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# Peculiarities in Teaching Students with Learning Disabilities and the Learning Support Mechanism of Educators during the COVID-19 Pandemic

Background and objective: One of the most decisive pedagogical consequences of the COVID-19 pandemic is the imposed distance education, which made it especially difficult to educate and care for students with learning disabilities. The goal of the present study is to examine the impact of the epidemiological situation on teaching students with learning disabilities and to illustrate the alternative methods and support mechanisms used by the special educators during the pandemic. Sample and method:  $n = 134$  special education teachers were interviewed by questionnaire. Their answers were analysed with the SPSS statistical program. In remote teaching special education teachers used multiple ways of communication in different types of settlements. According to the educators asked, there are quantitative and qualitative differences in the learning of students with learning disabilities during distance education, compared to attendance education. Educators reported various difficulties during distance education (eg. lack of info-communication tools, inability/difficulty of their usage, loss of motivation, impersonality, contact difficulties, isolation, etc.), and we also collected alternative solutions that special education teachers used to overcome learning/teaching difficulties.

Keywords: COVID-19, learning and teaching difficulties, students with learning disabilities, support methods

## INTRODUCTION

Appearing in December 2019, the new type coronavirus caused by SARS-coV-2 swept through as a pandemic. Owing to the slow-onset and intense spreading of the disease, the WHO deemed it a world-class health emergency and named it COVID-19 (<https://www.who.int/europe/emergencies/situations/covid-19>). One of the most characteristic pedagogical consequences of COVID-19 is the imposed distance education, which made it particularly difficult to educate and care for pupils with learning disabilities. The first (and at the same time very drastic) step towards the educational system's change in our country as a result of the pandemic was the passing of Hungarian government decrees with a remarkably quick reaction time, which required all educational institutions to switch to a digital work schedule or digital transformation. In order to intensively support this switch, the Coronavirus Education Action Group was established (Government Resolution 1102/2020 (III. 14; MK No. 42, 14.III.2020), and curfews were introduced from March 27, 2020 (Government Decree No. 71/2020 (III. 27.) – MK No. 56 2020.III.27).

During the curfew, the population was prohibited to leave their place of residence except for specified, justified reasons. At the same time, the government decided on the transition to digital-distance education in public education, based on the Government Decision 1102/2020. (III. 14.) decree on the introduction of a new work schedule in public education and vocational training institutions due to the coronavirus. Consequently, the possibility of attendance education for children essentially ceased. The majority of schools were unprepared for the unexpected transition to distance education, especially the special education institutions. Numerous publications (King et al. 2001; Hercz, 2003; Mező, 2011) were published in recent decades, which advocated for the renewal of the schooling with the introduction of distance education, blended learning, e-learning or new learning methodologies, etc. but they have not been put into everyday practice. Thus, from one day to the next, teachers had to deal with the difficulties of the variously named (distance education, digital work schedule, digital transition, digital transformation etc.) and completely new ways of organizing education.

## STUDENTS WITH LEARNING DISABILITIES IN DISTANCE EDUCATION

Children and students with learning disabilities belong to a group that has been studied to a lesser extent regarding the aspect of distance learning but they experienced equally significant disadvantages as a result of the pandemic. Many researchers have drawn attention to the fact that the lag of education of disadvantaged children for social or for any other reason during the pandemic is much more significant than that of their peers (Doyle 2020; Masonbrink & Hurley 2020), so the increase in inequality of opportunities can be guaranteed in this situation (Nahalka, 2021).

The learning-disabled group includes children who, on one hand, suffer from weaker functional capabilities of the nervous system that can be traced back to biological and/or genetic causes, and on the other hand, those who, show permanent comprehensive learning difficulties due to adverse environmental effects (Mesterházi, 1998). A learning disability causes a comprehensive problem covering several areas of learning, so in their case the most effective environment for development is within attendance education.

The learning difficulty/disorder can be associated with the different or slowed development of basic skills, and it most often occurs in school learning situations (Papp, 2010). The particular characteristics of students with learning disabilities include difficulty in concentrating, slow task performance, frequent mistakes while performing tasks, lack of interest, loss of motivation, difficulty in learning and applying cultural techniques, etc. Their thinking is more specific (object-related or image-level). The concrete thinking affects the understanding of the task, both in the learning and feedback phases. In addition, communication and social skills are often hindered or show differences in development, too (Hauser-Cram & Shonkoff, 1995; Westendorp et al., 2011; Mesterházi & Szekeres, 2019).

In the case of teaching children with learning disabilities, results only appear in long-term, regular, intensive special pedagogic development and therapy, with the application of learning methods adapted to individual abilities, and with constant,

direct motivation. Distance education eliminated all of this or at least made them very difficult to provide. The concept of distance education can most simply be interpreted as a form of education where the teacher and the student are not in the same place in space (and often in time), and the student learns autonomously for a significant part of the teaching time, independently, with the indirect help and guidance of the teacher. The digital transition is essentially the process-based realisation of this mode of organising education (Racsko, 2017). However, it is important to note that the ability level of children/students with learning disabilities is different, not homogeneous, even in the student groups of approximately the same age. They cannot (or only with great difficulty) learn independently, they need the constant presence and guidance of the teacher for learning.

The requirements for the success of distance education are: at least a satisfactory level of digital competencies; motivation; the ability to independently choose appropriate learning techniques; and appropriate time management. In many cases, students with learning disabilities do not or only partly have these competencies and abilities (Köböl & Vidákovich, 2015).

In case of the children with learning disabilities, besides the weakness of cognitive and executive functions, the absence or lack of technological background, and the absence or not adequate standard of an environment that supports learning (the parental background) could significantly influence the effectiveness of teaching and learning, too (Schuck & Lambert, 2020; Asbury et al., 2021). In their study, Schuck and Lambert (2020) analysed the experiences of special education teachers in connection with particular challenges with students. The special education teachers reported that it was difficult to end the inequity in resources among their students, and they needed to rely on at-home support while teaching their students. In addition, Houtrow et al. (2020) also highlighted that the “unmet need for educational assistance has been staggering and challenging for families to navigate” (Houtrow et al. 2020, p. 417).

In Hungary, prior to the pandemic situation, there was essentially no experience available in this group regarding digital education (since there was no prior example of this), so it is worth examining what impact the pandemic situation had on the teaching of students with learning disabilities. It is also important to explore what alternative methods and support mechanisms were used by the special education teachers associated with them during the pandemic in order to increase the effectiveness of education.

## RESEARCH

The investigation aimed to find out:

- Whether there were any difficulties during distance education that affected the quality of teaching students with learning disabilities and, if so, what these were; as well as a demonstration of what alternative methods and support mechanisms were used by the special education teachers associated with them during the pandemic

- What the opinion of the special education teachers is who teach and educate students with special educational needs regarding the effectiveness of distance education implemented in the year 2020/2021
- What effect of the distance education implemented in the year 2020/2021 has on attendance education in the year 2021/2022

## SAMPLE AND METHOD

The study was carried out among the special education teachers who participated in the practical training of the students of the Faculty of Education for Children and Special Education of the University of Debrecen, using a self-completed questionnaire (n=134). (Note: number of sent-out questionnaires was: 150. The return rate was: 89.33%). The special education teachers participating in the study have significant professional experience. Almost half of the respondents, 62 people, have been practicing special education for 21 years or more. Only 8 of the people (who spent the least amount of time as a special education teacher) answered that they had been teaching for 1-5 years. Although, this number may be influenced by the fact that the practice leader in the special education teacher training can only be someone who has at least the 'Pedagogist I.' qualification based on the teacher's career model.

The questionnaire was designed to acquire knowledge on the relationship between students with learning disabilities and special education teachers during the pandemic. The questionnaire contained twenty questions. Five questions collected demographic data. Twelve statements collected the opinions of special education teachers regarding the effectiveness and efficiency of distance education, the difficulties experienced during distance education, and the teachers' opinions about the attitude of students towards distance education (the distribution of values on a 5-point Likert scale are: 1 = I do not agree at all; 2 = I rather disagree; 3 = I partially agree; 4 = I agree; 5 = I strongly agree). Two statements related to the way of maintaining contact, and in one explanatory question, the teachers provided information about the support methods used during teaching. The questionnaire was filled out voluntarily in December of the 2021/2022 school year. The data were interpreted using SPSS, descriptive statistics, and Sperman's rank correlation.

## DATA ANALYSIS AND DISCUSSION

According to the special education teachers, the effectiveness of distance education was significantly influenced by the type of contact the special education teacher and the student with learning disabilities had the opportunity to maintain (*Figure 1*). The special education teachers reported that during the pandemic period, in addition to online education, they were forced to use other alternative solutions, because a significant number of their students did not have the tools necessary for the digital transition and the knowledge necessary to use them (*Figure 2*).

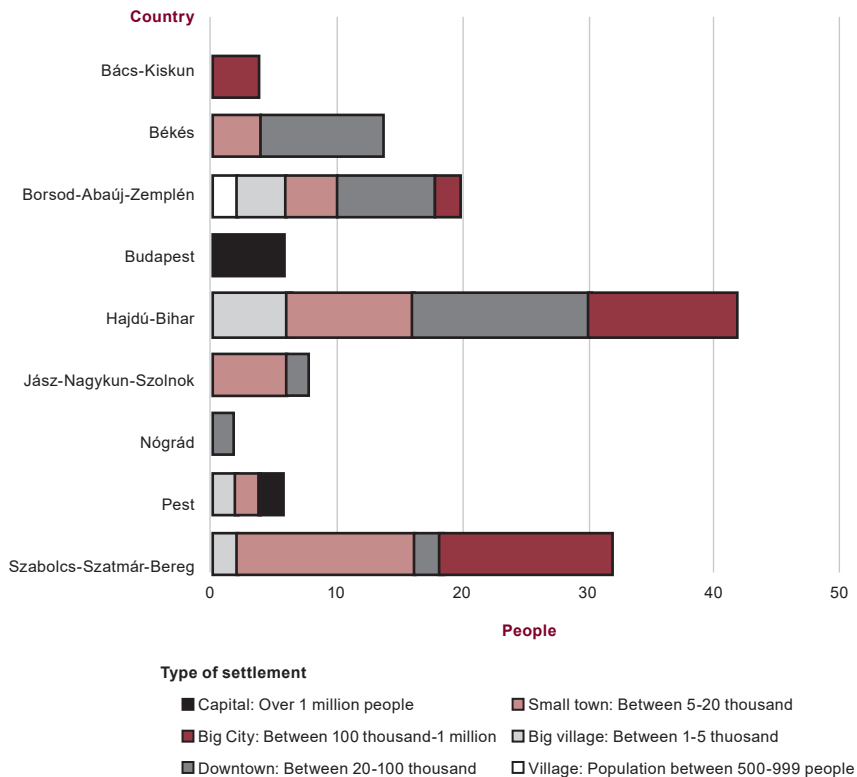


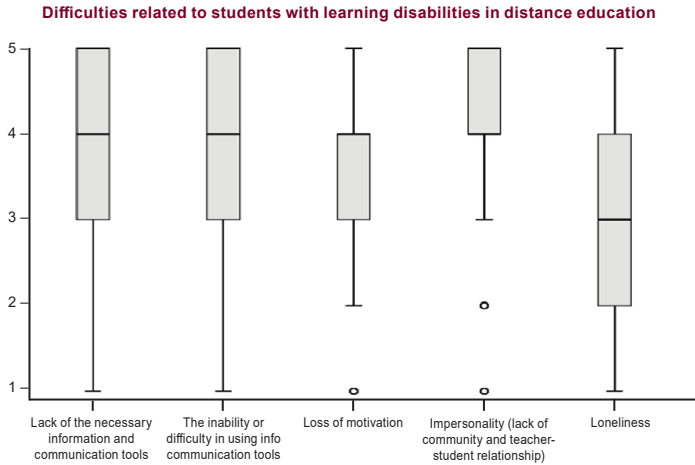
FIGURE 1 THE METHOD OF CONTACT BETWEEN THE SPECIAL EDUCATION TEACHER AND THE STUDENT WITH LEARNING DISABILITIES DURING DISTANCE EDUCATION, BASED ON TYPE OF SETTLEMENT. (SOURCE: AUTHOR)

The special education teachers related that even those students who had access to the digital environment had to face several difficulties that they had not encountered before. These included, for example, the deficiencies in subjects and teaching tools; the lack of ICT devices available in the home environment; limited internet access. However, one of the biggest problems was caused by the lack of parental and family background with adequate teaching competencies and experience, so the children hardly received help at home.

Almost half of the teachers (49.25%) reported that during distance education they had a student who was not able to perform at all in the teaching-learning situation, which meant that the given student during the pandemic dropped out of education completely. In addition, impersonality, lack of relationships, and loneliness carried a significant burden for students with learning disabilities, which is a problem that is constantly on the surface in the case of people with disabilities anyway (Figure 3). Similar experiences were reported by Portal et al. (2020), who analyze the phenomenon of increased neglect and discrimination in the case of people with intellectual disabilities and their families during the pandemic. In addition, Asbury et al. (2021) also reported in the study of parents of children with Special Educational

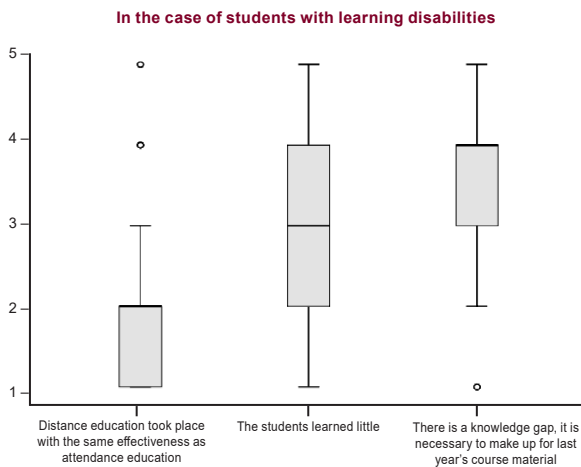
Needs and Disabilities (n = 241), that both parents and children are experiencing loss, worry, and changes in mood and behavior, which is a consequence of the rapid social changes that have occurred. It is interesting to experience that a significant number of special education teachers used a number of alternative support mechanisms in order to persuade their students to study even in the often hardly sustainable situation. In the case of such other alternative support methods, it can be observed that the smaller the settlement where the teacher teaches, the more personal solutions emerged:

- The teachers teaching in the village reported that since the majority of the students did not have ICT devices or could not use them independently, the teacher prepared a package of playful tasks for his students every morning and took the package to the children by bicycle at eight o'clock in the morning and hung it on their fence. From there, the children took the study material into their house and hung the solved package on the fence the next morning (the only problem was that there was a student who had the study material hanging on the fence for weeks).
- Elsewhere, every morning, teachers handed out study packets through a downstairs library window without contact, so that when the student arrived, they signaled through the window by knocking.
- All teachers reported that it was not possible to teach practical and skill-building subjects (music literacy, sports or development sessions) in the same quantity and quality during distance education. This coincides with the similar opinion of Kende et al. (2021) and Herman et al. (2022), who also drew attention to this earlier. Although many attempts were made, e.g. the use of youtube videos, short films, and music clips, however, it was noticeable that in the absence of attendance, the student's motivation for these activities decreased significantly, and the tasks were not completed.
- The teachers also tried to create small groups and pairs of students on the various digital interfaces, but these either partly worked or did not work at all for students with learning disabilities, because in the absence of control, the student's awareness of tasks, task adherence and ability to concentrate decreased in direct proportion over time.



**FIGURE 2.** THE OPINION OF SPECIAL EDUCATION TEACHERS ON THE MOST SIGNIFICANT DIFFICULTY DURING DISTANCE EDUCATION (N=134) (THE DISTRIBUTION OF VALUES ON A 5-POINT LIKERT SCALE: 1 = I DO NOT AGREE AT ALL; 2 = I RATHER DISAGREE; 3 = I PARTIALLY AGREE; 4 = I AGREE; 5 = I STRONGLY AGREE). (SOURCE: AUTHOR)

According to the majority of teachers, distance education was not as effective as attendance education. However, opinions are divided as to whether the students acquired less knowledge than during attendance education. This can be explained for several reasons: on one hand, it may have happened that, at the time of the investigation, the teachers were not yet able to assess the academic deficiencies they were facing. On the other hand, the data can also draw attention to the ineffectiveness of attendance education in the case of students with learning disabilities. According to the majority of teachers, in the case of students with learning disabilities, the curriculum intended to be mastered during distance education must be repeated and supplemented in the first stage of attendance education (*Figure 3*).



**FIGURE 3.** SPECIAL EDUCATION TEACHERS' OPINION ON THE EFFECTIVENESS OF DISTANCE EDUCATION (N=134). THE DISTRIBUTION OF VALUES ON A 5-POINT LIKERT SCALE: 1 = I DO NOT AGREE AT ALL; 2 = I RATHER DISAGREE; 3 = I PARTIALLY AGREE; 4 = I AGREE; 5 = I STRONGLY AGREE). (SOURCE: AUTHOR)

During the data analysis, we also tested with Sperman's rank correlation calculation what effect, according to the teachers, distance education will have on the following attendance education. Among the data, the most outstanding significant association was found in the case of motivation and comfort ( $r = 0.79$ ,  $p \leq 0.01$ ). Based on the opinion of the teachers, there is a significant, positive, strong correlation between the student's lack of motivation during distance learning and the over-indolency and lack of interest in a school that develops after the end of the pandemic measures (in this case, the over-comfort and the over-indolency can be interpreted as a lack of motivation). After the pandemic, a significant number of teachers struggled with the fact that students did not even want to attend school again (*Table 1*).

TABLE 1 CORRELATION BETWEEN MOTIVATION AND INDOLENCE. (SOURCE: AUTHOR)

Students are comfortable and don't want to go to school	
I experience a significant lack of motivation, compared to what was before the pandemic situation	,797**

\*\* $p < 0.01$

## SUMMARY

The present results also confirmed that the pandemic situation made it significantly more difficult to teach students with learning disabilities. At the same time, it drew attention to several aspects. After the relative retreat of the pandemic, efforts should no longer be made to restore the old methods again but rather to strengthen the competencies (especially digital competencies) that meet the expectations of the 21st century among students with learning disabilities, to develop teaching based on collaboration between teachers and students, and to teach and deepen the learning methods used outside the school's infrastructure. Increased attention should be paid to preparing students with learning disabilities to apply and use services available online, as well as to achieve the use of ICT tools for learning purposes. Teachers should strive to involve parents and families as partners in order to support learning. In addition, by intensively introducing new methods of learning organization and learning development, it is necessary to strive for the acquisition of increasingly independent, creative ways of learning (more: OxIPO-based learning, Mező & Mező 2014, 2019, 2020).

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