

# Kazakhstani In-Service Schoolteachers' Perceptions of Differentiated Learning in Heterogeneous EFL Classrooms

Gulnara Akhmetova<sup>1</sup>, Aigul Bizhkenova<sup>1</sup>, Dinara Ryspayeva<sup>2</sup>, Elmira Gerfanova<sup>3</sup>, & Alma Zhukenova<sup>2</sup>

<sup>1</sup>Department of Foreign Philology, L.N. Gumilyov Eurasian National University, Astana, Republic of Kazakhstan

<sup>2</sup>Department of the English Language and Teaching Methods, Sh. Ualikhanov Kokshetau University, Kokshetau, Republic of Kazakhstan

<sup>3</sup>Department of Social Sciences, Astana IT University, Astana, Republic of Kazakhstan

Correspondence: Gulnara Akhmetova, Department of Foreign Philology, L.N. Gumilyov Eurasian National University, Astana, Republic of Kazakhstan. E-mail: gulnaraakhmetova99@gmail.com

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## Abstract

In the era of the fourth industrial revolution, it is necessary to create a new model of a teacher and learner to provide global competitiveness. This study aims to explore Kazakhstani in-service English as a foreign language teachers' perception of awareness, implementation, and managing differentiated learning, lesson planning, and designing in heterogeneous English as a second language classrooms. The present study was done during the academic year 2020-2021 among the in-service English as a foreign language teacher from three regions of Kazakhstan, namely, Astana City, Kokshetau City, and Akmola Oblast (district). The participants' work experience ranged from 2 to 20 years and included 82 female (79.6%) and 21 male (20.4%). The data were collected via a Google Form questionnaire and interviews. The data were analyzed descriptively using frequency and percentage gained from the questionnaire and interpretation of interview results. All results were analyzed qualitatively and quantitatively. The result has confirmed that the Kazakhstani in-service English as a foreign language teacher is aware of differentiated learning as an effective strategy in catering to students' differences in the classroom. The results of the study have shown that 90% of Kazakhstani English as a foreign language teachers who participated in this study support the idea of using the differentiated learning approach in heterogeneous classrooms, as they agree that differentiated learning contributes to an increase in motivation and quality knowledge and make the English language learning enjoyable and accessible; however, lesson planning and preparation of study materials for differentiated learning in heterogeneous class is troublesome. The study discovered that a considerable number of English as foreign language teachers still struggle in applying the differentiated learning approach due to some factors such as large workload, lack of knowledge, insufficient training, large class sizes in the class, shortage of funding, and shortage of facilities for differentiated instruction.

**Keywords:** knowledge, awareness, lesson planning, student, education

## 1. Introduction

Kazakhstan is actively integrating into the global community full of fierce competition in the economy, technology, and education systems. Therefore, changes in educational reforms are necessary and important measures at this point. Since Kazakhstan signed the Bologna Declaration, Kazakhstan's education system has undergone many reforms and changes to meet international standards in education and to meet global needs and requirements. The updated content of the educational program is a new reform of education in Kazakhstan initiated by the Ministry of Education in 2015. First President of Kazakhstan N. Nazarbayev in his annual address to the nation emphasized the need to create a Kazakhstani model of advanced educational system, which includes all levels of education. The message of the President of the Republic of Kazakhstan "New development opportunities in the context of the Fourth Industrial Revolution" (2018) also reflected one of the priorities of the educational system, which is to update the educational content by 2021. The updated curriculum program was launched in 2015 as a pilot project in some schools in Kazakhstan, and later in 2016 was implemented by all public and private schools, school lyceums, and gymnasiums in Kazakhstan.

Although there have been many debates about the implementation of updated educational content in the educational system, it has brought many positive changes in the Kazakhstani educational system and has become a key factor for transformation, innovation, and creation of a new educational system aimed at entering the world's educational space (Nabieva et al., 2021; Zhampeisova et al., 2018). This process is accompanied by significant changes in the theory and practice of education. As a result, the educational paradigm has changed and requires new content, different approaches, and different pedagogical techniques and strategies (Hromchenko, 2022). Updating the content of education in the Republic of Kazakhstan is aimed at improving teaching skills in the context of updating the educational program and introducing a system of criteria-based assessment. Thus, Kazakhstani schools benefited from the implementation of updated learning content in the school system as it promoted differentiated learning (DL) and criteria-based assessment: formative and summative assessment (Tomlinson & Imbeau, 2010; Coubergs et al., 2017).

Nowadays, modern schools are constantly searching for new, effective approaches, means, and forms of teaching students. Despite the implementation of updated educational content in all schools, some EFL (English as a Foreign Language) teachers still use traditional group methods, which do not work in the present time and lead to poor English language acquisition, setting equal requirements, limiting students in time, opportunities and the amount of material studied, without taking into account the peculiarities of individual psychological development of each person (Moldabek et al., 2016; Dulayeva et al., 2023). As a result, this continuous process leads to low performance, demotivation, and a decrease in learning efficiency. In order to prevent these negative consequences, teachers should always remember that each person is unique and it is almost impossible to fit everyone to one standard. According to the updated content of education, differentiation is one of the key elements of teaching, which is integrated into different stages of lesson planning, starting from the lesson and learning objectives (Kenzhebekova et al., 2020; Zakharchyn & Sytnyk, 2023). The aim of implementing differentiated learning in heterogeneous classrooms is to meet the needs of students according to their learning pace, learning style, and multiple intelligence, to help learners acquire compulsory knowledge, to improve their skills according to educational standards, and to meet social demands. Therefore, it is crucial to verify that all EFL teachers understand, perceive, and apply it in an appropriate way in their classrooms (Gomendio, 2017; Roose et al., 2019).

When differentiated learning is considered in the context of Kazakhstan's ongoing education reform, its relevance and effectiveness become even more powerful. The goal of the reform is to improve teaching methods according to new subject matter and teaching strategies and to promote a more inclusive and successful approach to teaching that meets the unique learning needs of each student (Kenesbayev et al., 2017). Differentiated learning, a fluid and adaptive approach to instruction allows teachers to respect and recognize the unique characteristics of students (Bidaibekov et al., 2016). Learning outcomes are improved because DL enables educators to tailor instruction to each student's preferred learning pace, style, and cognitive abilities. Traditional one-size-fits-all methods have been shown to be less successful, resulting in low achievement and decreased motivation (Mynbayeva et al., 2019). The Fourth Industrial Revolution, with its emphasis on individualized learning and teaching methods, makes a paradigm shift imperative (Nazarova & Rudenko, 2023). In addition to ensuring compliance with international standards, a successful transition to DL within the Kazakhstani education system would provide students with critical knowledge and skills tailored to their particular profiles. It is also critical to the success of these changes to assess teachers' perspectives, awareness, implementation, and management of DL, as well as the difficulties they face in implementing DL in heterogeneous classrooms (Tuna et al., 2019). In order to reap the potential benefits of differentiated learning, the system can be further improved with the insights gained from such an evaluation.

The aim of this research is to explore perceptions, on awareness, application, management of DL and challenges that are encountered by EFL teachers applying differentiated learning in heterogeneous classroom. This study addresses the following research questions:

How do EFL schoolteachers understand, perceive and apply differentiated instruction (DI) in heterogeneous EFL classrooms?

What are the challenges that EFL teachers face for applying differentiated instruction in their classroom setting?

## 2. Literature Review

According to many studies, scholars define differentiated learning in different ways and use multiple terms such as "differentiated learning," "differentiated instruction," or "differentiated approach," which refer to one and the same concept of teaching students taking into account various aspects of learning such as ability, achievement, skills, background, level, learning style, and preference, needs, readiness, interest, intelligence, and so on. However, Jensen, Klette, and Hammerness (2017) find it challenging when researchers use different terms to denote the same phenomenon, and when they explore various phenomena, using the same concepts and terms. Tomlinson & Imbeau (2010) claim, "In a differentiated classroom, the teacher proactively plans and carries out varied approaches to content, process, and product in anticipation of and response to student differences in readiness, interest, and learning needs". A number of works related to differentiated learning practices and perception have been studied and analyzed to build a theoretical background for this study. Coubergs, Struyven, Vanthournout, and Engels (2017) investigated the factor structure and reliability of the Differentiated Instruction Questionnaire, called the DI-Quest instrument. In their research, they claim that no validated instruments exist to measure teachers' perceptions of differentiated instruction and their related classroom practices.

Naka (2018) posits that EFL educators should shift from conventional teaching methods to more contemporary and effective ones, stressing the need for teachers to thoroughly understand their students' learning styles, readiness, and interests. This understanding would aid in implementing teaching methodologies that cater to all learners effectively (Dolhikh, 2023). The research identifies three key ways differentiation can be applied: firstly, by tailoring the materials and literature to match each student's proficiency level; secondly, by incorporating diverse activities and teaching techniques, students can find the learning method that suits them best; finally, by providing opportunities for students to share their knowledge in varied ways, which stimulates motivation and fosters language improvement.

It is noticeable that many works studying differentiated learning relate to inclusion and heterogeneous grouping. Tomlinson (2017) claims that all classrooms are heterogeneous, as are the individual students within. Thus, Vantiegheem, Roose, Gheysens, Griful-Freixenet, Keppens, Vanderlinde, and Van Avermaet (2020) focused on teachers' reasoning about inclusive classroom situations, namely on teachers' reasoning on positive teacher-student interactions (PTSI) and differentiated instruction, as these are two noticeable teaching approaches that are essential for dealing with pupil heterogeneity and realizing inclusive classrooms. In their study, Roose, Vantiegheem, Vanderlinde, and Van Avermaet (2019) have illustrated that teachers' perception and comprehension affect how they view their classroom,

and how they take the opportunities to create inclusion in the classroom. According to Forghani-Arani, Cerna, and Bannon (2019) researching teachers' reasoning about inclusive classrooms can provide opportunities for teachers to reflect on how to adjust their classroom practices. Gomendio (2017) states that to implement inclusive education, teachers play a central role as they are required to adapt their teaching to students' heterogeneous academic abilities, interests, backgrounds, and needs. Brevik, Gunnulfson, and Renzulli (2018) in their study explored student teachers' understanding of differentiation for high-achieving secondary school students with higher learning potential.

Suprayogi, Valcke, and Godwin (2017) explored the factors that affect DI implementation by teachers such as teachers' DI self-efficacy, teaching beliefs, teaching experience, professional development, teacher certification, and classroom size. The study has identified that though DI implementation seems high, it is still below a critical benchmark. Dack (2019) in their study investigated candidate perceptions of the relationships among their appropriation of differentiation's pedagogical tools, coursework experiences, and field experiences. Teaching in heterogeneous classes has always been a challenging task for many EFL teachers to achieve the plan and their goal of successful teaching. The best way to achieve that goal is the teacher's effort to understand his/her student's peculiarities, preferences, and opinions about teaching and create favorable conditions and an atmosphere so students may feel their progress and participation through different activities (Bocheliuk et al., 2022; Kawiana et al., 2023). Scholars investigating learning issues in heterogeneous classrooms give several definitions for this type of group setting.

Kóty-Nagy (2023) investigated the understanding, attitudes, and practices of Hungarian primary and secondary EFL teachers regarding differentiated instruction. The findings suggest that while teachers grasp the concept of DI in relation to individual learner differences, they remain uncertain about the specific instructional strategies for implementation. Teachers expressed an ambivalent attitude toward DI due to methodological uncertainties, difficulties in implementation, and the pressure to differentiate. The research also revealed that while teachers demonstrated an authentic interest in addressing their students' unique needs, the application of DI strategies was often more spontaneous than planned. Teachers cited challenges in planning and delivering differentiated lessons, such as increased preparation time, multitasking, and maintaining student engagement.

Lombarkia & Guerza (2021) in their research have concluded, that most EFL students endorsed varying tasks and grouping methods to align with their interests and cognitive abilities, recognizing the need for alternative strategies for motivation and learning ownership. Moreover, such an adaptable teaching method is beneficial for all students, irrespective of their activity level or proficiency. EFL teachers emphasized the importance of varied instructional strategies, including tiered tasks and delivering content in multiple ways (Yermentayeva et al., 2018). They advocated for instruction refinement to better address students' needs, skills, and readiness, enabling more precise feedback on students' learning. Despite understanding the principles of DI, a gap was identified between understanding and effectively applying it to meet varied student needs. This indicates a need for adequate teacher training for efficient implementation of DI.

Lewis (2019) states that "heterogeneous groups, contrastive to homogeneous groups, include students from a wide range of instructional levels and students of varying achievement work advantage when working together and help each other reach educational goals". However, according to Schults (2018), gifted students may also be challenged in heterogeneous groups as much pressure is put on gifted students to be a guide or assistant to the teacher which may lead to students' demotivation and boredom in EFL classrooms. Gibbs & McKay (2021) presented research from a systematic review to identify how differentiated instruction is used in Australian mainstream schools. Findings showed teachers effectively used differentiated pedagogical practices in their mainstream classrooms. However, there is a need for a clearer definition of DI as a teaching practice. de Jager (2017) in his study explored secondary school teachers' perspectives on the implementation of differentiated instruction in public secondary schools. Findings illustrated those different limitations, such as inadequate teacher training, large class sizes, workload, undisciplined learners, lack of resources, second language instruction, and socio-economic obstacles promote the use of teacher-centered methods rather than differentiated learning approach.

Mardhatillah & Suharyadi (2023) propose that differentiated instruction in English as a Foreign Language (EFL) classrooms, particularly in mixed-ability classrooms, offers several advantages such as enhancing student performance, self-awareness, responsibility, engagement, motivation, and fostering cooperation and collaboration. Furthermore, it provides teachers with numerous options for a reflexive process, equitable assessments, and constant classroom innovation. Despite these advantages, differentiated instruction demands a significant commitment from teachers and school administration due to its time-intensive nature and increased workload for teachers (Abyzbekova et al., 2023). Yet, its benefits greatly influence the student's learning experience, attitude toward learning, and future achievements. Given these findings, the study suggests that teachers could benefit from workshops on differentiated instruction to improve its application in classrooms. Scientists also recommend training on optimal usage of existing differentiated resources in coursebooks and support from school administrators, such as providing a customized website with differentiated resources, to alleviate concerns about creating instructional material.

### 3. Materials and Methods

It is obvious that teaching in a heterogeneous classroom is one of the most challenging tasks for EFL teachers, and differentiated learning is a brilliant solution for overcoming learning barriers and satisfying learners' needs. Thus, the use of differentiated learning is a crucial requirement for modern EFL teachers in the context of modern learning in Kazakhstan. Although many controversial discussions about the implementation of updated learning content in educational systems, differentiated learning is considered as one of its advantages. However, differentiated instruction has recently been implemented in lesson planning, and there is a hypothesis that EFL teachers'

perceptions of differentiated learning are different, which consequently affects students' learning performance and outcomes. Data collection was done through questionnaires and interviews. This study included 103 EFL teachers working in public secondary schools and school lyceums who volunteered to participate in this research and took surveys in Google Forms and ten EFL teachers who were interviewed using the ZOOM program to collect the data. The purpose of the questionnaire and interview was to determine and explore perceptions, awareness, application of DL, and challenges that are encountered by EFL teachers applying differentiated learning in heterogeneous classrooms. The present study was conducted during the academic year 2020-2021 among in-service EFL teachers from three regions of Kazakhstan, namely, Astana City, Kokshetau City, and Akmola Oblast (district). The work experience of the participants ranged from 2 to 20 years and included 82 females (79.6%) and 21 males (20.4%).

This study used mixed methods to analyze in-service EFL teachers' perceptions of awareness, application, management, and challenges in implementing differentiated learning in their heterogeneous EFL classrooms. The data were designed according to the responses received from 103 EFL teachers through the use of questionnaires and interviews. Questionnaires and interviews were the main methods of data collection. All respondents gave voluntary written consent for data collection and processing and the right to withdraw. Before developing the questionnaire and interview questions and starting the data collection stage, the authors conducted a thorough analysis of the literature on the research topic. In the next stage, the authors used Google Forms as a research tool for developing questionnaires. Finally, the authors sent a written request to fifty EFL teachers and received ten written voluntary consents to be interviewed. All results were analyzed qualitatively and quantitatively.

The research procedure began with an EFL teacher questionnaire. The questionnaire contains closed-ended questions where the participants are asked to choose "yes" or "no" for each question. Under the topic of the questionnaire, the authors included the purpose of the questionnaire. First, respondents were kindly asked to indicate their work experience and gender. The questionnaire promised that all data collected would be used for research purposes only, thus ensuring the confidentiality of the respondents, so the respondents were not required to write their names. The authors also asked the participants to answer the questions honestly, explaining that there is no "right" or "wrong" answer to any question. The questionnaire was distributed to 110 EFL teachers in Astana, Kokshetau, and Akmola districts, but seven EFL teachers did not accept the request to participate in the study. The participants were asked to read the questions carefully and then mark the appropriate statement. The questionnaire contained 20 questions and asked the participants about their awareness, perception, and implementation of differentiated learning (Table 1). All interview questions were designed to explore how modern Kazakh EFL pre-service teachers perceive, understand, and implement differentiated learning. Then, volunteer EFL teachers were interviewed individually to elicit some responses about the benefits and challenges of differentiated learning. The interview consists of five questions. The interviews were conducted and recorded separately using the ZOOM platform.

Table 1. Questionnaire design

Question	Total number of participants 103			
	Answers			
	Yes		No	
	Frequency	Percentage	Frequency	Percentage
1 Do use you differentiated instruction in your classes?	83	80.6%	20	19.4%
2 Do you understand the tasks of differentiated learning?	84	81.6%	19	18.4%
3 Can you differentiate learning taking into account lesson type, objectives and content?	82	79.6%	21	20.4%
4 Can you select material and create differentiated tasks and assignments for heterogeneous groups?	88	85.4%	15	14.6%
5 Do you use differentiated approach while teaching new material?	63	61.2%	40	38.8%
6 Do you use differentiated learning for students' individual work?	80	77.7%	23	22.3%
7 Do you use differentiated approach in evaluating students' knowledge?	77	74.8%	26	25.2%
8 Do you use differentiated learning while assigning home tasks for students?	58	56.3%	45	43.7%
9 Do you know methods and ways of differentiated learning?	60	58.3%	43	41.7 %
10 Do you use differentiated instruction in all stages of the lesson?	47	45.6%	56	54.4%
11 Can you differentiate learning according to students' needs?	76	73.8%	27	26.2%
12 Do you know the components of differentiated learning?	46	44.7%	57	55.3%
13 Can you define criteria for teaching students using differentiated approach in groups with various needs?	64	62.1%	39	37.9%
14 Do you consider that lack of funding prevents from implementing differentiated learning in EFL classroom?	79	76.7%	24	23.3%
15 Do you agree that differentiated learning makes English language learning in the classroom enjoyable and accessible?	89	86.4%	14	13.6%
16 Do you think designing a differentiated learning lesson is challenging?	82	79.6%	21	20,4%
17 Do you think that a teacher needs and spend more time in planning and preparing study materials in differentiated learning?	88	85.4%	15	14.6%
18 Do you support the idea of differentiated learning?	93	90.3%	10	9.7%

19	Does differentiated learning contribute to an increase of motivation and the quality of knowledge?	85	82,5%	18	17.5%
20	Do you think that you need to upgrade your knowledge and participate in continuous professional development (CPD) courses on “Differentiated learning”?	89	86.4%	14	13.6%

**4. Results**

A total of 103 in-service EFL teachers from 10 secondary schools and school lyceums in Astana City, Kokshetau City, and Akmola district participated in this questionnaire. The analysis of the questionnaire shows that the study included EFL teachers of different ages and work experience in teaching English as a foreign language. According to the results, about 67% of the participants indicated that their work experience ranges from 2 to 5 years, 15.5% of the respondents replied that they worked as EFL teachers from 5 to 10 years, 12.7% of the teachers have worked approximately 15 years, and the least number of respondents (about 4.8%) replied that their work experience reaches approximately 20 years. Overall, it can be concluded that the number of young EFL teachers who participated in the study outweighed the number of experienced EFL specialists. The present study illustrates that it included respondents from one county and two cities. Questionnaires were distributed to three secondary schools in Astana, three secondary schools in Kokshetau city, and four secondary schools in Akmola district. According to the analysis of the questionnaire, the largest number of respondents forty-four work in Astana, thirty-three participants work as EFL teachers in Akmola oblast, and the smallest number of respondents included twenty-three EFL teachers from Kokshetau. Since the authors promised confidentiality and not to share personal data, by research ethics, the authors do not disclose the names of the schools and teachers who participated in this research. Although the same number of schools in Astana and Kokshetau participated in the study, the number of respondents from Astana exceeded the number of participants from Kokshetau. Where do you work? 103 responses (Figure 1).

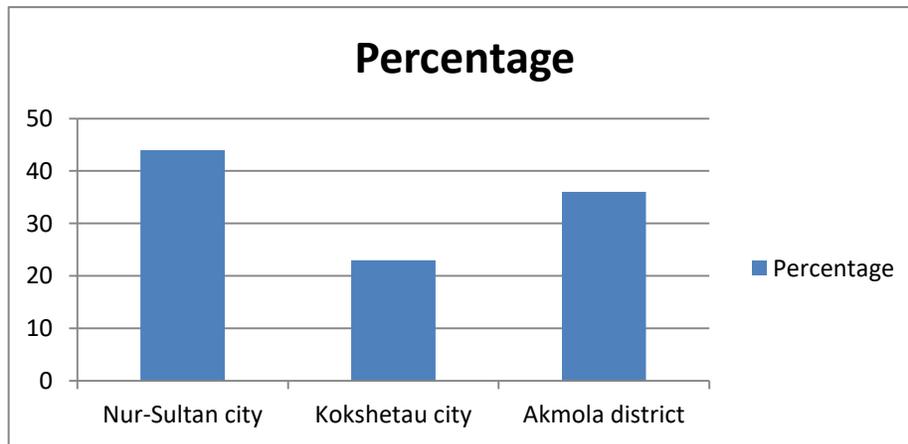


Figure 1. Geography of respondents

How many years have you been working at school? (Figure 2).

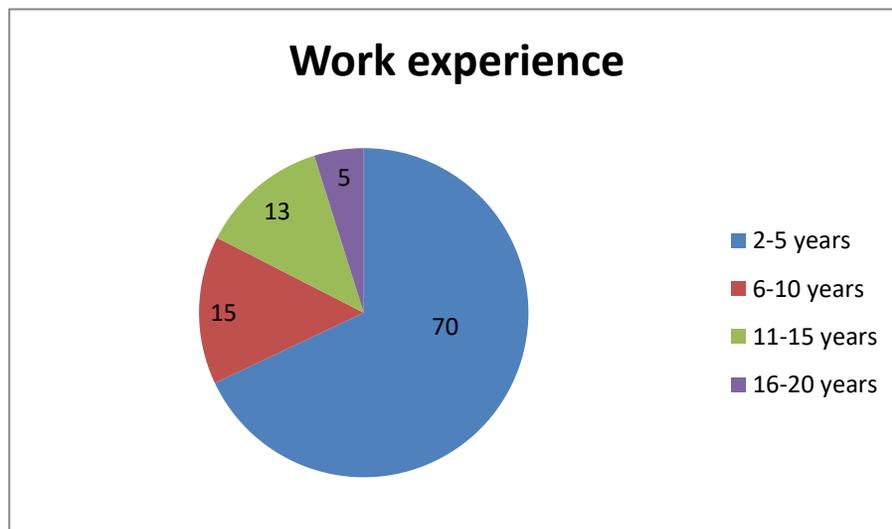


Figure 2. Work experience of the respondents

Figure 3 shows the information about the teachers' perception of the awareness of DL. The questionnaire results show that only 58.3% of the

respondents answered that they know the methods of differentiated learning and 41.7% of the respondents admit that they are not aware of the methods and ways of differentiated learning. While designing the research and creating the questionnaires, the authors also wanted to know whether in-service EFL teachers can differentiate learning taking into account the type of lesson, objectives, and content. According to the survey results, 79.6% of the participants answered positively, while 20.4% of the respondents confessed that they could not do it. Furthermore, the next question of the questionnaire focused on whether EFL teachers can select study materials and create differentiated tasks and assignments for heterogeneous groups. The results of the study showed that 88 participants, or 85.4%, answered in the affirmative, while 15 participants (14.6%) admitted that they could not do it. The questionnaire tried to find out whether EFL teachers understand the tasks of differentiated learning. The analysis shows that 81.6% of the respondents gave positive answers while 18.4% of the respondents gave negative answers.

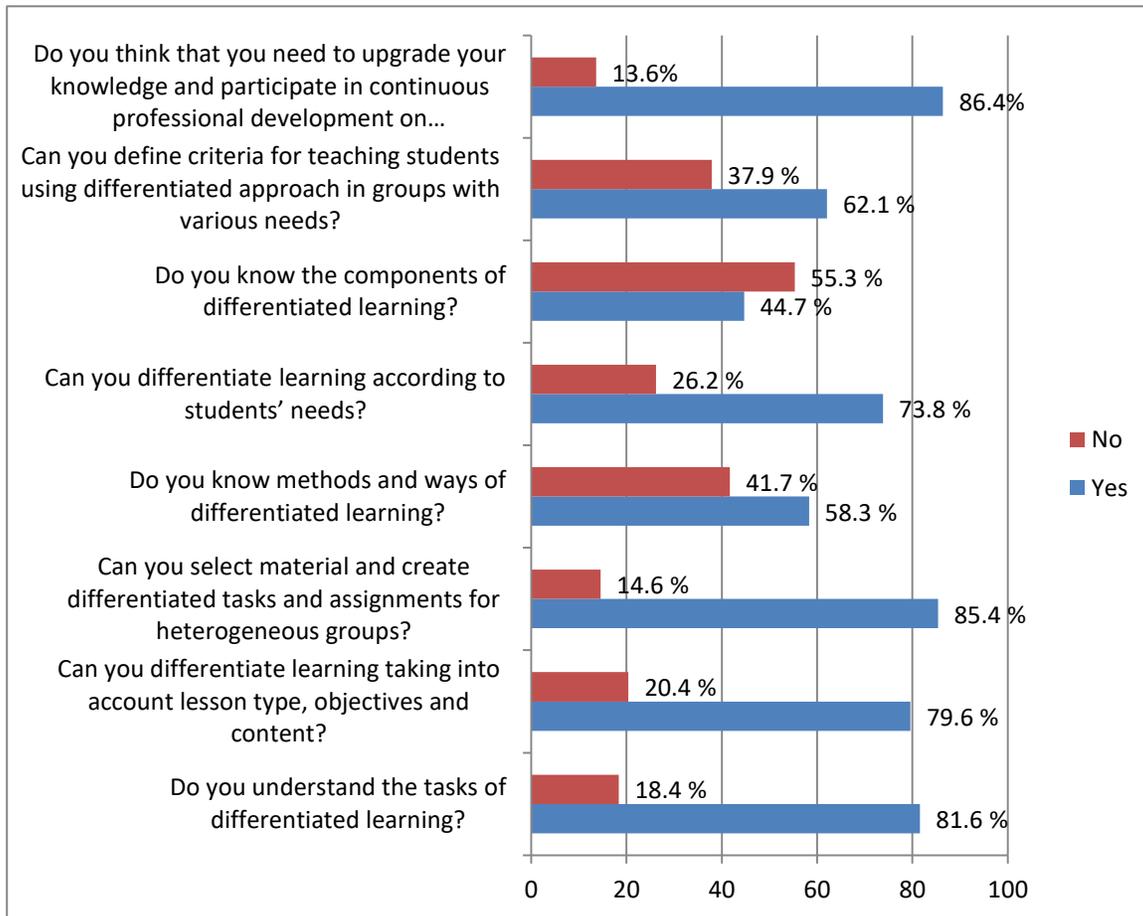


Figure 3. Teachers' perceptions on awareness of differentiated learning

The results of the questionnaire show that the majority of the respondents (83 teachers) that is 80.6% stated that they use differentiated learning in their EFL classroom, while 20 participants that is 19.4% stated that they do not use it at all. Figure 4 shows that the majority of the respondents (61.2%) answered that they use a differentiated approach when teaching new material and a small part (38.8%) of the respondents answered that they neglect a differentiated approach when teaching new material. Furthermore, 77.7% of the EFL teachers admitted that they regularly use differentiated learning for students' individual work, while 22.3% of the respondents answered that they do not use differentiation for students' individual work. During the study, the authors aimed to identify the role of differentiated learning in different aspects of teaching and learning. One of the important aspects of teaching is the assessment of students' knowledge. The results of the questionnaire show that 74.8% of the respondents use differentiation in evaluating students' knowledge, while 25.2% of the participants gave negative answers. In addition, the majority of the respondents (56.3%) also admitted that they were not aware of the components of differentiated learning, while only 43.7% of the respondents answered positively.

The analysis of the questionnaires revealed that a considerable number of EFL teachers (39 out of 103 teachers) have difficulties in defining criteria for teaching students when using the differentiated approach in heterogeneous groups. In addition, the study found that 27 participants out of 103, or 25.2%, admitted that they could not differentiate learning according to learners' needs. The results of the study show that EFL teachers do not use differentiation at all stages of teaching, the minority (45.6%) of the respondents gave positive answers and the majority of the respondents (54.4%) gave negative answers. The last question in the questionnaire which aimed to identify the

willingness of EFL teachers to upgrade their knowledge of the DL approach plays a significant role and shows that despite some challenges, lack of knowledge, and funding in modern schools, the majority of EFL teachers (86.4%) are eager to gain more knowledge on DL approach by attending CPD and improving their skills to enhance the learning process in heterogeneous classrooms.

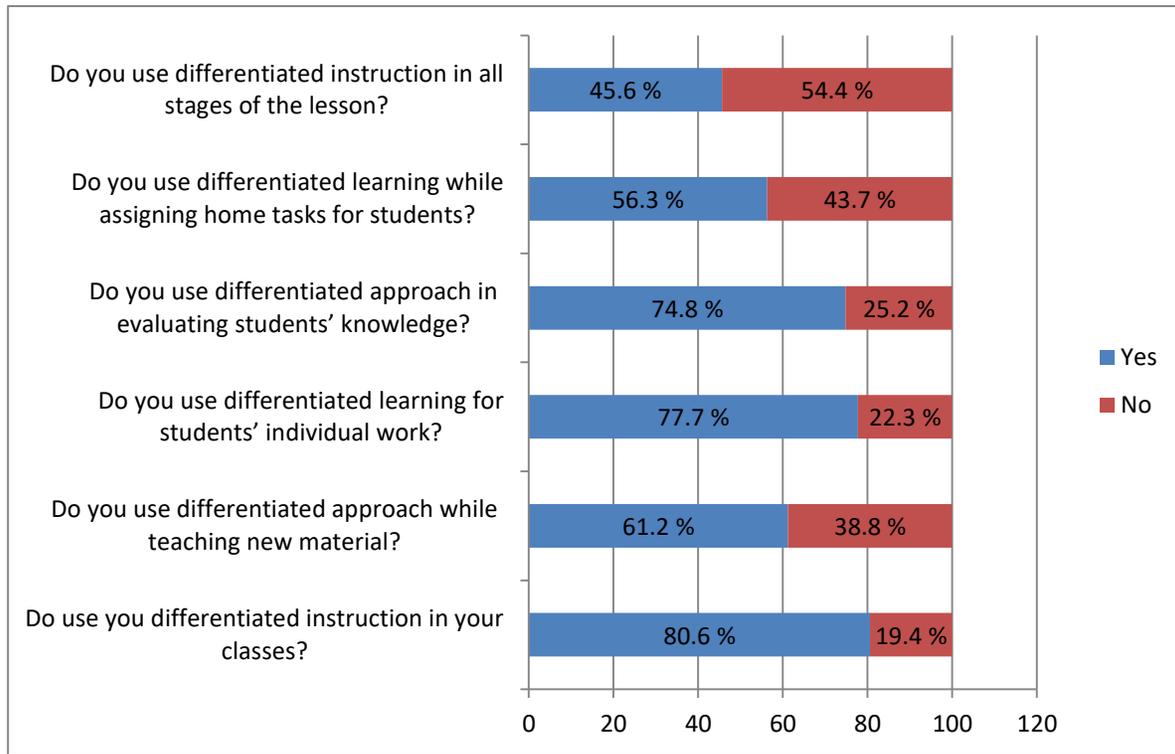


Figure 4. Teachers' perceptions on application of differentiated learning

Figure 5 shows the teachers' perceptions of managing differentiated learning, lesson planning, and lesson design. Overall, the results of the study show that the majority (90.3%) of the participants in the study believe that differentiated learning is important, while 9.7% of the opponents do not support the idea of differentiation in EFL classrooms. Thus, the results of the questionnaire show that the majority of the respondents have a positive attitude towards the implementation of differentiated learning. According to the results of the study, 79 respondents, i.e., 76.7%, believe that lack of funding is one of the main factors in the implementation of the DL approach, while 24 people (23.3%) disagree with this opinion. The graph shows that the majority of respondents (85.4%) believe that differentiated learning is time-consuming, as teachers need more time to prepare lesson plans and learning materials for different groups of students with different needs. In contrast, 14.6% of respondents disagreed with this statement. In addition, a larger percentage (79.6%) of participants find designing differentiated learning challenging, and only 20.4% of respondents disagree with this statement. Even though the majority of EFL teachers find the DL approach tedious and laborious, they admit the effectiveness of DL, as 86.4% of the respondents answered that the DL approach makes English language learning enjoyable and accessible, which is a key point when teaching in a heterogeneous group. In addition, the majority of EFL teachers (82.5%) admit that the DL approach has a positive effect on students' motivation and quality of knowledge.

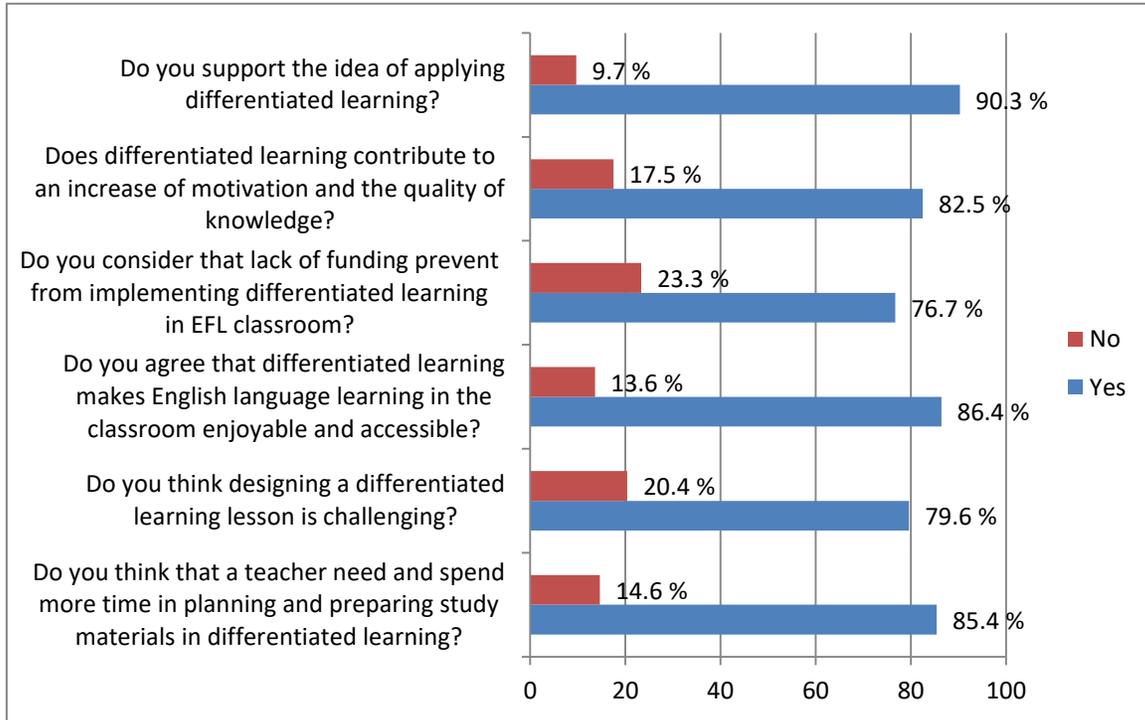


Figure 5. Teachers’ perceptions of managing DL, lesson planning and designing

**5. Discussion**

To get some data about EFL teachers' perception, awareness, and problems encountered in implementing the DL approach, ten English teachers were interviewed. Although the responses varied, the majority of the respondents have the same positive view of differentiated learning. The first interview question is "How do you define differentiated learning?" This question turned out to be the most complicated question among others because the respondents gave different answers. Six EFL teachers defined differentiated learning as beneficial learning that helps learners do different tasks according to their language level and proficiency. Three teachers admitted that they have a vague idea and interpretation of differentiated learning and claimed that they are hesitant to explain what it is. One teacher explains differentiated learning as a complex approach that includes different methods to meet students' needs. The second interview question is "What are the benefits of using differentiated learning in a heterogeneous EFL classroom?", Five teachers answered that it will help to engage all students and provide them with appropriate tasks, and two other teachers answered that it will benefit students because each student will learn at his or her own pace without comparing with other students, two teachers believe that differentiated tasks will help challenged students to meet their needs by performing multi-level tasks, and one teacher disagreed by stating that he or she could not highlight the benefits of DL approach.

The third interview question is "What are the challenges of EFL teachers in using differentiated learning in heterogeneous classrooms?" while analyzing the answers to this question, the authors admit that the answers are similar. Four teachers claim that planning and designing lessons for differentiated learning takes extra time and effort, apart from the main preparation for the lesson. In addition, they believe that it is difficult to manage differentiated learning in a forty-minute lesson. Two teachers claimed that the excessive number of students in the EFL class is a big obstacle to the use of differentiated learning. Although it is recommended that language classes should not have more than 15 students, EFL teachers admit that they can have up to 32 students in one class, which makes it difficult to apply DL. Three EFL teachers claim that it is a challenge to organize differentiated learning because they lack knowledge, strategies, and skills on how to do it properly. Lawrence-Brown (2004) states that the availability of strategies such as differentiated instruction provides an excellent opportunity for educators to teach students according to their preferred learning style, content, and pace. In addition, these teachers admit that the lack of learning and teaching resources and facilities for differentiated learning is one of the main stumbling blocks in implementing the DL approach. Thus, EFL teachers explain that this problem can be solved with sufficient school funding. One teacher says that the most difficult task in differentiation is the preparation of tasks because teachers should know the level and educational needs of the learners.

The fourth interview question is "What EFL teachers can differentiate in the heterogeneous classrooms?" According to study results, this question seems to be confusing, as many teachers confirm they do not have a clear idea about all components of differentiated learning. Surprisingly, seven teachers consider that teachers can differentiate the only tasks and assignments. Two teachers claim teachers can differentiate methods and strategies, while one teacher mentioned the activities and exercises. Surprisingly, teachers’ responses differed greatly from each other, however, none of the interviewed teachers mentioned content, process, and product as components of differentiated learning which demonstrates that teachers need deeper study of differentiated learning and its components. According to Aliakbari & Khales

Haghighi (2014), differentiation involves a variety of instructional practices that address differences in students' learning styles, interests, prior knowledge, socialization needs, and comfort zones. In differentiated learning, teachers design activities that support students' learning preferences and strengths while providing tasks that promote growth in areas of weakness (Heacox, 2014). As Levy (2008) states, "Content is what is taught to each child in the same curriculum, but the content may be quantitatively or qualitatively different. Process differentiation can mean the process of teaching and learning based on the activities and tasks for achieving the content and learning outcomes that are predetermined and described for a particular unit of study. According to Tomlinson & Allan (2000), to differentiate content and process, EFL teachers should consciously prepare effective teaching principles and quality curriculum. Well-designed differentiated instruction will create favorable conditions for all students to learn and select the right product to demonstrate learning results.

The fifth interview question is "Do you think EFL teachers should use the DL approach in heterogeneous classrooms?" By asking this question, the authors tried to find out the teachers' attitudes towards the DL approach. Surprisingly, despite all the challenges that EFL teachers face in the classroom while applying the DL approach, almost all of them expressed a positive attitude towards the DL approach. According to seven EFL teachers, differentiated learning can contribute to better results by increasing interest in the subject through the use of basic-level tasks that allow you to work according to students' individual abilities and eliminate gaps in knowledge and skills. Two teachers state that the DL approach can also help to develop the ability to work independently on a task or project, develop imagination, and associative thinking, discover creative possibilities, and improve students' language skills. One teacher claim that differentiation and grouping according to levels help to increase students' motivation to learn and increase students' participation and engagement in the EFL classroom. Finally, the sixth interview question is, "What aspect of the DL approach would you like to improve in professional development courses on differentiated learning?" According to the results of the study, this question seems to be the most controversial. On the other hand, the question seems to be inspiring, as the respondents show their willingness to give complete answers. Surprisingly, all the EFL teachers interviewed agreed that they lacked knowledge about differentiated learning despite their work experience. Six teachers admitted that they are not aware of the components of the DL approach and they are convinced that they should increase their knowledge about what, when, and how to differentiate.

Moreover, they insist that pre-service teachers and graduates of education departments should take a separate course and master their skills before being employed in schools. Thus, in their research, almost 90% of EFL teachers agree with Gibbs & McKay, (2021) who state that continuous professional learning, mentoring, and coaching on DI supported by school leaders is essential. Furthermore, they add that in-service teachers should also be provided with teacher development courses and workshops that include the DL approach, as young EFL teachers struggle in heterogeneous classes if they do not use the DL approach. Two teachers explained that they struggle with managing DL, grouping students, and making different assignments for multi-level students. Two other teachers confirmed that they do not know how to assess and grade multi-level learners and they expressed their willingness to learn strategies on how to differentiate when teaching new learning material. From the results of the questionnaire, it can be concluded that the number of EFL teachers who use the DL approach at all stages of the lesson is higher than the number of teachers who do not. In addition, the results indicate that a majority of the participants (more than 60%) can use DL in assigning homework, in individual student activities, in assessing knowledge, and in teaching new material.

According to the results of the questionnaire and interview, the least number of EFL teachers who participated in the study cannot fully implement a differentiated learning approach adequately in their classrooms. Also, many EFL teachers have a vague idea about differentiated instruction, definitions, methods, and strategies. The authors may suggest that this may be related to the insufficient work experience of EFL teachers in teaching, as 70% of the participants in the study indicated that their work experience ranged from 2 to 5 years. Overall, the interview results have shown that teachers' needs as well as their perceptions about awareness, application, and management of the DL approach are different from each other. Based on the questionnaire responses, the authors have found that the majority of EFL teachers claim that they know how to apply differentiated instruction. However, the results of the interview have shown that a considerable number of EFL teachers still have difficulties in applying the DL approach due to some factors such as heavy workload, lack of knowledge, insufficient training, large class sizes in the class, lack of funding, and lack of facilities for differentiated instruction. Surprisingly, despite all the challenges that EFL teachers face, about 87% of Kazakh EFL teachers from three regions are willing to promote the DL approach, yearn to deepen their knowledge and improve their expertise by attending professional development courses, in-service courses, workshops, and training sessions to gain a thorough understanding of differentiated learning concepts, objectives, tasks, components, and strategies to use in their teaching. The results have also shown that half of the interviewed teachers do not have a clear idea of a differentiated learning approach, which is detrimental to the teaching process. It is obvious that to meet modern educational standards and learners' personal needs, all EFL teachers should have a clear understanding of why and how they can use the DL approach in heterogeneous classrooms by differentiating content, process, and product.

This study has several limitations. The first limitation relates to the research design based on questionnaire and interview responses. Pre-service EFL teachers only responded to the questions about how they understand and use the DL approach and why they face challenges when using DL. Therefore, in order to strengthen the research, future research should build on observational data of actual classroom practices. Secondly, this study can be extended to a wider geographical audience and involve more target groups, so that the authors can involve teachers from other districts of Kazakhstan, pre-service EFL teachers, and university lecturers as participants and explore how they implement the DL approach in their classrooms.

## 6. Conclusions

This study explored Kazakh pre-service EFL teachers' perceptions of awareness, implementation, and management of differentiated learning, lesson planning, and design. Differentiated learning and teachers' skills in applying this approach are key decisions for many learning issues in heterogeneous classrooms. Differentiated instruction continues to be actively practiced in Kazakhstan since the implementation of updated learning content in Kazakh schools. The result has confirmed that Kazakhstani pre-service EFL teachers are aware of DL as an effective strategy for accommodating students' differences in the classroom. When setting objectives, EFL teachers admit that all learners learn new material and content at different levels, therefore, every teacher is required to reflect this aspect in lesson planning.

The results of the study have shown that 90% of Kazakh EFL teachers who participated in this study support the idea of using the DL approach in heterogeneous classrooms, as they agree that DL contributes to increasing motivation and quality knowledge and makes English language learning enjoyable and accessible; however, they report that lesson planning and preparing study materials for DL in heterogeneous classroom is tedious. In addition, the authors have to admit that some teachers still follow the idea of "one size fits all". The results of the questionnaire confirmed that the majority of EFL teachers can define criteria for DL, differentiate taking into account learners' needs, know methods of DL, select materials for heterogeneous groups, and create differentiated tasks and learning according to lesson type, aim, and content. It is paradoxical to know that approximately the same number of EFL teachers admit that they understand the tasks of DL although they are not aware of the components of the DL approach.

The findings of the study highlight the urgent need for EFL teachers to have access to DL-focused professional development opportunities. These should cover a comprehensive understanding of DL, including its elements, techniques and application tactics. Such training could specifically address the areas of ambiguity or doubt found in this study, such as the distinction between content, process, and product. In addition, increased spending on DL support resources, such as money and instructional materials, could alleviate some of the difficulties mentioned and promote more effective application of this strategy.

To confirm and extend the findings, future studies should consider incorporating observations of classroom procedures. In addition, the sample for this study was geographically limited and excluded university teachers and in-service teachers. A more thorough understanding of the use of DL in Kazakhstan's EFL teaching environment may result from expanding future studies to include these additional perspectives. This study provides important new insights into the possibilities and difficulties of DL in Kazakh EFL classrooms. It highlights the importance of emphasizing professional development and resource allocation to support the successful implementation of this pedagogical method. This could have implications for raising the standard of EFL teaching and accommodating learner diversity in the country's classrooms.

## 7. Recommendations

There is an obvious need to include robust DL modules in the curriculum of teacher training programs. Such modules need to provide not only a theoretical understanding of DL, but also useful advice on how to tailor training to the needs, interests and learning preferences of individual students. A culture of continuous learning among teachers should also be promoted through teacher training programs that emphasize the need for ongoing professional development in DL. The findings highlight the importance of integrating DL ideas into the design of EFL curricula in terms of curriculum development. This may involve developing a range of tasks and resources that take into account different levels of language proficiency, learning preferences and academic interests. Given the difficulties of controlling large class sizes, curriculum designers should consider ways to streamline and simplify the use of DL, for example by offering pre-designed, differentiated lesson plans and materials that are easily adaptable to different classroom circumstances.

The study's findings on instructional practices suggest that teachers need to implement DL in a consistent and knowledgeable manner. Teachers should be able to identify and address students' individual learning needs, differentiate their curriculum, and successfully manage the dynamics of a diverse classroom. This would require separation not only of tasks and assignments, but also of teaching methods, activities and exercises, and instructional materials. In light of these findings, it is recommended that policy makers consider methods to support DL in EFL classrooms. These may include funding for DL tools and materials, regulations that support smaller class sizes, and investment in teacher training and professional development. A supportive environment for DL could also be promoted through school policies, for example, by encouraging collaborative learning and inclusive classroom practices. On the other hand, teacher educators have a crucial role to play in preparing pre-service teachers for the realities of a diverse classroom. They should not only teach preservice teachers about DL principles, but also practice what they preach. They should also consider working with preservice teachers to provide guidance and support, and to build a community of practice that promotes continuous improvement in DL.

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