Challenges and Opportunities of Online Training for Work with Children with Special Needs

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ABSTRACT

The trends and changes that have occurred in recent years, as a result of the COVID pandemic and the modernization of education, have led to an increase in the flexibility of the education system and the implementation of technological changes in the educational process itself. That is why the realization of online teaching in primary and secondary schools in the Republic of North Macedonia has started. The organization of online teaching monitoring imposed a change in the paradigm of the pedagogy itself, the organization of teaching, and the ways of working during the whole teaching process. Online teaching was and still is supported by a number of practicums, online training, and education for teachers in order to smoothly implement this type of teaching. This paper examines those perspectives that relate to the specifics of online teaching and its impact on the development of students with disabilities. For that purpose, the views of online teaching are explained, experiences and definitions, and methods for working in online teaching, as well as the characteristics of online teaching. The last point of the paper covers empirical research on teachers and their experiences with distance learning with students with disabilities.

Keywords: Methods, Online teaching, Pandemic, Special educational needs.

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and organization of teaching. Distance learning is new,

I. INTRODUCTION

As in many countries, in the fight against COVID-19, schools in the Republic of North Macedonia were completely closed from the beginning, and teaching began to take place via the Internet. The new school year started with the use of the hybrid model of teaching, that is, the students from I-III grade in the primary schools performed the teaching with a physical presence, while the other grades from the primary, secondary and higher education functioned online. The new situation has become a great challenge for teachers, students, parents, and especially for students with special educational needs. A number of platforms for support the realization of online teaching were developed and systematization and new principles of the teaching process were approached. However, the question arises as to how this affected the acquisition of lasting knowledge and the acquisition of life skills, especially among children with special educational needs. The truth is, for many students, distance learning is just a formality and not a real substitute for learning in school. During distance learning, various forms and approaches to work could be seen by teachers. Some of them, without teaching, just shared material with the students; and Internet testing is sometimes based on the "do it yourself" principle, so that at certain times students do not acquire real, long-term knowledge. This is especially important to emphasize in students with special needs who need a different approach unknown, and different for students as well as for teachers and parents. It is especially difficult for students with special educational needs. The parents of these young students need to spend most of their time more often, helping their children navigate the platforms, working with them on homework, and explaining the curriculum. This applies to parents who work from home, but what about those students whose parents go to work? How can these parents help their children? Those parents who do not have IT skills face bigger problems and should seek help from relatives, friends, colleagues, etc. Parents and students from vulnerable communities also face difficulties, as many do not have the means to provide their children with a computer and a smart phone to attend classes. Exactly these perspectives are covered in this paper which refers to the specifics of distance learning and its impact on the development of students with special needs. For that purpose, the perspectives of online teaching are explained, and exactly what this teaching covers, in terms of experiences and definitions, methods for working in online teaching, and characteristics of online teaching. Furthermore, the definition of children with special educational needs, the manner of inclusion in teaching, and the changes adopted by the Law on Primary Education as well as the reflection of these changes in work. The last point of the paper covers empirical research on teachers and their experiences with distance learning with students with disabilities.

II. PERSPECTIVES AND CHARACTERISTICS OF DISTANCE LEARNING

Distance education requires a very different organization, both at the level of the whole school and at the level of the individual teacher. Not all educational activities can be equally adapted to distance education. On the other hand, there are a number of learning activities that can be realized more effectively without the physical presence of all participants in the educational process. But the biggest challenge is to organize and adjust the way of working with students with special needs. In some cases, distance learning has made a great contribution to development (because some students have the opportunity to study individually, not in the classroom), while for some students it has been a problem that has contributed to difficulties in mastering the teaching material.

When we talk about establishing effective distance learning or online teaching, we are talking about facilitating flexible learning dynamics for students, in a structured, sometimes private, yet always open environment. As distance learning teachers, we will best succeed if we understand the nature of student dynamics, especially those with special educational needs, which consistently uses learning applications and platforms and a range of interactive teaching

Creating an environment for distance learning can be a great challenge but also an obstacle to the realization of given activities. Let us not forget that this type of teaching has a lack of social interaction between students which is a very important segment of the teaching process, especially for children with special needs. The challenge refers to the freedom to shape the dynamics of the classroom with all students, and the obstacle is the fear of the unknown, and the inability to establish direct communication with students and to directly monitor their work. The best thing is that all the opportunities offered by educational technology can be used in order to improve students' learning, motivation, and acquisition of lasting knowledge. What becomes apparent as we talk and research about this type of teaching and its planning is that these situations require creative solutions to the problems that currently arise. It requires thinking beyond standards to generate a variety of possible solutions that help meet new needs for all students and communities. Therefore, it may be tempting to think of this type of education as an approach. In reality, it is a way of thinking about delivery methods, methods, and technology, because the situation is quite dynamic and different in each country. If until now the school was one of the most important places for social interaction, now the home has become a new educational environment without physical social interactions with teachers and peers. Social isolation and lack of interactivity are considered to be the biggest disadvantages of distance learning, as technology has become the only channel for students to interact with teachers and their peers (Ergulec, 2019).

Links to social isolation and lack of interaction are likely to have detrimental effects on children's physical and mental health during and after the pandemic. Adverse effects include psychological influences such as prolonged quarantine, fear of infection, frustration and boredom, inadequate learning environment, etc. In addition to those negative psychological

effects, school closures and absenteeism, in students and teachers contributed to a change in behavior and view of the teaching process from a different angle. This includes a lack of interaction with peers, friends, classmates, and teachers. In this regard, schools at all levels have a key role to play, not only in delivering educational materials but also in offering students the opportunity to communicate with teachers and receive psychological counseling, especially students with special educational needs (Wang, 2020).

In addition to the challenges at the social level, parents and students are also influenced at the technological level. Parents and students who are accustomed to teaching with a physical presence, and who do not have the technological equipment, knowledge, and skills, have difficulty attending classes conducted in distance learning. In virtual learning environments, parent support has a significant contribution to student learning. Challenges affecting parental involvement in distance learning include lack of access to technology, low self-efficacy in technology, and lack of interest in using technology. Given the lack of physical presence of teachers and the time students spend with their parents during distance learning, parental involvement in the learning process is particularly important for student achievement.

During distance learning, especially for students with special needs, parents can be considered as one of the most important stakeholders, as they are the only ones who physically accompany their children. As homes become a new learning environment during the pandemic, parents influence learning by providing digital technologies, a learning environment, and learning how to support their children. This new situation leads to changes in the functioning and living of families. We have educational assistants working with students with special needs who help teach in general. For that purpose, the online teaching is performed through a specific model, so that the parents of the students had the right to choose whether the student will attend the classroom with a physical presence or (in rare cases) the educational assistant will be at home with the student.

III. METHODS AND APPROACHES OF WORK IN DISTANCE **LEARNING**

Experiences with distance education in compulsory education (primary and secondary education) in our country, until March 2020, can be reduced to separate attempts and enthusiasm of certain teachers and schools to use platforms for the realization of teaching and learning. In addition to primary and secondary schools, in the past period, higher education institutions have intensively used the advantages of distance learning systems for teaching, and it is not for exams to be conducted through uncommon communication tools (Nauka, 2020). In order to be able to successfully realize distance learning and learning, it is necessary to have a good organization of the whole process. The organization starts and develops in the school itself, taking into account the factual situation and the possibilities that the school has.

Each school in accordance with the protocols and measures had guidelines on how to organize teaching:

1) Will distance learning be realized or will it be

combined with teaching with the physical presence of students (or how the platform will be used in regular

2) The conditions of the schools (available technology for teachers and students, expected/possible or impossible support from parent), (Nauka, 2020).

The most important thing with the organization of distance learning is to anticipate the methods and forms of work, the strategies that will be used in this type of teaching, and the assessment, monitoring, evaluation, achievement of certain goals that will make learning "visible", giving feedback. information so that students will know when learning outcomes have been achieved. For that purpose, a starting point in the organization of distance learning is the creation of a schedule of classes according to which the teaching will be performed regardless of whether it takes place through the hybrid model or the teaching takes place through distance learning. Teachers need to adjust the time, methods, and ways to implement distance learning. The adoption of new teaching content by students is best to be 15 minutes, and then the teacher has time to check or evaluate the acquired knowledge during the class, taking into account the fact that one class lasts 30 minutes. In order to motivate students for self-directed learning, it is recommended that teachers give students longer-term activities (projects) guided by their individual interests, rather than short-term activities.

In this way, students develop more complex competencies, and the teacher can focus on monitoring the progress and guidance of students. All this is achieved by using innovative methods and applications that are appropriate for the age of students and offer opportunities for independent learning, use of various proposed sources of information, but also the acquisition of lasting knowledge. This type of work, on the one hand, proved to be quite effective for working with students with special educational needs, because their individuality and representation of interests and opportunities came to the fore.

Such tasks should be well-structured and timed, and progress should be monitored by completing tasks and achieving objectives within agreed deadlines. All materials for the realization of the teaching (textbooks, homework, presentations/plan of certain teaching contents, links, recorded video lectures) the teacher shares with the students, depending on the way of communication that is used. In addition to the National Platform, teachers used other free platforms that were conducive to working with students. Homework/independent assignments for students, assigned by the teacher, should be adapted to the age of the students, their needs, and abilities. The number of classes per specific subject is in accordance with the established curriculum and syllabus for each subject. During the realization of the teaching, the teacher should use a system for recording the presence of the students in the teaching, the regularity, and the timely fulfillment of the tasks.

For the efficiency to be even greater, the teacher should develop a strategy and determine ways of support for students with disabilities. This requires excellent coordination between teachers, assistants, and professional associates. Depending on the needs of the student, it should be determined which pace of work is most appropriate, which way is most appropriate for modifying the tasks and what type of assistive technology is needed, how to use the platforms and resources for these children, etc.

Contrary to the realization of classroom teaching (using various modern strategies, methods, techniques, and tools for teaching, monitoring, and evaluating student achievement), teachers in distance learning are put in a situation where they need to adapt those strategies or find new strategies and methods to succeed in motivating, engaging and guiding students in the learning process. To conduct distance learning, teachers need to deepen their understanding of learning processes and expand their knowledge with new innovative methods and techniques appropriate to the new way of working that the new paradigm has imposed on distance education.to develop their competencies to perform creative, supportive, and tailored distance learning for each student.

IV. DEFINING CHILDREN WITH DISABILITIES AND SPECIAL **EDUCATIONAL NEEDS**

"Determining the needs means perceiving the student's behavior during the teaching process, in socializing with other peers, in the relationship with adults, information about the family, the use of free time, and all the tasks of discovering the reasons for the child's behavior. The assessment of the abilities, knowledge, interests, and needs of the student with special needs is the basis for determining the further work of the teacher and the special educator, in relation to the planning of the teaching as a whole." (Shapiro, 2005).

In accordance with the legal norms and regulations in the law on primary education of the Republic of North Macedonia, inclusive teaching is organized in all primary schools. The purpose of this type of teaching is for the child to develop according to the abilities he has, the pace that suits him, and all the other needs he has. Students with special educational needs in schools in the Republic of North Macedonia have different types of disabilities and difficulties, such as speech or voice difficulties, language difficulties, specific learning difficulties (dyslexia, dysgraphia, dyscalculia), hearing difficulties and vision problems, elements of autism, mental retardation, etc. Therefore, it is necessary to emphasize that the role of the teacher and special educator in the school is quite specific. From the first day, the special educator, as well as the teacher, observe the work of the students, which gives them a clear picture or idea of how the student develops and what their abilities and possibilities are (Duga, 2009). For that purpose, the special educator should be properly didactic-methodical and ready to work with children with special educational

For the needs of this paper, it is necessary to clearly define the term and to know what this term covers, ie who are the students with special needs? That's all:

- 1) Students with disabilities (students with physical, mental, and sensory impairments).
- Students with behavioral disorders.
- Students with severe chronic diseases and other sick children for long-term hospital and home treatment.
- Students with emotional disorders.
- Students from socially, culturally, and materially

endangered families.

- 6) Students without parental care.
- 7) And what is quite important, gifted students (Begić, 2009).

In order to avoid ambiguities in communication as well as the explanations in this paper, and in everyday communication in primary school, the term "students with special educational needs" is accepted term that includes all those students who have learning difficulties and who can be the result of a disability or some other circumstance, so they need special support and assistance during education (Begić, 2009).

Individual differences are natural, and the development of each student can not flow and be straightforward, each student in a certain period of development may have certain difficulties, so he needs individual help and support.

V. INTEGRATION AND INCLUSION

The terms integration and inclusion are often used interchangeably, how to denote the same processes. It is good to clarify their meanings so that people in practice and in everyday work will know what integration is and what inclusion is.

Integration of students with special educational needs in regular schools means the inclusion of students in the educational process, without observing special educational needs. The integrative approach in itself implies and requires the student to change and adapt to the school so that he/she will fit into the school environment, thus emphasizing what he/she achieves in the school. In this case, at the center of the teaching process is not the student with his specific abilities, interests, and experience. If the student fails to adjust he becomes unsuccessful and excluded. At best, the student is transferred to a special school, which often means displacement or detachment from its natural environment.

Integration has its basis in the medical model of disability, which in turn treats disability exclusively as a problem or deficiency of the individual, which must be corrected, treated, rehabilitated, or changed in order to adapt to the school system and society as a whole. The entire burden of disability falls on the child and the family. The student is monitored through disability and diagnosis, and the support provided to him in protected conditions (in homes, hospitals, and boarding schools) aims to change him so that he can more easily fit into the natural environment. For example, a hearing-impaired student may wear a hearing aid and be expected to learn to speak in order to fit in more easily, but the teacher and other children are not expected to learn sign language or other forms of communication. Due to that, the need arose for the employment of special educators in primary schools. These students are often expected to have the same educational achievements as other students according to the curriculum so that they can be passed from grade to grade or will be forced to go to special schools (Begić, 2009).

Unlike the medical model, the social model does not treat disability as a problem of the individual, but as a problem of society. Society needs to change and adapt to meet the specific needs of each individual through new legislative

policies, new educational and social policies, and the adjustment of social institutions by removing various barriers in the environment from architectural to psychosocial. It is, therefore, necessary to view disability as a problem of society and to accept the responsibility that the position and quality of life of students with special educational needs depend on the degree of adaptation in society. Integrated education is often seen as a stepping stone to inclusive education. But the main constraint on the application of integrated education remains if the school system remains rigid and resists the changes that occur then only students with certain minor disabilities will need to be included.

Inclusion, on the other hand, is a philosophy based on the belief that every person has equal opportunities regardless of individual differences. In an inclusive society, every person is respected and accepted as a human being. Inclusion in the first place means providing equal opportunities for all, as well as maximum flexibility in meeting the specific educational and wider needs of all students. In inclusive education, all students are different, and the school and education system need to be adapted to meet the needs of all students as well as those with developmental disabilities and those without disabilities. It brings with it inevitable changes in the field of school culture, politics, and practice (Begić, 2009). The origin of the word inclusion dates back to the 17th century and has Latin origin includere/inclusion/inclusion which literally means closure, restriction. Today, the term inclusion has a completely different meaning and translates as involved in something, inclusion (Ristevska, 2018).

VI. RESEARCH-EXPERIENCES OF TEACHERS FOR THIS **PROBLEM**

Teachers are the bearers of the teaching process. Their task is to organize the teaching and the environment well and to provide equal access to all students. It is especially important for the teacher who works with students with special educational needs to know the characteristics of the student, to communicate with the parents and the educational assistant, and of course with the special educator (if there is one in the school). In the last two years, we have faced a great challenge, the pandemic of COVID-19 with which the teaching took place from a distance, and teachers and students had to adapt to that form of work and functioning. The specificity of our educational system and the decisions made by the Ministry of Education and Science was that the students from 1-3 grade attended classes in school (with physical presence), while the other students from 4-9 grade in primary education realized the teaching from distance. With this moment, the teachers and students with special needs faced a specific moment of organization and realization of the teaching, which was quite an extensive process realization.

As part of this paper is the explanation of distance learning, its specifics, methods, and organization, and its impact on the development of students with special educational needs, ie how this whole process affected students, researched from the perspective of teachers. For that purpose, an electronic survey was conducted, which was set up on the Google Forms platform, consisting of 10 questions and it was completed by 25 primary school teachers, who work with students with special needs. The sample was selected at random, and the populations are all teachers who teach in primary schools in the municipality of Bitola, Republic of North Macedonia.

The survey was conducted for teachers, specifically to identify their attitudes and experiences regarding distance learning.

The following is the processing of questions and comments on them:

- 1) How did you realize the teaching this school year? Respondents answered that 75% of them realized distance learning, 0% through a hybrid model and 25% realized physical presence teaching.
- 2) Did you have difficulties in the preparation and realization of the teaching? Respondents answered that 50% of them had difficulties in teaching planning, 25% lacked the technology and 25% did not have enough experience to work with students with special needs.
- 3) Have you received appropriate guidance from the Ministry of Education and Science and the Bureau for Development of Education? 75% of the respondents answered that they have

constant support and 25% that they have partial support.

- 4) How did you work with students with special educational needs? Share your experiences.
 - Some of the teachers worked directly with the student with special educational needs, i.e., he attended classes at school in the presence of the educational assistant. The teachers also pointed out that they worked online with the student, when he had the opportunity (i.e., when the student's technology allowed).
- 5) What tools did you use to work with students with special educational needs?
 - The teachers answered that they mostly used the national platform and the tool for the realization of distance learning Teams, but also used Slide Share, PowerPoint, videos, educational applications in the Macedonian language, as well as other digital resources depending on the student's disability.
- 6) How was the work and teaching organized with the educational assistant?
 - Respondents answered that students who attended classes with physical presence had personal contact with students and educational assistants, while teachers who worked remotely stated that they only had contact with the student via computer, the student worked with the educational assistant or parent at home, while the inclusive team had meetings to share experiences and ongoing planning and organization of work.
- 7) Does your school have assistive technology available for students with disabilities and do you use it? 75% of the respondents answered that they have and use it, and 25% have it but do not use it.
- 8) Did you plan the teaching in cooperation with the educational assistant? Please explain.
 - On this question, the respondents stated that the communication with the educational assistant, the special educator, and the parent was constant and it

- was very useful because it helped for the smooth realization of the teaching.
- Do students with disabilities learn better by distance learning?
 - 25% of the respondents answered that students learn better, and 75% answered that students learn better to a certain extent, but physical presence is also required.
- 10) What kind of support do you need for further work with students with special educational needs? The answers to this question are summarized in several points that refer to the constant communication and work of the inclusive team.
 - As before, mutual support and understanding from the parents, cooperation with the assistant, constant contact with the inclusive team, and visits to the classes by the special educator.
 - b) Providing the student with technical means for attending classes.
 - More special educators to be involved in teaching.

From the overall research, it can be said that the students with special needs had educational assistants, and distance learning and its organization and realization were performed with constant communication of the inclusive team. For better teaching, the teachers believe that greater support is needed from the Ministry of Education and Science and Bureau for Development of Education and improvement of the technical conditions as well as training for the use of the educational technology available to the schools. Distance learning is good for students with special educational needs, but physical presence is also required. In this way, teachers have direct contact and constant feedback on the student's progress and ways of learning.

VII. CONCLUSION

The modernization of education, the trends, and the changes that have occurred in recent years, as a result of the pandemic, have led to an increase in the flexibility of the education system and the implementation of technological changes in the educational process itself. For that purpose, the realization of distance learning in primary and secondary schools in the Republic of North Macedonia has started. The organization of distance learning monitoring imposed a change in the paradigm of the pedagogy itself, the organization of teaching, and the ways of working during the whole teaching process. The schools were equipped with a large number of computers so that the teachers could realize the teaching. In our country, distance learning is such that it is in an emergency situation, and for that purpose, a hybrid teaching model has been implemented. Distance learning was supported by a number of documents, practicums, online training, and education for teachers so that they can conduct this teaching smoothly. The challenge that the teachers pointed out was the planning of the teaching and the work with the students with special educational needs. This indicates the need for greater education and training for teachers to work with these students. During distance learning, various resources and platforms were used which contributed to the students with special educational needs gaining experience and knowledge.

Students with special needs and their specifics are a challenge for the organization of teaching, due to the fact that each student needs a special approach. Distance learning may be a good way to work with these students but in this segment the lack of socialization and communication with peers, which to some extent can be a motivating factor for these students. Education is the most important segment of any society because through it we forge our future. Every student as part of society needs to receive appropriate support and education in order to contribute to the development and a better future. That is why we need constant development and modernization of education, as well as equal opportunities for all students.

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As part of this paper is the explanation of teachers for distance learning, its specifics, methods, and organization, but also its impact on the development of students with special educational needs. For that purpose, an electronic survey was made, consisting of 10 questions, which was posted on the Google Forms platform, and it was completed by 25 primary school teachers, who work with students with special needs. The sample was randomly selected, and the population was all teachers who teach in primary schools in the municipality of Bitola. Therefore, we would like to express our gratitude to the teachers from the primary schools in Bitola, Republic of North Macedonia, who selflessly contributed to our research.

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