view DI as highly effective, while others emphasize the challenges related to its implementation. The perspectives of those with affirmative views are presented below.

Yes, I think it is effective because considering students' individual differences while teaching motivates them more and encourages their engagement in the lesson. Each student is unique in many ways; each student is a flower. They have strengths and weaknesses. Being aware of this, we should get to know and discover our students, making our lessons more effective.

Yes, I definitely think that differentiated instruction methods are effective in my classroom. The simpler and more reinforcing

quizzes, assignments, or exams that I prepare for my students with learning difficulties or those in inclusive education have significantly improved their motivation and learning.

Each student is different from the other and has various areas in which they are good. I have observed that when the lesson delivery and materials are tailored to suit my students, class participation improves, making the lessons more productive and enjoyable. Additionally, this approach mitigates the disadvantage of having a high number of students in the class.

Yes, I think it is effective. I believe using different and varied materials in teaching increases interest and motivation. As interest and motivation increase, so does participation.

I have noticed that every variation of differentiated instruction I apply in my classes is beneficial for the students. By being exposed to different instructional methods within the classroom, students experience variety and freshness, which in turn increases their participation.

PTs also question the practicality of differentiated instruction in some conditions, suggesting that while the concept is ideal in theory, it may not be realistic in practice under their current circumstances. Limited time, logistical constraints, and feelings of inadequacy hinder their ability to address the diverse needs of students effectively. While PTs strive to provide inclusive education, the realities of their teaching environments often force them to prioritize practicality over idealism, leaving certain groups of students overlooked. The participants who view it as ineffective are outlined above.

I do not consider myself proficient in implementing differentiated instruction very effectively due to the overcrowded classrooms. Teaching according to the interests and needs of each student in a class of 40 is quite challenging, and even if I attempt to do so, we encounter difficulties in terms of time.

To be honest, despite my efforts, I don't believe I am successful in my attempts. Besides, I don't think it is realistic.

I do not believe it is used very effectively; it was difficult for foreign students in the class to adapt to it.

The overcrowded classrooms and limited time were significant issues. Given the time constraint, I often felt pushed to prioritize the majority in my lesson planning, leaving me with an internal sense of neglect towards the other group.

In conclusion, the discussion encompassed a range of viewpoints regarding the impact of the application of DI in EFL classrooms. Participants emphasized the obstacles resulting from overcrowded classrooms and time constraints. While some participants expressed their confidence, others voiced skepticism regarding its feasibility. All these insights collectively underscore the multifaceted structure of DI within diverse classroom settings.

3.5 Conclusion

The aim of this study was to perform a case study to achieve a comprehensive understanding of the current competencies of EFL pre-service teachers in implementing differentiated instruction. It aimed to explore the specific strategies they employ to differentiate their instruction and to capture their perceptions regarding the use of DI in their teaching practice. This chapter presents a detailed analysis of the collected data, highlighting the key emerging themes. The organization of this chapter is structured around the research questions, offering a coherent framework for interpreting the findings in relation to the study's objectives. The results of the subthemes show a variety of responses from participants who support DI with strategies they employ and the self-criticism they make, while some are not competent in differentiation due to the mentioned constraint. Overall, the findings offer a comprehensive view of each theme.

4. DISCUSSION

This chapter presents an extensive examination of the findings and contextualizes them within the existing literature and concludes the study by presenting pedagogical implications, limitations of this study, and suggestions for future research based on the results obtained. The primary aim of this study was to investigate the competencies of PTs in implementing differentiated instruction for diverse groups of learners during their practicum. The study examined pre-service teachers' perspectives and abilities concerning DI using a combination of qualitative data sources—pre- and post-reflective journal entries, semi-structured interviews—and quantitative data from the DI questionnaire.

Participants were asked to share their observations and experiences during the practicum, with a particular focus on how they addressed their students' diverse needs and learning styles. The analysis revealed several key themes and subthemes related to the pre-service teachers' implementation of DI. The main themes included effective communication, needs analysis, and positive reinforcement and feedback. Each of these themes encompasses various subthemes that reflect the multifaceted nature of DI and the strategies employed by PTs.

The effective communication theme highlights the importance of clear and meaningful interactions in the classroom, enabling students to better engage with the content and with each other. The needs analysis theme emphasizes pre-service teachers' efforts to assess and understand the individual needs of their students, allowing them to tailor their instructional approaches accordingly. The theme of positive reinforcement and feedback focuses on the strategies used to motivate and encourage students, reinforcing their learning and fostering a supportive classroom environment.

The figure below, titled “EFL Pre-service teachers' DI competency matrix,” offers a comprehensive summary of these themes and subthemes. This matrix visually encapsulates the competencies and strategies pre-service teachers employed during the practicum, illustrating the range of skills required to effectively implement DI. It presents a holistic view of how pre-service teachers navigate the complexities of meeting diverse learner needs, from developing

targeted materials and activities to fostering an inclusive and engaging classroom atmosphere. This chapter will further discuss these findings in relation to the existing literature and provide answers to the research questions.



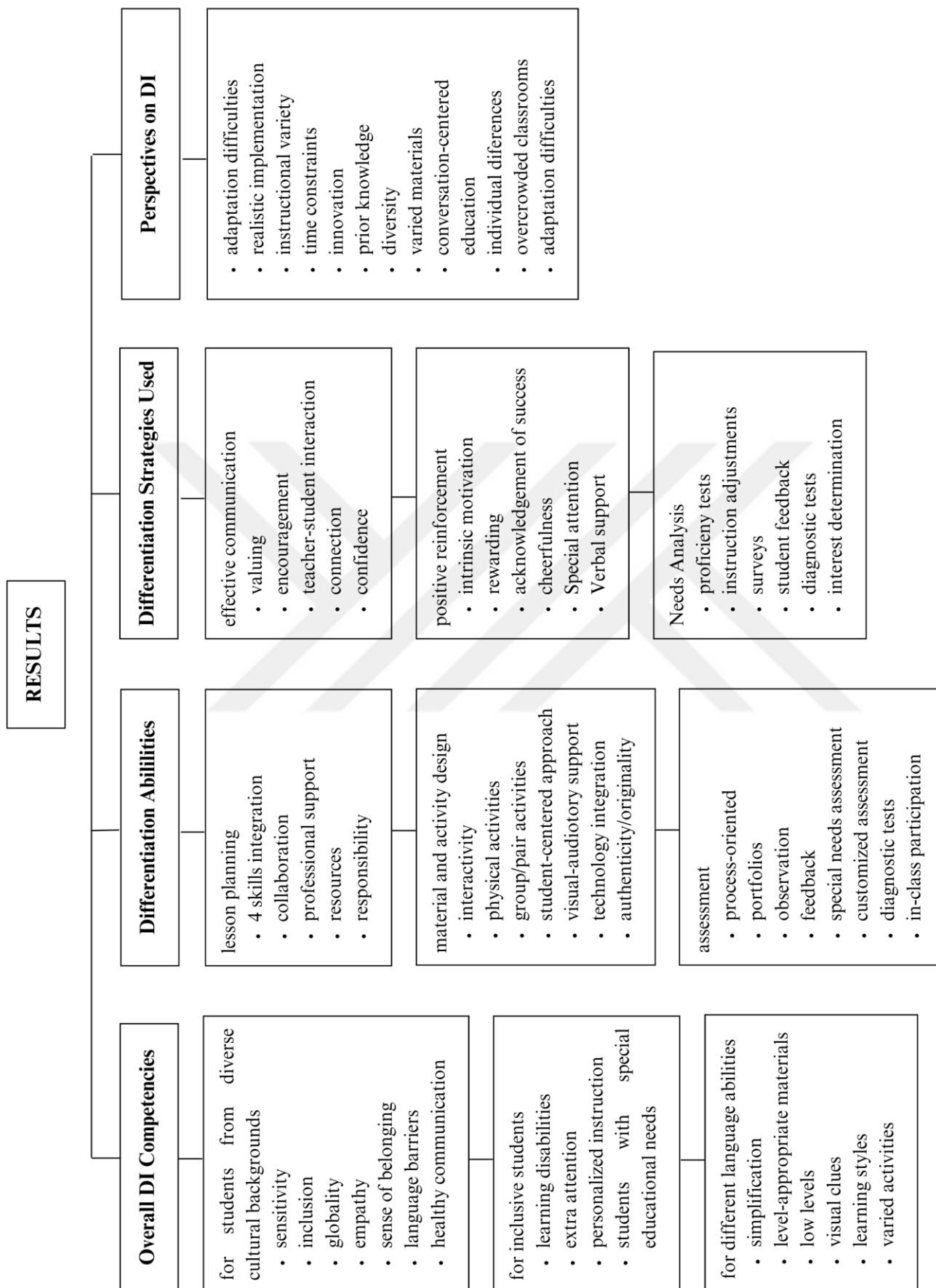


Figure 5 EFL Pre-service Teachers' DI Competency Matrix

4.1 The Current Competencies of EFL Pre-service Teachers on the Implementation of DI

The DI questionnaire assessed 65 PTs, showing a mean competency score of 3.7 with moderate consistency. Reflective journals revealed that teachers recognize the need for DI but face challenges such as large class sizes and limited time, leading to generalized rather than individualized approaches. Despite concerns about engaging each student and misconceptions about DI, some teachers were motivated to create inclusive lesson plans.

In line with these findings, studies show that even though successful implementation of DI leads to higher student achievement, increased student interest, intellectual growth, and satisfaction with the lesson when compared to traditional methods, the challenges such as significant amount of time required for planning and research are quite apparent (Joseph et al., 2013; Obrovská et al., 2023; Santangelo & Tomlinson, 2009; Sukarno et al., 2024). Likewise, holding a high belief in the successful implementation of DI will result in higher self-efficacy, thus, resulting in higher classroom engagement, as stated by Scarparolo and Subban (2021). Regarding the pre-service teachers' understanding of the term "differentiated instruction", this study found a range of conceptions. Some participants demonstrated accurate definitions, whereas others exhibited misconceptions. Nepal et al. (2021) found that pre-service teachers had an inadequate understanding of differentiation and its concepts, despite its emphasis on their training. They further suggested a need for further research on preparing pre-service teachers for inclusive practices. Nepal (2021) also conducted a dissertation study on the understanding of DI by pre-service teachers and proposed that pre-service teachers frequently perceive DI as a strategy for struggling learners rather than a broad, inclusive philosophy, and most participants relied on procedural knowledge and exhibited multiple epistemic beliefs. This can be interpreted as teacher education programs need to shift their focus to foster deeper conceptual knowledge and critical thinking skills. Another study by Joseph (2013) found that though most teachers grasp the concept of DI, primary school teachers and those with approximately 10 years of experience demonstrated better understanding than secondary school teachers and those with over 20 years of experience. This

indicates that for pre-service teachers to demonstrate competency and understand DI completely, they need experience and training.

It can be concluded that teachers confront the difficulty of catering to diverse student needs, and while differentiation is important, too much can be counterproductive (Marshall, 2016), and inclusive education is often seen as an extra burden that increases the workload and resource demands (de Jager, 2013). Nevertheless, Tomlinson (2006) suggested that, as with any innovation, implementing new teaching practices and classroom routines can be challenging and may not go smoothly initially. The paper further claimed, despite challenges, that it is important to stay focused on desired results in order to continue progressing professionally rather than reverting to old habits. There is no such thing as it is early to do so because, as the agents of change, teachers have the responsibility and vision to proceed professionally. However, they should feel the support of administrators and academics. Without a proper teacher education program that incorporates both theoretical and practical training, it cannot be assumed that pre-service teachers will internalize the ideas of inclusion and diversity, thus implement DI effectively.

4.1.1 DI Implementation for Students with Different Cultural Background

The DI questionnaire showed an average competence ($M = 3.5$) for handling diverse cultural backgrounds. Interviews and reflective journals revealed teachers strive for inclusive classrooms using cultural references and empathy-building activities but face challenges such as large class sizes, language barriers, and engaging overwhelmed foreign students. Despite obstacles and a lack of multicultural education in Türkiye, most participants valued cultural sensitivity and differentiation in their practices.

In line with this study, existing research highlights similar challenges that teachers encounter, such as language barriers, emotional readiness, assessment literacy, and classroom management (Gay, 2015; Lew & Nelson, 2016; Neophytou et al., 2020). These challenges can significantly impact the effective implementation of DI, as teachers need to navigate these complex factors while trying to meet the diverse needs of their students. Addressing these issues is crucial for developing a more comprehensive understanding of DI and supporting teachers in creating inclusive and effective learning environments. As a matter of fact, the

underachievement of students from diverse backgrounds often stems from systemic issues within schools and society rather than individual or familial shortcomings (Valiandes et al., 2018). Therefore, in order to overcome the challenges, a holistic approach should be developed that can help understand cultural diversity and differentiation. Santamaria (2009) demonstrates that DI and Culturally Responsive Teaching (CRT) can complement each other to enhance teaching practices and student outcomes. In her study, she pointed out that DI guidelines prioritize clarifying key concepts, fostering critical and creative thinking, engaging all learners, balancing teacher-assigned and student-selected tasks, and using assessment as a teaching tool. These guidelines align with CRT indicators, which encompass academic achievement, cultural competence, and sociopolitical awareness. Classroom examples illustrate the integration of DI and CRT, such as using culturally responsive materials and scaffolding content to support diverse learners. Teachers employ various strategies such as flexible grouping, culturally relevant examples, and assessment data to inform instruction, ensuring that all students can succeed. Thus, the successful application of culturally responsive differentiated instruction can be possible.

A primary objective of all education faculties is to guarantee that teacher candidates cultivate effective teaching skills. It is important for candidates to know what, how, and when to teach while also fostering a democratic learning environment that respects and values students' cultural differences. On this matter, Çoban et. al. aimed to identify the perspectives of non-thesis master's degree teacher candidates on cultural differences. Results indicate that candidates are generally regarded as having favorable attitudes towards political and religious views, gender roles, sexual orientations, economic status, and disabilities, and are viewed as tolerant and impartial.

Contrarily, Halpern et al. (2022) comment on the issue of teacher preparation programs lacking a strong emphasis on cultural competence, noting that while these programs often include coursework on English for Speakers of Other Languages (ESOL), they typically focus more on linguistic rather than cultural responsiveness. The researcher further concludes that cultural competence is crucial in teacher preparation programs to foster transformative educational practices that challenge dominant cultural norms and better serve multicultural and multilingual

students. Incorporating cultural competence into teacher training is not just about adding a new set of skills; it is about shifting the mindset of teachers to embrace diversity as a strength rather than a challenge

To accommodate the needs of students from diverse cultural backgrounds and the needs of prospective teachers who feel incompetent and overwhelmed in culturally diverse classrooms, key teacher roles should be introduced in supervision sessions. The roles include cultural organizers, cultural mediators, and orchestrators of social contexts for learning (Gay, 2018, p.88). These identities will create an experience for teacher candidates when demonstrated through effective and real-life-like applications. Ultimately, the roles will empower teachers to navigate cultural complexities and ensure that every student feels valued and included in the learning process.

4.1.2 DI Implementation for Inclusive Students

The study participants shared their experiences and perspectives on using strategies to differentiate instruction for students who require special education. They emphasized the need for personalized support and lesson plans, while acknowledging the challenges of implementing theoretical concepts in real classrooms. Their reflections underscored the importance of inclusive practices and DI to support every student effectively, which is consistent with the remarks of Strogilos (2018), who suggests that despite the challenges, such as teachers' lack of content knowledge, time constraints for curriculum adjustments, and inadequate resource utilization, DI has proven beneficial, improving student engagement and reducing management efforts when effectively applied. Devi (2023) similarly commented on the importance of recognizing that students with disabilities possess distinct strengths, weaknesses, and learning preferences; thus, differentiated teaching is crucial for meeting the diverse needs of enrolled students. This approach fosters an inclusive environment that supports intellectual, social, and emotional growth by tailoring education according to each student's unique characteristics. All in all, DI underscores the importance of inclusive educational practices that foster authentic academic progress for students with special educational needs within the general curriculum framework (King-Sears, 2008).

Specifically, on EFL teachers' attitudes towards inclusive students, Savic and Prosic-Santovac (2017) found different results, revealing that in 96 primary English teachers, 87.5% of respondents had negative attitudes towards inclusion, primarily due to insufficient training and inadequate conditions for effective inclusive practice. Only 29.16% had received specialized training for teaching SEN (students with special educational needs) children, while 69.79% reported having SEN teams in schools, which often met irregularly. Likewise, Chan and Lo (2016) investigated the responses of three EFL teachers in Hong Kong to the Education Bureau's inclusive education policy and concluded that there is limited guidance from schools or official bodies. However, the participants developed inclusive practices through reflection and daily classroom experiences while struggling with their roles as inclusive practitioners due to limited support. Considering all relevant factors, effective language instruction necessitates adapting methods to meet the individual needs and preferences of SENs.

In Türkiye, Special Education and Inclusion are integral and mandatory components of education faculties and pedagogical certification programs (CoHE, 2018). Even though these courses provide a comprehensive understanding of the theoretical foundations of special education and consultancy practices, it is necessary to complement these theoretical foundations with extensive hands-on experience and practical training. Integrating real-world scenarios and direct interaction with diverse student populations into the curriculum ensures that pre-service teachers not only understand the principles of special education but also effectively apply them in various educational settings. While Special Education Teachers undergo extensive and specialized training to address a broad spectrum of needs, it is imperative that all teachers, including those in EFL contexts, acquire essential practical knowledge to effectively integrate tailored instruction for SENs.

Teaching language to students with autism spectrum disorder, ADHD, or hearing impairments should not be overlooked; however, for such instruction to be effective, teachers must possess a high level of competence and confidence in their ability to address the needs of these learners. This competency is crucial because the success of language instruction for SENs heavily depends on the teacher's ability to adjust their instructional approaches and techniques accordingly. Therefore, it is essential that teacher training programs not only cover the

theoretical aspects of special education but also emphasize practical strategies and skills. This approach ensures that all teachers, particularly pre-service teachers, are well-prepared to provide inclusive education, ultimately enhancing the effectiveness of teaching practices and fostering a more supportive learning environment.

4.1.3 DI Implementation for Students with Different Language Abilities

The questionnaire indicates high self-reported competency in managing students with diverse language abilities, with a mean score of 3.8 and moderate variability. Journal entries and interviews show that while pre-service teachers acknowledge the challenges of DI, they employ adaptive strategies. These include modifying lesson plans and using diverse teaching methods to meet students' needs.

In parallel with this study's findings, Şallı-Çopur (2005) discussed the challenges in mixed-ability classes. The researcher suggests strategies to address these challenges, such as using multisensory materials, creating contingency plans for early finishers, offering open-ended tasks, personalizing activities, using games and group work, assigning extra homework, and implementing portfolios. Moreover, Treko (2013) claims that teachers must adapt strategies to their specific classes, especially in multilevel settings, where there are no perfect solutions. Recognizing the benefits of multilevel classes and involving students in their own assessment can enhance teaching effectiveness. Classroom interactions also play a crucial role in mixed-language ability classes. Soto Gordon (2012) found that lower-level learners gain hope by seeing advanced students as role models, while advanced learners empathize with beginners in her study conducted through interviews, observations, journals, and questionnaires with 6 participants. This interaction fosters cooperative learning and supports the development of student identity.

Conversely, Salerno and Kibler (2013) found that pre-service teachers often provide limited and simplistic descriptions of linguistically diverse students, focusing more on behaviors and family backgrounds than on specific linguistic needs or using students' languages and families as resources. While some PSTs show an emerging understanding and better strategies, many lack a comprehensive approach. Another study conducted by Kanevsky (2011) investigated high and low-

ability students' preferences and explored that both groups preferred controlling their learning pace, topics, methods, and colleagues, and disliked catching up after absences or working with quicker peers. Kanevsky (2011) further noted that teachers should establish reciprocal relationships and emotional comfort in successful learning environments and called for a differentiated curriculum to meet individual preferences. Thus, integrating these varied strategies and insights underscores the importance of a responsive approach to teaching in mixed-ability and multilevel classrooms, where flexibility and personalization are key to fostering a supportive learning environment.

Tomlinson et. al. (2003) emphasized that effective differentiation in education involves a proactive, systematic approach to adapting curriculum and instruction to meet diverse student needs. Achieving effective differentiation demands a deep cultural shift in education, involving a comprehensive transformation of teaching practices and systemic support. This transformation requires commitment from all stakeholders to continually reflect, adapt, and develop practices that respect the individual needs of students.

The findings revealed the significance of continuous and targeted professional development as well as reflective practices during practicum and initial teacher education. This professional growth should be complemented by systematic reflective practices to evaluate the impact of these strategies on student learning and implement necessary adjustments. Furthermore, necessary resource allocation must be ensured so that PTs can access multisensory tools, adaptable lesson plans, and other necessary materials. Moreover, establishing mentorship or supervision systems to offer continuous support and feedback to teachers as they implement DI strategies in their classrooms is essential.

4.1.4 Differentiated Lesson Planning Abilities of EFL Pre-service Teachers

The analysis of pre-service teachers' feedback on preparing differentiated lesson plans revealed a range of experiences. Some participants expressed confidence in incorporating diverse activities and adapting lessons to student profiles. Others acknowledged their difficulties and lack of confidence, highlighting the need for professional support and resources.

In accordance with this study's findings, Maia and Freire (2023) explored the link between teachers' beliefs about curriculum planning and the challenges they face in executing differentiated instruction. Through an in-service training program lasting a school year and involving six teachers, data from reflective portfolios, interviews, and lesson observations revealed that teachers became more aware of and reflective of their mindsets when tasked with planning differentiated lessons. Supporting this, Alanazi (2019) found that pre-service teachers' lesson plan designs vary greatly based on their knowledge and competency levels. Many relied heavily on readily available web resources, often neglecting to develop their own materials, leading to difficulties in effectively executing their plans. While some PTs demonstrated creativity and communicative competence, others struggled due to a lack of rehearsal and over-reliance on prefabricated materials. Furthermore, Chien (2015) collected data through an analysis of 46 undergraduate students' lesson plan designs and teaching practices in elementary schools. The study found that undergraduate students, through a TESOL Methods course, progressed from having no knowledge of differentiated instruction to successfully implementing tiered worksheets in elementary school English classes. Highlighting the importance of lesson planning competence, Pang (2016) claimed that this competence is key to quality teaching. It is developed through a cycle of reasoning about the subject matter, gaining a new understanding of the content, experimenting with transformation processes, and learning about students. Likewise, Mundy-Henderson et al. (2023) found that by teaching how to create effective lesson plans early in their coursework, pre-service teachers can practice and improve before they start teaching. The researchers suggested that revising the program's lesson plans to focus on differentiating instruction from the start helped pre-service teachers feel more knowledgeable and confident.

One respondent in the study noted that at the first stage of creating a differentiated lesson plan, they may need guidance and seek collaboration from colleagues and friends. When pre-service teachers engage in collaborative planning, they benefit from diverse perspectives and collective expertise, which can help them overcome initial uncertainties and refine their planning skills. Accordingly, Khoiriyah et al. (2022) found that collaborative lesson planning significantly shapes

pre-service teachers' professional identity, boosts their motivation and self-efficacy, and enhances their commitment to teaching, especially in online contexts.

In summary, these studies collectively highlight the critical role of differentiated lesson planning in initial teacher education. They emphasize the necessity for sufficient training, resources, and reflective practices to guarantee that pre-service teachers can proficiently design and implement differentiated instruction. It is also noteworthy that teaching focuses on what students should know, understand, and be able to do. Expert teachers continually deepen their understanding of their subject, which is crucial for effective curriculum planning (Tomlinson & McTighe, 2006). Constantly updating and refining teacher preparation curricula to incorporate current best practices into differentiated instruction and lesson planning are essential. Preparing lesson plans is one of the most basic and core elements of teacher education programs, but pre-service teachers should be familiar with crafting differentiated lesson plans as it would be inevitable to come across diverse classroom settings. Furthermore, Professional Learning Communities can be established for pre-service teachers to foster ongoing professional development and peer support. These communities can provide a space for sharing experiences, resources, and strategies related to differentiated instruction, especially by drawing on the experiences of previous pre-service teachers, which can offer valuable insights and practical guidance. By integrating comprehensive training, teacher education programs can better equip prospective teachers with the skills and confidence needed to create differentiated lesson plans and enhance overall teaching effectiveness.

4.1.5 Differentiated Activity and Material Designing Abilities of Pre-service EFL Teachers

The participants demonstrated a high level of competency in designing differentiated materials and activities, with an average score of 3.7. Their approaches, documented in reflective journal entries, include developing activities to meet diverse student needs, integrating technology, group and pair work, and using a variety of teaching methods to enhance engagement and participation. Teachers emphasize the importance of creating original materials specific to their students' characteristics and needs, while also noting challenges such as material

availability and student reluctance to adopt new methods. Overall, teachers' strategies highlight their commitment to effective, inclusive instruction.

In parallel with these results, Andrean (2023) outlines that the task of creating and modifying differentiated materials for English language classrooms is intricate and challenging process due to the need for real-time adaptation, access to high-quality materials, and ongoing professional development, yet teachers must embrace a learner-centered approach, utilize technology, and collaborate with peers to effectively support English language development. Teachers have an opportunity to choose between creating their own materials and activities and adapting or using the ones that can be found online. Most of the participants in the study preferred to design themselves to support originality and authenticity. Nevertheless, Tomlinson (2012) suggests that materials development in language education has significantly advanced; therefore, teachers are more critical and capable of adapting coursebooks to meet their learners' needs, especially in regions where they receive training in materials development. In relation, Yenmez and Özpınar (2017) found that pre-service teachers scored above average in differentiating materials, activities, and evaluation methods. They felt confident in adjusting these elements to match students' interests, preparedness levels, and learning styles. In contrast, Gaitas and Alves Martins (2016) found that the most challenging aspect for teachers in DI was the adaptation of activities and materials based on student characteristics. This domain involves differentiating the content and process of instruction to match students' readiness, interests, and learning profiles. Teachers struggle with this due to a lack of material resources, insufficient time, and inadequate training and skills in differentiation.

Most participants in this study indicated that they primarily benefit from technological tools for material design. While there is a recognized need to enhance teachers' skills in creating and adapting teaching materials, the Higher Education Council in Türkiye mandates a Teaching Technologies and Material Development (TTMD) course to keep teacher candidates updated with technology and develop new educational materials (Alım, 2007). However, this course is not specified for the teaching of foreign languages, and computer assisted language learning courses effectively raise pre-service English teachers' awareness and improve their attitudes towards using CALL tools (Akayoğlu, 2017). This is crucial because effective

material and activity design is central to differentiating language teaching instruction. For pre-service teachers to be able to design materials for students with diverse learning needs, CALL and TTMD courses should incorporate practical guidelines for the differentiation of teaching materials. By embedding these guidelines into teacher education programs, EFL pre-service teachers can foster a more equitable learning environment.

4.1.6 Differentiated Assessment and Evaluation Abilities of EFL Pre-service Teachers

Participants demonstrated moderate competence in using differentiated assessment strategies, with a mean score of 3.6. According to the interviews and reflective journal entries, observational assessments were most common, focusing on student engagement and participation. Portfolios were valued for tracking progress. Some assessments were adjusted for students with special needs, but the challenges included large class sizes and time constraints.

One of the most crucial aspects of DI is assessment, as it provides the necessary insights into student achievement through the effective implementation of DI. Differentiating assessment techniques allows students to demonstrate their performance in the best possible way they feel comfortable. Likewise, it is also essential as it focuses on how teachers use assessment data to plan lessons that help students progress from their existing levels of knowledge, understanding, and skills (Tomlinson & Moon, 2014). Consequently, teachers' ability to plan differentiated assessment processes and/or tools is key to ensuring that each student's individual needs are effectively addressed. In light of this and consistent with the findings of this study, Kaur et al. (2018) found that while teachers generally had an understanding of the basic principles of differentiated assessment, they struggled with its practical application. This difficulty is often attributed to external constraints such as large class sizes and limited time. These challenges hinder the ability of teachers to implement differentiation effectively, suggesting a disconnect between theoretical comprehension and practical implementation in classroom settings. This indicates the need for more support and resources to help teachers navigate these obstacles and apply differentiated assessment strategies successfully. DeLuca et al. (2016) investigated teachers' approaches to classroom assessment and revealed that teachers' assessment approaches are stable across career stages,

with experienced teachers having a more refined view of fairness. Teachers reported higher skills with more experience but lower skills with prior assessment education, possibly due to increased awareness of assessment complexities. Additionally, the findings of DeLuca and Lam (2014) suggest that while candidates could articulate some connections between assessment and diversity, these were often superficial and lacked practical application. Teachers showed a basic understanding of assessment practices but struggled with integrating assessment with diverse learning needs and individualizing instruction.

The findings reveal a disparity between the training of pre-service teachers and their practical implementation, underscoring the need for more specialized professional development and training that emphasizes practical, hands-on experience with differentiated assessment strategies. To bridge this gap, teacher education programs and last-year supervision sessions should incorporate more comprehensive modules on creating original and diverse assessment tools, including developing rubrics and conducting portfolio assessment techniques, with a focus on real-world classroom scenarios. Additionally, ongoing mentorship and support for in-service teachers can help refine their assessment practices by ensuring that they can effectively evaluate and support student learning across diverse student needs.

4.2 Differentiated Instruction Strategies that EFL Pre-service Teachers Utilize

Drawing from the study's findings, the three most common strategies that the participants utilized were effective communication, needs analysis, and positive reinforcement strategies. This chapter will discuss the findings and compare them with existing literature.

4.2.1 Effective Communication

Participants highlighted that effective communication and building rapport with students are key to improving student outcomes. They emphasized the necessity of fostering a supportive and non-threatening environment, avoiding actions that could lower students' confidence, and engaging with them as friends rather than authority figures. This approach includes learning about students' interests, participating in their activities, and having frequent conversations to make

students feel valued and supported. This method led to increased student engagement and participation in the classroom.

Supporting the findings of this study, research highlights that teaching involves both content and relational dimensions, suggesting that effective teaching requires both clear communication and supportive interactions (Bernieri, 1988; Frymier & Houser, 2000; Koca, 2016; Roorda et al., 2011). Teachers who build positive relationships with students foster better learning environments and boost student engagement. A theoretical review study conducted by Meng (2021) revealed that communication skills, especially referential skills (clear explanations) and ego support (emotional encouragement), significantly impact student learning and motivation. Effective teaching goes beyond content delivery; therefore, there is a need for relational aspects that build positive interactions between teachers and students. Lee (2012) explored how the social environment within schools, specifically the interactions between teachers and students and the level of academic rigor, influences student outcomes such as behavioral and emotional engagement, as well as academic performance. The study found that both positive interactions between teachers and students and a strong emphasis on academic achievement predict higher levels of behavioral and emotional engagement, with students showing more effort, perseverance, and a sense of belonging in such environments. Besides, Spilt et al. (2019) suggest that teachers' perceptions on student relationships—both positive and negative—affect their stress levels and burnout. Whereas educational perceptions on the relationships of students have a positive influence on teachers so as to feel valued and de-stressed, they form a shield against emotional stress. Hence, one must accept that there is a dual relationship in teacher-student rapport concerning both the students and the teachers.

All in all, positive teacher-student interactions are shown to improve student motivation, academic performance, and emotional resilience. Hence, these relationships should be paid special attention to and constantly developed, so that proper conditions for learning can be ensured and both students and teachers can feel comfortable. The findings support the incorporation of communication skills into teacher training. Supervisors and mentors should focus on evaluating teachers' content knowledge and instructional techniques as well as their relational practices.

Providing constructive feedback on how teachers interact with students, managing classroom dynamics, and fostering a supportive environment can help improve their effectiveness. Likewise, a culture of reflection where teachers regularly assess their relational practices and their impact on student engagement and learning can be promoted. By focusing on these areas, educational programs and institutions will find ways to provide a more supportive and result-oriented teaching environment.

4.2.2 Needs Analysis

Participants recognized the importance of assessing students' needs and aligning educational practices with those needs. They emphasize understanding students' proficiency levels, reasons for learning, and interests using methods such as needs analysis, surveys, and feedback. This approach underscores a commitment to student-centered practices and highlights positive outcomes in student progress.

In line with this study's findings and consistent with existing research, it is clear that recognizing and addressing students' unique needs is essential for effective teaching and learning.. In this context, needs analysis in language education involves evaluating students' abilities, experiences, and requirements to design effective instructional materials and strategies (West, 1994). It has evolved to address a broader range of educational processes, including curriculum design, material development, and learner assessment based on the needs of the students. Long (2005) argued that effective instruction in EFL and ESL teaching requires thorough needs analysis to adequately address the diverse needs of learners. This diversity can include a wide range of student populations, such as refugees, gifted students, professionals, and immigrants, each with unique linguistic, cultural, and educational requirements.

Differentiation, also, requires a successful needs analysis. "Pre-assessment" is the needs analysis process in DI, which is essential in finding out what the students' interests and learning profiles are. Tomlinson and Moon (2014) emphasize that pre-assessments should capture students' interests and learning profiles, alongside their readiness for new content. At the end of the process, pre-assessment information should guide instructional planning. This information enables teachers to form appropriate instructional groups, assign relevant tasks, and select suitable materials, ensuring that instruction addresses students' readiness and

preferences (Tomlinson & McTighe, 2006). These non-graded assessments ultimately become the mechanisms for teacher planning (Tomlinson & Imbeau, 2010). On the effectiveness of using pre-assessments, Bukhari (2018) found that the experimental group that underwent EFL reading pre-assessment test outperformed the control group, which highlights that pre-assessment effectively gauges prior knowledge and informs the creation of appropriate instructional support and challenging tasks, leading to improved reading comprehension.

Given the significance of assessing and aligning educational practices with student needs, this study highlights the necessity of incorporating needs analysis and pre-assessment into instructional strategies. Moving forward, teachers should prioritize the systematic implementation of needs analysis and pre-assessment techniques in their teaching practice which is possible through adding differentiated assessment techniques to the Assessment and Evaluation courses at present and strengthening practicum supervision sessions on how to analyze what the students know, want to know, and learn.

4.2.3 Positive Reinforcement Strategies

In classrooms, students require motivation and joy, which can be effectively fostered through positive reinforcement. In this study, the participants shared that using verbal praise, like “well done” or “good job”, and giving stickers as rewards encouraged students, particularly those from foreign backgrounds, to participate more actively and develop intrinsic motivation. According to their observations, students showed increased engagement and a more cheerful demeanor when their efforts were acknowledged and appreciated.

Diverse classroom settings require positive reinforcement, mostly considering the capabilities and the lack of motivation in students coming from different cultural and intellectual backgrounds. Similar to the results of the data obtained from this study, Students with intellectual disabilities who received positive reinforcements performed significantly better academically than students who did not, according to Adibsereshki et al. (2014). Both tangible and social reinforcements significantly improved academic achievement scores in comparison to a control group, but tangible reinforcements performed better. Furthermore, Losh (2022) discussed in their dissertation the challenges faced by young students with

autism spectrum disorder. According to the research, positive reinforcement strategies in the classroom can lead to better social-emotional, behavioral, and academic outcomes for students. The most effective strategies include praising good behavior and rewarding it with incentives. Likewise, Morin (2017) discusses that positive reinforcement and attentiveness to feedback in inclusive classrooms further encourage desired behaviors and personal growth. Additionally, Laird (2023) conducted a study using surveys, questionnaires and interviews about teachers' sense of efficacy in giving positive reinforcement. The results showed that while teachers generally felt knowledgeable and confident in using positive reinforcement, they expressed a desire for further training.

In an inclusive and diverse classroom setting where each student brings a unique identity, it is inevitable for teachers to recognize that these students will have different levels of motivation. For teachers to feed the students with positive feedback, they need to be willing to do so. The participants of this study recognized this notion and tried to implement various ways to motivate their participation. Teachers should continue to utilize strategies such as verbal praise and tangible rewards to boost students' intrinsic motivation. However, the desire for further training expressed by Laird (2023) highlights the need for professional development programs focused on effective behavior management techniques. By equipping teachers with more knowledge and tools for positive reinforcement, schools can better support diverse student populations which will lead to enhanced social-emotional, behavioral, and academic outcomes.

4.3 The Perceptions of the Pre-service EFL Teachers on the Use of Differentiated Instruction

This study reveals a range of understanding and views on effectiveness of DI. While some participants accurately understood DI as a method to address diverse student needs, others showed misconceptions, associating it with modern trends or technology use. Opinions on DI's effectiveness vary: some believe it motivates and engages students by catering to individual differences, while others highlight challenges such as overcrowded classrooms and limited time, which hinder its practical application.

In alignment with these findings, research on DI has revealed a complex landscape of perceptions and challenges in its implementation. Gülay and Altun (2022) found that primary school teachers generally had positive opinions about DI, especially in terms of readiness-interest and assessment-evaluation. Paradoxically, teachers without diverse student characteristics perceived DI more positively. Gender differences were also notable, with the female teachers showing stronger perceptions of DI. Paraskeva (2020) further supports this, noting that higher self-efficacy, postgraduate studies, effective training, and more teaching experience contribute to better DI implementation. However, Tzanni (2018) found that despite teachers' support for DI to enhance motivation and address learning profiles, they struggle with differentiation based on readiness due to inadequate training. Jamoliddinova (2022) observed a significant gap between reported and observed DI practices, influenced by factors such as age, experience, and grade level, thus recommending workshops and observations to bridge this gap. Likewise, a study conducted by Bidari (2021) highlighted challenges in Nepalese EFL classrooms, including large class sizes and time constraints, which limit DI's implementation despite its benefits. Dee (2010) noted that pre-service teachers often struggle with DI, suggesting a need for improved training, as whole-class instruction remains common. On a more encouraging note, Crisologo et al. (2023) and Sukarno et al. (2024) found that pre-service English teachers hold positive beliefs and high self-efficacy regarding DI for multilingual learners, though they face challenges such as time constraints and large class sizes. Overall, while perceptions of DI are generally positive, effective implementation is hindered by various challenges, underscoring the need for targeted training and support to align beliefs with practice.

Research has consistently highlighted significant barriers to effective DI implementation and varying teacher perceptions. Tackling these challenges is crucial for optimizing the effectiveness of DI and guaranteeing that all learners get the help they need. Although DI has been widely confirmed to be effective, the absence of a teaching practice connection between teachers' perception of DI and teachers' reported implementation of DI is still an important problem. Thus, alleviating this issue creates a better language-learning class environment for the teachers to offer.

So far, research has shown that teachers' perceptions of DI can impact its implementation. Research suggests that teachers with higher self-efficacy and positive beliefs about DI are more likely to implement it effectively (Crisologo et al., 2023; Paraskeva, 2020; Whitley et al., 2019;). To shift perceptions, it is crucial to promote a culture of continuous learning and improvement. To build a more positive attitude towards DI, it is important to encourage collaboration among teachers, sharing success stories as Tomlinson (2001) and Tomlinson and Murphy (2015) shared. The responsibility to nurture all the students based on their needs belongs to all stakeholders. It belongs to teachers because they are on the front lines of DI implementation and must take an active role in seeking out professional development opportunities, collaborating with colleagues, and applying relevant strategies in their classrooms. It is the responsibility of school administrators to create an environment that encourages DI. This includes ensuring that teachers have access to professional development, providing resources, and fostering a school culture that supports differentiation. Policymakers are another essential stakeholder; they should prioritize the allocation of resources for DI training and support, advocate for class size reductions, and promote policies that enable flexible and differentiated teaching practices. Teacher education institutions are responsible for incorporating DI principles into their training programs. Preparing pre-service teachers to implement DI effectively includes providing the knowledge and skills they need. By integrating the theory of DI with practice, these programs prepare future teachers to create classrooms where no one feels invisible or inconvenient (Tomlinson & Burchard, 2022).

5. CONCLUSION

This chapter will present pedagogical implications, limitations of this study, and suggestions for future research based on the results obtained.

5.1 Pedagogical Implications of the Study

Differentiated instruction (DI) involves employing various teaching methods to support struggling students and making content relevant by aligning it with their interests. The study suggests that teachers' instructional practices can significantly influence students' academic, social-emotional, and behavioral outcomes Within this framework. However, teachers often face challenges such as a lack of knowledge, large class sizes, limited time, and insufficient support and resources. These obstacles can hinder their ability to implement effective differentiated instruction, limiting their potential impact on the overall development of students.

One of the primary barriers to effective DI is inadequate training. Teachers often report difficulties implementing DI strategies due to a lack of understanding and experience. Comprehensive professional development programs and/or DI-specified courses should be established to address this. These programs should include practical, hands-on training and ongoing support to help teachers develop and refine their DI skills. Workshops, peer observations, and mentorship programs can play a critical role in enhancing teachers' abilities to implement DI effectively. Encouraging and modeling best practices during current practicum mentoring sessions will also significantly improve the effective implementation of DI. Ongoing guidance and support from experienced mentors will help refine teachers' skills and address any challenges they may face. If not mandatory, elective courses focusing on cultural responsiveness, intercultural communication skills, and related topics should be incorporated into teacher education programs for EFL instructors. Such courses are essential to adequately prepare teachers to address the unique needs of refugee student populations.

Limited resources and large class sizes are significant obstacles to DI. Schools and educational institutions must prioritize allocating resources such as instructional materials, technology, and support staff. Structural factors such as time and syllabus constraints can hinder DI implementation. Schools might consider

adjusting schedules to allow for more planning time for teachers and flexible curriculum structures that accommodate diverse instructional strategies. Additionally, incorporating DI principles into school policies and practices can support a more systemic approach to differentiation. Schools can embed cultural responsiveness into their differentiation strategies, as it is important for students to see themselves reflected in the curriculum and to feel valued by it. Representation of various cultures, languages, and perspectives in textbooks or school environments will help students see their own experiences represented in what they learn (Heineke et. al., 2022).

Additionally, considering the participants' responses about using digital materials, investment in educational technology that supports personalized learning can also aid in DI and provide support for students with diverse abilities. For this to happen, schools ought to offer professional development for teachers to know how to use digital tools proficiently and incorporate them into their teaching practices, as they cannot do everything without rich digital content varied according to interests or learning styles and proficiency levels of students. To help students with disabilities, many digital tools include features such as text-to-speech and speech-to-text programs, adjustable font sizes, and translation functions (Rao et. al., 2021). Teachers can use immediate feedback and data provided by digital devices to identify aspects where learners require assistance or are ready for more demanding materials while benefiting from it all. However, for all this to be possible, schools should invest in professional development to ensure that teachers are proficient in using digital tools and integrating them into their teaching practices.

An additional suggestion is that teachers should be encouraged to internalize reflective practices. This can provide self-feedback on the effectiveness of DI practices and advocate for further support and resources when needed. Reflective practices allow teachers to critically examine how well they are meeting the diverse needs of their students, identify areas for improvement, and adjust their instructional techniques. By understanding their strengths and limitations, teachers can make informed requests for professional development, classroom resources, or collaborative opportunities.

While mastering technical and reflective teaching skills is important, a critical teacher education approach is necessary to develop transformative intellectuals. This approach includes understanding broader socio-cultural and political forces, which is essential for teachers to advance both their own knowledge and that of their communities. While it may seem challenging to cover all aspects of teacher knowledge in pre-service programs, Tezgiden-Çakçak (2016a) argues that it is crucial for developing well-rounded, critically aware educators even though it remains marginalized in Türkiye. Advocating the rights of all the students and nurturing them without preconceptions is an issue of social justice. Therefore, critical teacher education programs will help teachers address classroom challenges more effectively and foster social justice (Tezgiden-Çakçak, 2016b).

Investing in DI and overcoming the challenges mentioned by the participants is a long-term commitment that requires collaboration. Such commitment ensures that educational practices are effective, flexible, and responsive to the diverse needs of their students currently in Türkiye's classrooms. The New Education Model of Century of Türkiye appears to focus on educational strategies and frameworks designed to address the individual learning needs of the students, with an emphasis on flexible grouping, continuous assessment, and adaptation to ensure that each student's needs are met (MoNE, 2024). Yet, there is a long way to go before the teachers can implement it effectively, especially considering the challenges they indicated in the research. By addressing barriers, all stakeholders can drive meaningful change that enhances student learning outcomes and promotes educational equity. Eventually, a sustained and collaborative approach to DI will lead to more inclusive classrooms where each student can achieve their full potential.

5.2 Limitations of the Study

The qualitative aspect of this study specifically focuses on a group of pre-service EFL teachers during their practicum at Bolu Abant İzzet Baysal University. This narrow focus may limit the generalizability of the findings to other contexts. The experiences and perspectives of these participants might not reflect those of pre-service teachers in different university settings, fields, or geographical locations. Furthermore, the sample size is limited to 65 participants who completed questionnaires, 32 interviewees, 53 reflective journal 1 entries, and 27 reflective

journal 2 entries, all drawn from senior students in the ELT department. This relatively homogenous group could affect the representativeness of the findings. If the sample lacks diversity in terms of demographic factors, such as age, cultural background, or teaching experience, the results may not fully capture the range of experiences and challenges faced by all PTs.

Each interview session lasted only 30-45 minutes and included 6 participants, which might not have been sufficient to explore complex topics in depth. This could limit the richness and detail of the qualitative data collected. Besides, the semi-structured nature of the interviews allows for researcher influence in probing and follow-up questions.

Besides, the reliance on self-reported data, which includes reflective journal entries and interviews, introduces the possibility of bias. As in all social studies, participants may have responded with socially desirable answers, which could affect the accuracy and reliability of the data (Mortel, 2008). Furthermore, the context in which the data was collected, such as the environment or timing, could have influenced participants' responses, introducing additional variables that might affect the study's outcomes.

The data collection involved reflective journals and interviews in the participants' native language, which were later translated into English verbatim. This process may introduce translation biases or errors, potentially affecting the interpretation and presentation of the findings. While efforts were made to ensure accurate translation, nuances or cultural contexts specific to the original language may have been lost or misinterpreted. Despite these limitations, the study provides a foundation for future investigations and offers preliminary insights that can inform teacher education programs and support the development of effective instructional practices among PTs.

5.3 Suggestions for Future Research

Considering the limitations and insights derived in this research, several key areas have been identified as promising leads for future studies. Researchers should aim to include larger sample sizes to enhance the generalizability of findings. While this study's focus is on pre-service teachers from Bolu Abant İzzet Baysal University, expanding the sample to include PTs from various universities across

Türkiye would provide a more comprehensive understanding of DI implementation. This will help capture multiple perspectives and practices by introducing a broader group of participants into the study, enabling a cross-cultural examination of DI. Furthermore, it is essential to understand how it is viewed and practiced in different educational and cultural contexts in Türkiye. Research should investigate how teachers in various regions adapt DI to meet their students' unique needs. This approach would highlight regional differences and commonalities in DI practices, offering a broader perspective on its applicability and effectiveness. Finally comparing the beliefs of pre-service and in-service teachers about inclusive practice may provide much-needed insight into how teacher preparation programs can close gaps between theory and practice.

Longitudinal studies are essential in order to evaluate the long-term impact of DI on both student outcomes and teaching practices. Tracking the progress and development of both students and teachers over an extended period would offer useful insights into the sustainability and efficacy of DI. Such studies can reveal how continuous implementation of DI strategies influences academic performance, engagement, and retention over time, providing a clearer picture of its long-term benefits and challenges.

Studying how students perceive DI and then comparing that to what teachers are actually doing in the classroom might be a potential research question. It may be possible to gain a better understanding of to what extent classroom practices are consistent with students' experiences of DI strategies. The possible research methods that could be used are interviewed and focus groups as they offer detailed insights into the views and use of DI among the students. On the other hand, experimental studies could be conducted to evaluate the effectiveness of DI training programs. For instance, a group of teachers could undergo DI training while a control group does not, which would allow researchers to compare the outcomes and identify the specific benefits of such training. This approach would provide empirical evidence on the impact of professional development programs on DI implementation and its subsequent effects on student learning.

In conclusion, this study has provided a foundational understanding of the implementation and impact of DI among PTs at Bolu Abant İzzet Baysal

University. However, to comprehensively evaluate the efficacy and applicability of DI, future research must consider the issues aforementioned (e.g., sample size, broader geographical scope, comparative studies). These expanded research endeavors will contribute significantly to a holistic understanding of DI, which will eventually enhance educational practices and improve student outcomes across diverse educational settings.

5.4 Conclusion

This research aimed to assess pre-service English teachers' competencies and perspectives on using DI in their practicum at Bolu Abant İzzet Baysal University, focusing on their strategies for addressing diverse learning needs and their views on DI's effectiveness in promoting inclusive, equitable education. In order to do this, this study utilized a mixed-methods approach. The quantitative aspect of the study involved administering a DI questionnaire to 65 pre-service EFL teachers. The qualitative aspects included two reflective journal entries and semi-structured interviews, which aimed to assess their self-reported competencies in implementing DI by focusing on these areas: managing students with different cultural backgrounds, inclusive students, students with different language abilities, as well as differentiated lesson planning, material and activity designing, assessment and evaluation abilities; likewise, specific DI strategies they utilize which includes effective communication, needs analysis, positive reinforcement and feedback; lastly, their perceptions towards the use of DI.

The findings of this study suggest that pre-service EFL teachers exhibit a varied level of competency and perception regarding the implementation of DI during practicum. Regarding students with various cultural backgrounds, the participants employ strategies such as incorporating cultural references and using pair work and drama to promote inclusivity. Yet, they face challenges such as balancing cultural sensitivity with practical constraints like large class sizes and addressing language barriers. These challenges impact their ability to fully engage students from diverse backgrounds. Additionally, they have problems in implementing assessment and evaluation practices as well. Qualitative insights indicate that participants make efforts to provide individualized support for inclusive students. However, they encounter difficulties in managing personalized instruction within large classrooms and ensuring effective communication and

engagement with students with special needs. These challenges highlight the need for improved strategies and support for inclusive education.

The study finds a higher level of self-reported competency in addressing students with varying language abilities, with a mean score of 3.8. Teachers use adaptive strategies such as visual aids and modified lesson plans to address different language levels. Nonetheless, challenges persist in balancing material difficulty to prevent student boredom or frustration. Pre-service teachers exhibit high confidence in creating differentiated lesson plans by incorporating various activities to accommodate different learning styles. However, there are inconsistencies in confidence levels, with some teachers requiring additional professional support and collaboration to enhance their planning capabilities. They indicate that effective lesson planning often depends on understanding students' profiles and adapting plans accordingly.

Teachers demonstrate a strong ability to design differentiated materials and activities by employing diverse student engagement approaches. Most of the activities they utilize are group and pair work, digital materials, interactive games, and songs. Technology integration is a significant strategy, but it requires additional resources and familiarity to be effectively implemented. Still, the results show that challenges such as material availability and student reluctance are common. The study shows that pre-service teachers employ observational assessments and portfolios to evaluate student progress. Challenges in differentiated assessment include large class sizes and time constraints. This emphasizes the need for more targeted professional development to enhance assessment practices. Additionally, participants emphasized the importance of effective communication in improving student outcomes. Building rapport and creating a supportive environment are highlighted as crucial strategies (Nguyen, 2007). This aligns with existing literature that underscores the positive impact of strong teacher-student relationships on engagement and academic performance.

The study underscores the significance of needs analysis in addressing instruction to individual student needs. Teachers utilize surveys and feedback to align their instruction, reflecting a commitment to student-centered practices. Literature supports this approach by emphasizing the role of pre-assessments in

designing effective instructional strategies. Further, findings further indicate that positive reinforcement, including verbal praise and tangible rewards, effectively boosts student motivation and engagement. The consistent application of positive reinforcement strategies has created a supportive learning environment. This is consistent with research that highlights the benefits of positive reinforcement in enhancing academic and social-emotional outcomes.

The study reveals a range of perceptions among PTs regarding DI. While some teachers exhibit a robust understanding of DI, recognizing its potential to address diverse student needs and enhance engagement, others hold more limited or misguided views. A portion of participants appreciate DI as a comprehensive method; they see DI as a beneficial approach that, when implemented effectively, can lead to increased student motivation and achievement. Conversely, some pre-service teachers perceive DI through a narrower lens.

Moreover, the study points to the necessity of more comprehensive training and professional development to address these varied perceptions. Recommendations for DI's success include targeted training, support for practical implementation, and integration of culturally responsive teaching to bridge gaps between theoretical knowledge and classroom practice. Enhancing pre-service teachers' understanding of DI through targeted education can address deficiencies between theoretical knowledge and practical application. By clarifying DI principles and providing practical strategies for implementation, teacher education programs can help ensure that pre-service teachers are better equipped to apply DI effectively in diverse classroom settings.

6. REFERENCES

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7. APPENDICES

7.1 APPENDIX: DI Questionnaire

No	Maddeler	1 (Hiçbir zaman)	2 (Nadiren)	3 (Bazen)	4 (Sıklıkla)	5 (Her zaman)
1	Öğrencilerin yeteneklerine göre uygun çalışma grupları oluşturma	(1)	(2)	(3)	(4)	(5)
2	Öğrencilere sağlanan desteği yeteneklerine göre farklılaştırma	(1)	(2)	(3)	(4)	(5)
3	Öğrencilerin öğrendiklerini yeteneklerine göre farklı yollarla sergilemelerini sağlama	(1)	(2)	(3)	(4)	(5)
4	Öğrencilerin öğrenme profillerine göre uygun çalışma grupları oluşturma	(1)	(2)	(3)	(4)	(5)
5	Öğrencilerin öğrendiklerini öğrenme profillerine göre farklı yollarla sergilemelerini sağlama	(1)	(2)	(3)	(4)	(5)
6	Öğrencilerin öğrenme hızlarına göre uygun çalışma grupları oluşturma	(1)	(2)	(3)	(4)	(5)
7	Öğrencilerin öğrendiklerini öğrenme hızlarına göre farklı yollarla sergilemelerini sağlama	(1)	(2)	(3)	(4)	(5)
8	Materyalleri öğrencilerin yeteneklerine göre farklılaştırma	(1)	(2)	(3)	(4)	(5)
9	Etkinlikleri öğrencilerin yeteneklerine göre farklılaştırma	(1)	(2)	(3)	(4)	(5)
10	Farklı kültürlerden gelen öğrencilere uygun destek sağlama	(1)	(2)	(3)	(4)	(5)
11	Farklı kültürlerden gelen öğrencilere akran desteği sağlama	(1)	(2)	(3)	(4)	(5)
12	Kültürel farklılıklara sahip öğrencilerin bir arada çalışmasını sağlama	(1)	(2)	(3)	(4)	(5)
13	Farklı kültürleri kapsayacak bilgilere/konulara yer verme	(1)	(2)	(3)	(4)	(5)
14	Etkinlikleri öğrencilerin kültür farklılıklarına göre çeşitlendirme	(1)	(2)	(3)	(4)	(5)
15	Materyalleri öğrencilerin kültür farklılıklarına göre çeşitlendirme	(1)	(2)	(3)	(4)	(5)
16	Etkinlikleri öğrencilerin hazır bulunuşluklarına göre farklılaştırma	(1)	(2)	(3)	(4)	(5)
17	Materyalleri öğrencilerin hazır bulunuşluklarına göre farklılaştırma	(1)	(2)	(3)	(4)	(5)
18	Öğrencilere sağlanan desteğin hazır bulunuşluklarına göre farklılaştırma	(1)	(2)	(3)	(4)	(5)
19	Materyalleri öğrencilerin ilgi alanlarına göre farklılaştırma	(1)	(2)	(3)	(4)	(5)
20	Etkinlikleri öğrencilerin ilgi alanlarına göre farklılaştırma	(1)	(2)	(3)	(4)	(5)
21	Konuyu az/iyi bilen öğrenciler için ek materyaller kullanma	(1)	(2)	(3)	(4)	(5)
22	Öğrencilere verilen görevlerde sosyoekonomik düzeylerini gözönünde bulundurma	(1)	(2)	(3)	(4)	(5)
23	Etkinlikleri çeşitlendirmede öğrencilerin sosyoekonomik farklılıklarını dikkate alma	(1)	(2)	(3)	(4)	(5)
24	Materyal kullanımında öğrencilerin sosyoekonomik farklılıklarını dikkate alma	(1)	(2)	(3)	(4)	(5)

25	Aile desteđi düşük ğrencilere sınıfta uygun destek sağlama	(1)	(2)	(3)	(4)	(5)
26	Öğrencilerin farklı özelliklerine uygun süreç deęerlendirmeyöntemleri kullanma	(1)	(2)	(3)	(4)	(5)
27	Öğrencileri farklı özelliklerine göre süreç öncesi deęerlendirme	(1)	(2)	(3)	(4)	(5)
28	Öğrencilerin farklı özelliklerine göre süreç sonunda deęerlendirme	(1)	(2)	(3)	(4)	(5)
29	Öğrencilerin farklı özelliklerine uygun ölçme-deęerlendirmeyöntemleri kullanma	(1)	(2)	(3)	(4)	(5)
30	Sınıfın fiziksel ortamını öğrencilerin farklı özelliklerine göre düzenleme	(1)	(2)	(3)	(4)	(5)
31	Öğrencilerin bireysel farklılıklarına uygun sınıf atmosferi oluşturma	(1)	(2)	(3)	(4)	(5)
32	Sınıfta bireysel çalışmaya uygun öğrenme ortamı oluşturma	(1)	(2)	(3)	(4)	(5)
33	Sınıfta grup çalışmasına uygun öğrenme ortamı oluşturma	(1)	(2)	(3)	(4)	(5)

7.2 APPENDIX: Interview Questions

1. Farklılaştırılmış öğretim kavramını nasıl tanımlarsınız ve kendi öğretim uygulamalarınızda nasıl uygularsınız?

1.a. Sınıfta farklı öğrenme seviyelerine ve öğrenci profillerine nasıl uyum sağlanır?

1.b. Farklı öğrenci ihtiyaçlarına nasıl yanıt verebileceğinizi örneklerle açıklayabilir misiniz?

2. Farklı öğrenme ihtiyaçlarına sahip öğrencilere yönelik ders planları oluşturabiliyor musunuz?

2.a. Oluştururken neleri dikkate alıyorsunuz?

2.b. Farklı öğrenme seviyelerine sahip öğrencilerle çalışırken ders içeriğini nasıl uyarlıyorsunuz?

3. Farklılaştırılmış öğretim yöntemlerini kullanarak öğrencilerin katılımını ve ilgisini artırmak için hangi stratejilerin etkili olduğunu düşünüyorsunuz?

3.a. Bu stratejileri ne kadar sıklıkla kullanabiliyorsunuz?

3.b. Bu stratejileri kullanırken nelere dikkat ediyorsunuz?

4. Farklılaştırılmış öğretim uygulamalarınızda öğrenci geri bildirimlerine nasıl yanıt veriyorsunuz? Bu geri bildirimler, ders planlarınızı nasıl şekillendiriyor?

4.a. Öğrencilerden daha etkili geri bildirim alabilmek için hangi stratejileri uyguluyorsunuz?

4.b. Öğrenci geri bildirimlerini kullanarak ders planlarınızı nasıl güncelliyorsunuz? Hangi tür geri bildirimler ders planlarınızda önemli değişikliklere yol açıyor?

5. Farklı öğrenme ihtiyaçlarına sahip öğrencilere yönelik ders materyali ve kaynakları nasıl seçiyorsunuz? Bu materyalleri seçerken dikkate aldığınız kriterler nelerdir?

5.a. Ders materyali seçiminde öğrencilerin geri bildirimleri sizin için ne kadar önemli?

5.b. Öğrencilerin bu materyalleri nasıl değerlendirdiği, seçim sürecinizde nasıl bir rol oynuyor?

6. Farklılaştırılmış öğretim uygulamalarında dikkate almanız gereken kültürel ve sosyal faktörler hakkında ne düşünüyorsunuz?

6.a. Bu faktörleri nasıl ders planlarınıza entegre ediyorsunuz?

6.b. Farklı kültürlerden gelen öğrencilerin daha fazla katılımını teşvik etmek için hangi stratejileri uyguluyorsunuz?

7. Farklılaştırılmış öğretim uygulamalarınızda öğrenci performansını ölçme ve değerlendirmek için kullanılabilecek stratejiler nelerdir?

7.a. Farklılaştırılmış öğretimde öğrenci ilerlemesini nasıl izliyorsunuz? Öğrencilerin performansını düzenli olarak nasıl değerlendiriyorsunuz?

7.b. Öğrenci performansını değerlendirdikten sonra, elde ettiğiniz verileri nasıl kullanıyorsunuz? Bu verileri değerlendirme sürecinizi iyileştirmek için nasıl kullanıyorsunuz?

7.3 APPENDIX: RJ1 Questions

Öğretmenlik Uygulaması Öncesi Yansıtıcı Günlük Soruları

1. Farklılaştırılmış öğretim nedir? Ne anlıyorsunuz ve nasıl tanımlarsınız?
2. Staj dönemi öncesinde farklılaştırılmış öğretim uygulamalarınız için bir plan hazırladınız mı?
3. Öğretmenlik uygulaması süresince öğretim yaptığınız sınıfta öğrencilerin farklı ihtiyaçları neler olabilir?
4. Bu ihtiyaçları karşılamak için nasıl farklılaştırılmış öğretim materyalleri ve aktiviteler geliştirebilirsiniz?
5. Farklı öğrenme ihtiyaçlarına sahip öğrencilerle nasıl etkileşim kurabilirsiniz?
6. Farklı öğrenme ihtiyaçlarına sahip öğrencilerle çalışırken karşılaşılabileceğiniz zorlukları önceden tahmin edebiliyor musunuz?
7. Bu zorluklarla başa çıkmak için neler yapmayı düşünüyorsunuz?

7.4 APPENDIX: RJ2 Questions

Öğretmenlik Uygulaması Sonrası Yansıtıcı Günlük Soruları

1. Uygulama dönemi sonrasında farklılaştırılmış eğitim uygulamaları deneyiminizi nasıl değerlendiriyorsunuz?
2. Öğretmenlik uygulaması boyunca farklılaştırılmış öğretim uygulamalarında nasıl bir gelişim gösterdiniz?
3. Farklılaştırılmış öğretim uygulamalarını kullanarak öğrenci başarısını nasıl etkilediniz?
4. Farklılaştırılmış öğretime dayalı olarak neleri iyi yaptığınızı düşünüyorsunuz ve bu başarınızı etkileyen faktörler nelerdir?
5. Farklılaştırılmış öğretime dayalı olarak daha iyi yapabileceğinizi düşündüğünüz durumlar nelerdi?
6. Öğretmenlik uygulaması sonrasında farklılaştırılmış öğretim uygulamalarındaki deneyimleriniz ve öğrenimleriniz doğrultusunda, gelecekteki kariyerinizde bu tecrübelerin size katkıları neler olacak?