

# World Journal on Educational Technology: Current Issues



Volume 14, Issue 1, (2022) 316-328

www.wi-et.eu

## Education for the disabled in accordance with the quality of inclusive education in the distance education process

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### **Suggested Citation:**

Stambekova, A., Zhakipbekova, S., Tussubekova, K., Mazhinov, B., Shmidt, M., & Rymhanova, A. (2022). Education for the disabled in accordance with the quality of inclusive education in the distance education process. *World Journal on Educational Technology: Current Issues*. 14(1), 316-328. https://doi.org/10.18844/wjet.v14i1.6760

Received from July 31, 2021; revised from August 15, 2021; accepted from October 05, 2021. Selection and peer review under responsibility of Prof. Dr. Servet Bayram, Yeditepe University, Turkey. © 2022 Birlesik Dunya Yenilik Arastirma ve Yayincilik Merkezi. All rights reserved

#### Abstract

The aim of this research is to evaluate the disabled education in accordance with the quality of inclusive education in the distance education process in line with the opinions of special education teachers. The research was conducted with 10 special education teachers who were teaching special education and general education in schools with special needs students in Kazakhstan and who agreed to participate in the research voluntarily. The research was designed in accordance with the case study, one of the qualitative research designs. Research data were collected with a semi-structured interview form developed by the researchers. As a result of the research, it was revealed that the teachers used online lessons, video sharing, homework control, online activities and mobile applications in the teaching of the lessons in the distance education process; they preferred formal education to distance education; and they found distance education insufficient to meet the individual needs of students in learning. In addition, teachers stated that they found family participation in distance education and teacher–student peer interaction insufficient. The results obtained from the research revealed the necessity of eliminating the obstacles in the education of the disabled in accordance with the quality of inclusive education.

Keywords; Inclusive education, students with disabilities, special education, special education students

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### 1. Introduction

One of the tasks defined in the State Programme for the Development of Education of the Republic of Kazakhstan between 2011 and 2020 is to improve the inclusive education structure in schools. Within the scope of the programme, it was planned to increase the share of schools that constitute the conditions of inclusive education from the total number to 70% by 2020. The share of schools that will provide unhindered access for disabled children will be 20% (Kazakhstan and Nazarbayev, 2010). The 2020–2025 targets have been added to the planned changes in the structure of inclusive education. Among the goals of the State Programme for the Development of Education of the Republic of Kazakhstan 2020–2025 is a new understanding of education, which focuses on the formation of flexible and professional skills necessary in the international arena (Alpysbaeva and Karmanova, 2021).

In the reform understanding of the modern world, human resources are defined as the potential of the society. Since the formation of a human resource is directly dependent on the education system, it is expected that modern education systems will have an infrastructure that meets the needs of students and ensures that young people are integrated into the society (Alpysbaeva and Karmanova, 2021). In this respect, inclusive education has an important function in education systems.

## 1.1. Theoretical and conceptual framework

In this section, basic information about inclusive education, the right to education of people with disabilities and distance education will be given.

## Kapsayıcı eğitim

The main areas that inclusive education focuses on are discussed in three categories by the United Nations Educational, Scientific and Cultural Organisation (UNESCO), (2009). These are inclusiveness of the system, inclusiveness of access to education and social inclusion.

- Inclusiveness of the system: Respecting cultural, social and individual differences by education systems, schools and teachers and responding to the expectations and needs of students in this direction.
- Inclusiveness of access to education: Ensuring equal access to quality education for all.
- Social inclusion: It is the close coordination with other social policies that includes the expectations of social actors and stakeholders.

Inclusive education is the development of interactive, affirming and dynamic learning communities that empower all members, regardless of identity difference, by removing all barriers to developing policies and practices based on a well-established, democratic social justice-oriented approach to create, develop and sustain inquiry-based, bias-free learning communities (2011).

In order for inclusive education to fulfil its function, teacher training programmes and schools should be arranged accordingly. Teacher training programmes should be arranged in a way that will provide pre-service teachers with knowledge and experience about inclusive education content. School programmes, on the other hand, should function to provide learning opportunities in a way that prepares students for life. In addition, school environments should offer all students the opportunity to participate equally in intra- and extracurricular activities (Banks, et al., 2001).

In the years when the concept of inclusive education came to the fore, it focused on children with special needs and disabilities. Considering it with an ever-expanding perspective, it means that today, children, youth and adults of all ages and all characteristics benefit from education with equal opportunities and quality (Taylor & Sidhu, 2012).

There are many factors in the success of inclusive education, such as the knowledge, attitudes and beliefs of different stakeholders, cooperation and support between stakeholders, educational environment, curriculum, teacher training, physical and legal infrastructure. Among these factors,

the role of classroom teachers is emphasised, and the knowledge, experience, attitudes and competencies they should have in the inclusive education process are emphasised (Siagian & Kurniawati, 2019).

## The right to education of people with disabilities

In education, it means that for all individuals to have equal learning experiences, the learning content, teaching process and learning experience must be tailored to the needs of students, including students with disabilities (Iwarsson & Ståhl, 2003).

The Education of All Disabled Children Act (EADCA) requires the inclusion of technological innovations in curricula as part of inclusive education. Effective learning contents in the curriculum of general education programmes offer an education opportunity equipped with new learning technologies to improve students' knowledge and skills. In line with the EADCA, teachers are expected to use learning technologies effectively in accordance with content provision and practice (Ng, Liew, Saripan, & Noordin, 2008).

The right to education of persons with disabilities is clearly stated in the United Nations Convention on the Rights of Persons with Disabilities. States participating in the agreement have agreed to unify the education system and to provide lifelong learning opportunities to students with disabilities in order to ensure this right on the basis of equal opportunity and without discrimination. People with disabilities should not be excluded from the education system because of their disabilities, and primary and secondary education of disabled children should be made compulsory. It should be ensured that disabled people have equal rights and opportunities in education with other members of the society. In this direction, the states that have accepted the United Nations Convention on the Rights of Persons with Disabilities have accepted the appointment of teachers who know sign language and Braille alphabet and the training of experts and personnel working at all levels of education. These trainings should include awareness of disability and the use of training techniques and materials.

In addition, the states that have accepted the agreement are obliged to ensure that people with disabilities have access to general higher education, vocational education, adult education and lifelong education on an equal basis with other individuals without discrimination (MacKay, 2006).

It is extremely necessary to emphasise the importance of education to individuals with disabilities and their families and to explain that one of the basic rights of disabled people is the right to education, just like every person sharing the same society. Of course, education is important for all individuals. Education for people with disabilities or special needs like everyone else means making the difference between a socially satisfying, intellectually stimulating and economically productive life and future. In addition, education is a process that highlights the abilities of people with disabilities; a tool for managing chronic health problems; and a factor that improves their children's quality of life (Genc, 2016).

## **Distance education**

Due to the COVID-19 pandemic, educational institutions in many countries have switched from the face-to-face education model to the online education model in order to prevent the spread of the virus. This transformation is not only an arbitrary practice, but has been made compulsory by the decision taken by the Council of Ministers of many countries (Telli and Altun 2020).

The COVID-19 pandemic process, which started in China in December 2019, opened the doors of a new and challenging life for the whole world, and caused new concepts to enter our lives. The transformation of distance education into a compulsory practice at all levels of education has brought about many debates.

Information and communication technologies have influenced the whole world with the emergence and spread of computers and the Internet (Firat, 2017). The transition to distance education has also

revealed the difficulties and needs experienced in the integration of technology into education (Daniel, 2020). One of the sole purposes of distance education is to create mutual interaction and communication between the teacher and the learner by using technology instead of face-to-face communication (Mishra, Gupta, & Shree, 2020).

The COVID-19 pandemic, whose effects are thought to continue for a long time, is seen as the biggest social experiment in the history of the world in education. Although approximately 1.6 billion students worldwide have been affected by the process, the reflections of these new educational experiences on the quality of education seem inevitable in the long run. In addition to the foreseen negativities, the distance learning model, which is the most effective way in which education and technology can be intertwined, also offers important opportunities for the structuring of modern education (Reimers & Schleicher, 2020).

### 1.2. Related research

In recent years, the number of researches on special education and special education methods and techniques has increased (Uzunboylu & Özcan, 2019). When the researches in the field are examined, it is seen that there are many studies on inclusive education practices, education of disabled students as a part of inclusive education, teacher training policies and quality education practices.

Sigutina (2018) drew attention to the needs brought about by inclusive education practices in her study. The researcher emphasised that inclusive education in the education of all children with special needs, including children with disabilities, has a significant effect on them having equal opportunities with children without disabilities. In addition, it was emphasised in the research that the inclusive education model is an important opportunity to create a barrier-free education environment for children with special needs (Sigutina, 2018).

In his research, Movkebaeva (2013) drew attention to the problems in teacher training strategies in inclusive education practices. In the research, the importance of the formation of professional competencies of future special education teachers to increase the quality of education to be given to students was emphasised.

Eshpanova, Bekzhanova and Akhmetova (2018) evaluated the life levels and quality of people with disabilities in their study. In the research, based on the declaration of the United Nations Convention on the Rights of Persons with Disabilities, it was emphasised that the educational needs of the disabled should be equal to those of non-disabled people, but that the quality of life of the disabled can be increased in this way.

Odom (2000), in his study, revealed teacher competencies regarding the education of children with special needs in the pre-school period. In his study, he revealed that preschool teachers need training on the use of technology in the education of children with disabilities and their ability to implement related programmes.

Lee (2001) reveals that the motivation of educators and trainees regarding the distance education process has a great impact on the evaluation of distance education programmes and service quality. Pacheco et al. (2020) evaluated the educational practices carried out during the COVID-19 epidemic period and examined the changes in the academic achievement of students with special needs in this process. In his research, Cahapay (2020) revealed how families participated in the education process during the COVID-19 pandemic and how they were affected by this process. In his study, Patel (2020) discussed the effects and consequences of the coronavirus pandemic on the mental development of students.

However, since the effects of the COVID-19 pandemic are quite new, there are limited studies on the effects of the epidemic on the education of students with special needs in Kazakhstan. For this reason, it is thought that the evaluation of the disabled education in accordance with the quality of

inclusive education in the distance education process and the evaluation of the views of special education teachers will contribute to the literature.

## 1.3. Purpose of the research

The aim of this study is to evaluate the disabled education in accordance with the quality of inclusive education in the distance education process in line with the opinions of special education teachers.

The sub-objectives formed in accordance with the purpose of the research are as follows:

- 1. What are the practices that teachers use in the teaching of lessons in the distance education process?
- 2. Do the teachers find the teaching of the distance education process sufficient when they compare it with the formal education?
- 3. What are the teachers' views on meeting students' individual needs in learning?
- 4. What are the teachers' views on family participation in the distance education process?
- 5. What are the views of teachers on teacher–student and peer interaction in the distance education process?

#### 2. Method and Materials

In this section, information is given about the research model, participants, data collection tools, data collection process and data analysis, which will enable special education teachers to give their opinions in a planned manner.

### 2.1. Research method

This research was designed using a case study, one of the qualitative research designs. Case studies are defined as a research method that allows the researcher to examine a phenomenon or event in depth that he cannot control. In this study, special education teachers were asked to evaluate the disabled education within the distance education process. Depending on this moment, it was decided to collect the research data in accordance with the case study, one of the qualitative research designs (Thomas, 2017).

## 2.2. Participants

In studies in which the qualitative research method is used, small sample groups are generally studied. For this reason, the relevance of the sample is taken into consideration rather than the representativeness of the sample. Convenience purposeful sampling, which is among the purposeful sampling types, is a sampling type that makes it possible to save on the factors of time, materiality and effort (Patton, 1990). For this reason, the study group of the research was formed by using the 'appropriate purpose sampling' technique in this research. Ten special education teachers who were teaching special needs students in special education and general education schools in Kazakhstan and who agreed to participate in the research voluntarily participated in the research. Demographic characteristics of the participants of the study are given below.

Table 1 contains information about the demographic characteristics of the teachers participating in the research.

Teachers	Professional	Gender	Class	Students' educational diagnoses
	experience			
T-1	1-5 Years	Female	6th grade	Hearing and speech insufficiency
T-2	1-5 Years	Female	8th grade	Visual impairment
T-3	1-5 Years	Male	8th grade	Mild mental disability

Table 1. Demographic characteristics of teachers

T-4	6-10 Years	Female	5th grade	Mild mental disability
T-5	6-10 Years	Male	6th grade	Visual impairment
T-6	6-10 Years	Male	7th grade	Mild mental disability
T-7 6	6-10 Years	Female	5th grade	Visual impairment
<b>T-8</b> 1	11-15 Years	Male	7th grade	Hearing and speech insufficiency
<b>T-9</b> 1	16-20 Years	Female	8th grade	Mild mental disability
<b>T-10</b>	16-20 Years	Female	5th grade	Mild mental disability

Three teachers participating in the research had 1–5 years, 4 had 6–10 years, 1 had 11–15 years and 2 had 16–20 years of experience. Six teachers were female and four were male. Three teachers taught 5th grade, two teachers 6th grade, two teachers 7th grade and three teachers 8th grade. Of the teachers participating in the research, two provided education to students with hearing and speech impairments, three to students with visual impairments and five to individuals with mild intellectual disabilities.

#### 2.3. Data collection tools

In the research, a semi-structured interview form was created by using the case study approach, one of the qualitative research methods. The semi-structured interview form, which was created to get the opinions of special education teachers, was developed by the researchers. Semi-structured interviews were conducted in a way that allowed the interviewer to expand the interview questions when necessary (Thomas, 2017). The semi-structured interview form used in the research is as follows:

## Semi-structured teacher interview form

The purpose of this research; The aim of this study is to evaluate the disabled education in accordance with the quality of inclusive education in the distance education process in line with the opinions of special education teachers. Your answers will be used in the research by keeping your personal information confidential. Thank you for sincerely answering the questions.

## **Demographic Information**

Genders:	Female: ( ) Male: ( )
The Class You Teach:	5th grade ( ) 6th grade ( ) 7th grade ( ) 8th grade ( )
Your professional expe )	erience: 1-5 Years ( ) 6-10 Years ( ) 11-15 Years ( ) 16-20 Years (
Disability diagnoses of	f students:

#### Questions

Question 1. What are the applications you use in the teaching of the courses in the distance education process?

Question 2. Do you prefer courses to be given through distance education or through formal education?

Question 3. What are your views on meeting the individual needs of students in learning during the distance education process?

Question 4. How would you evaluate the participation of families in the distance education process?

Question 5. What are your views on teacher-student and peer interaction in the distance education process?

#### 2.4. Data collection process

In the process of collecting the research data, precautions due to the COVID-19 pandemic were taken into account. Interviews with special education teachers were conducted online. Before moving on to the questions in the semi-structured interview form, the teachers who participated in the research were informed about the purpose and content of the research and the confidentiality of the researchers' personal information. Then, the questions in the semi-structured interview form were directed to the teachers. The interview with each participant lasted approximately 30–35 minutes. The interviews were recorded, and then the audio recordings were transcribed for data analysis.

## 2.5. Data collection analysis

The data obtained from the interviews with the teachers were analysed with the 'thematic analysis' technique, which is a method used to identify, analyse and report the patterns (themes) in the data due to its usefulness and theoretical flexibility (Braun & Clarke, 2006). Separation of data with the thematic analysis technique was done by following the thematic analysis steps suggested by Braun and Clarke (2006). The audio data obtained in the first stage were converted into Word format, and the data were converted into concrete form. In the second stage, the themes of 'Teaching the lessons in the distance education process', 'Meeting the individual needs of the student in learning', 'Family participation in distance education' and 'Teacher, student and peer interaction' were determined by the researcher in accordance with the purpose of the research. In the third stage, subthemes under the main themes were created. In the fourth and later stages, other researchers also participated in the process and acted jointly in controlling the themes, naming and preparing reports. As a result of all these stages, the tables in the findings were created and the opinions of the teachers who participated in the research were reported. The thematic analysis stages used in the research are shown in Figure 1.

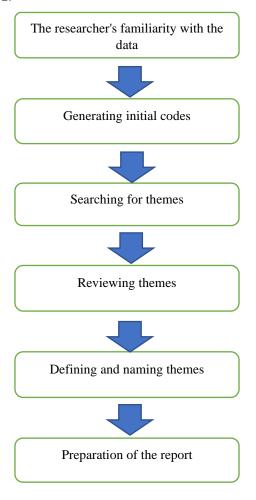


Figure 1. Thematic analysis process stages (Braun & Clarke, 2006)

### 3. Results

The research data consists of teacher opinions, student opinions, parent opinions and the sections where these opinions are compared.

The research data were evaluated in four categories by following the thematic analysis process shown in Figure 1. The categories are as follows: the teaching of lessons in the distance education process; the ability to meet the individual needs of students in learning; family participation; and teacher—student and peer interaction in distance education.

## Processing of courses in the distance education process

From the training process, which is evaluated in Table 2, the evaluation regarding the practices in its processing is not included.

Table 2. Applications in the teaching of teachers in the distance education process

Theme	Sub-themes	Teachers giving opinions	F
	Online lessons	T-1, T-2, T-3, T-4, T-6, T-7, T-9, T-10	8
Processing of lessons	Video sharing	T-1, T-3, T-5, T-8, T-10,	5
in the distance education process	Giving homework- checking homework	T-2, T-6, T-10	3
caacation process	Online events	T-3, T-4, T-7	2
	Mobile application	T-8	1

The views of the teachers participating in the research on the teaching of the course in the distance education process were evaluated. Eight teachers stated that they held online lessons, five teachers shared videos, three teachers gave homework and homework control, two teachers organised online activities and one teacher used a mobile application.

Table 3 presents the opinions of teachers regarding the comparison of distance education with formal education.

Table 3. Comparison of distance education and formal education

Themes		Teachers giving opinions	F		
ı	find	distance	education	T-3	1
adv	advantageous				
I find both similar		T-6, T-9	2		
I find formal education advantageous		T-1, T-2, T-4, T-5, T-7, T-8, T-10	7		

One teacher participating in the research found distance education more advantageous than formal education, while two teachers found both of them to be similar and seven teachers found formal education more advantageous than distance education.

## Being able to meet the individual needs of the students in learning

Table 4 shows the views of the teachers participating in the research on meeting the individual needs of students in learning during the distance education process.

Table 4. Teachers' views on meeting students' individual needs in learning

Theme	Sub-themes	Teachers giving opinions	F
To be able to meet the	I find it sufficient	T-3	1
individual needs of	I find it quite sufficient	T-4, T-6, T-9	3
students in learning	I do not find it insufficient	T-1, T-2, T-5, T-7, T-8, T-10	6

One teachers participating in the research stated that they were able to meet the individual needs of students in learning during the distance education process, while three teachers found it partially sufficient and six teachers found distance education insufficient in meeting the individual needs of students in learning.

## Family involvement in distance education

In Table 5, the views of the teachers participating in the research on family participation in the distance education process are evaluated.

Table 5. Teachers' views on family involvement in distance education

Theme	Sub-themes	Teachers giving opinions	F
	High level of anxiety	T-1, T-3, T-4, T-5, T-7, T-8, T-9	7
Family	Lack of technological means	T-2, T-3, T-5, T-6, T-10	5
participation	Lack of communication	T-4, T-6, T-9, T-10	4
	Lack of online family education	T-5, T-7	2

Seven teachers participating in the research evaluated that families have high levels of anxiety, five stated lack of technological facilities, four stated lack of communication and two evaluated the inadequacy of online family education as deficiencies related to family participation in the distance education process.

## Öğretmen-öğrenci ve akran etkileşimi

Table 6 shows the views of the teachers participating in the research on teacher—student and peer interaction in the distance education process.

Table 6. Opinions of teachers on teacher-student and peer interaction

Theme	Sub-themes	Teachers giving opinions	F
	Weak interaction	T-2, T-4, T-5, T-7, T-9, T-10	6
Teacher-student and	Insufficient time	T-1, T-3, T-4, T-6, T-8	5
peer interaction	Unqualified interaction	T-5, T-8, T-10	3
	Disorganised interaction	T-2	1

Six teachers participating in the research found the interaction between teacher, student and peers weak in the distance education process. Five teachers expressed an opinion about the lack of time in

interaction; three teachers participating in the research found the interaction unqualified; and one teacher evaluated the irregularity of the interaction.

#### 4. Discussion

When the opinions of the teachers participating in the research on the practices they use in the teaching of the courses in the distance education process are evaluated, it is seen that the teachers use online lessons, video sharing, homework control, online activities and mobile applications. Within the scope of the COVID-19 struggle, Kalaç and Erönal (2020) categorised the technology materials used by teachers in education as materials shared in different formats such as online lessons, videos, slide shows and PDFs, in their research in which they addressed the problems of students with disabilities during the distance education process.

When the opinions of the teachers regarding the comparison of distance education lessons with formal education are evaluated, it is seen that the majority of teachers prefer formal education to distance education. Mengi and Alpdoğan (2020) emphasised in their research that distance education applications are difficult teaching methods for special education students. In the research, it was concluded that the students took less responsibility in the home environment and had much more difficulty in acquiring the knowledge and skills they gained in face-to-face education in online education.

In the research, when the opinions of the teachers about the students' ability to meet their individual needs in learning in distance education were evaluated, the teachers stated that they found it insufficient. In their research, Armitage and Nellums (2020) stated that, as in every stage and every type of education, distance education applications should be organised in a way that can meet the basic needs of students by adopting an inclusive education approach based on the idea that no student will fall behind from education.

When the views of the teachers participating in the research on family participation in the distance education process are evaluated, the teachers drew attention to the high level of anxiety of families, the lack of technological opportunities, the lack of communication and the inadequacy of online family education. In their study, Asbury et al. (2020) stated that with the closure of schools during the COVID-19 process, this process negatively affected students with special needs, as well as their families. Stankovic et al. (2020) stated that while distance education causes a rapid social change during the pandemic process, it causes anxious mood in students with special needs and their families, behavioural changes in students and their families, and anxiety. Saricam, Deveci and Ahmetoglu (2020) stated that mothers and fathers of disabled children experience intolerance to uncertainty because their psychological resilience is low. Stenhoff, Pennington and Tapp (2020) emphasised the importance of families' participation in distance education in their study, in which they discussed the distance education support in the education of children with autism spectrum disorder and special needs during COVID-19 and school closures, while at the same time they mentioned the inadequacy of the technological opportunities of families living in rural areas.

When the views of the teachers participating in the research on the teacher–student and peer interaction in the distance education process are evaluated, the teachers emphasised the problems of poor communication, lack of time, unqualified interaction and irregular interaction. Gross and Opalka (2020) stated that during the COVID-19 epidemic, students with special needs were most affected by the lack of adequate facilities in schools and educational environments during the transition from face-to-face education to distance education. In the study, it was also stated that the teachers' regular communication with students and their families about the time they spend at home, the activities and things to be done will increase the quality of education.

### 5. Conclusion

Students, who are obligatory participants of distance education practices around the world, and teachers responsible for managing the process, pass an important test. Disabled education,

especially suitable for the quality of inclusive education, is an important part of distance education that should be carried out meticulously. In this study, special education teachers evaluated the disabled education in accordance with the quality of inclusive education in the distance education process. As a result of the research, when the teachers were asked which they would choose between distance education and formal education in the education of students with disabilities, they stated that they preferred formal education. In addition, teachers found distance education insufficient in meeting the individual needs of students with disabilities in learning. In the teachers' views on family participation in the distance education process, They stated that they have a high level of anxiety, technological impossibilities, lack of communication and lack of online family education. In student, teacher and peer interaction, weak interaction, lack of time, unqualified interaction and irregular interaction are the main areas that teachers focused on.

### 6. Recommendations

The findings obtained as a result of the research reveal that special education teachers have identified problems in various fields in the education of the disabled in accordance with the quality of inclusive education. In line with the problems identified by special education teachers, the following solution suggestions have been developed:

- 1. It should be aimed to diversify the technology-based learning methods used by teachers in the education of the disabled, and the necessary infrastructure should be created for this.
- 2. Learning contents based on the individual needs of students with disabilities should be created.
- 3. Online seminars should be organised in order to eliminate the problems related to family participation in the distance education process and to ensure full participation of families in the process.
- 4. Regular social activities should be organised to strengthen social ties with alternative programmes to be created with the support of technological infrastructure to increase teacher, student and peer interaction.

## Acknowledgement

The article is executed within the grant of the Ministry of Education and Science of the Republic of Kazakhstan under the budget program 217 "Development of Science", subprogram 102 "Grant financing of scientific researches", project AP08857092 "Organization of pre-university training of persons with special needs in the system of inclusive higher education". The state registration number is 0120PK00471.

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