

DISTANCE LEARNING IN ELEMENTARY SCHOOL - PARTICIPANT EXPERIENCES AT THE UPPER ELEMENTARY LEVEL (5TH-8TH GRADE)

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Abstract

The aim of this paper is to present the results of a quantitative research study of the experiences of pupils, their parents and teachers involved in distance learning at the upper elementary level. The research sample consisted of 517 pupils (5th-8th Grade), 458 parents and 53 teachers at the Vladimir Nazor Elementary School in Pazin. The results show that pupils felt overloaded, strained and confused as a consequence of not interacting with their teachers in person. Nevertheless, the interactive learning materials and the convenience of distance learning were seen as benefits of the programme. For the pupils' parents, the biggest hurdles were lack of time, lack of comprehension of educational resources, work commitments and the inability to handle ICT well. The teachers missed the ability to further clarify instructions, but the biggest obstacles for them were not being able to test their pupils' knowledge of the subject content and organizing their work schedule. Despite the issues, both the parents and the teachers were satisfied with how distance learning was organized. The results have important implications regarding educational practices, but they also indicate the importance of further research in the field of distance learning.

Keywords: distance learning, pupils, parents, teachers, elementary school

INTRODUCTION

E-learning and distance learning are terms that have been mostly used in connection with higher education and lifelong learning. In the last 20 years they have become one of the fastest-growing trends in higher education (Vuksanović, 2009). Distance learning in elementary education, however, is a new experience for everyone in the educational system. The change from classroom-based learning to distance learning was sudden for all elementary schools in Croatia and it required a lot of knowledge and skill, as well as support from the Ministry of Science and Education and local communities. On 13 March 2020, the Croatian government declared that all elementary, secondary and higher education institutions be closed until further notice (Ministarstvo znanosti i obrazovanja, 2020a). The decision took effect on that same day in Istria County because of the negative epidemiological situation there, caused by the Covid-19 virus. The Ministry of Science and Education provided technical support at the national level. Elementary schools were given guidelines regarding the organization of distance learning with the help of information and communications technology. Those guidelines primarily referred to the establishment of communication channels between pupils/parents and school employees. At the upper elementary level, that meant choosing an online distance learning platform, creating a virtual staffroom and classrooms as well as providing pupils with the necessary equipment to ensure that every pupils had an adequate Internet connection in order to effectively attend online classes. Elementary schools also had the choice whether to use their own class timetable or the Ministry's predetermined schedule and curricula for the basic subjects package. Of course, teachers were encouraged to use extra materials, including their own, along with the prepared curricula. In addition, the Sports Television (SPTV) broadcast

curricula content for students. The Ministry also provided recommendations for organizing schoolwork and pupils assessment and grading (Ministarstvo znanosti i obrazovanja, 2020a). Classes were held online primarily to stop the spread of the Covid-19 virus and to ensure an uninterrupted learning and education process (Wang, Zhang, Zhao, Zhang, & Jiang, 2020).

DISTANCE LEARNING

Some of the most common terms for distance learning in professional literature are *distance education*, *online learning*, *e-learning*, *web-based learning*, *m-learning* (Afrić, 2014; Matasić & Dumić, 2012). These are all modes of “Internet-supported learning, learning in virtual classrooms and e-communication” (Šafhalter, 2013, p.45). The common defining characteristic is the usage of information and communications technology (ICT) (Afrić, 2014). However, there is an important difference between the terms *online* and *distance*, which is summed up by the fact that during *online* classes, students can do activities with the help of ICT while still being physically present in the classroom with their teachers, while *distance learning* implies physical separation between the students and the teachers (Katavić, Milojević & Šimunović, 2018; Zenović & Bagarić, 2014; Kalamković, Halaši & Kalamković, 2013; Šafhalter, 2013; Huzjak, 2010; King, Young, Driver-Richmond & Schrader, 2001). For example, Janeska and Taleska (2011) explain the differences between the terms *e-education* (or *e-learning*) and *distance education* (or *distance learning*), regardless of their usual conflation. E-education is every form of education that is supported by ICT - it can be used to enrich classroom-based learning, or it can also be used in virtual classrooms. Distance education is the type of education where students and teachers do not physically meet in classrooms, and all communication takes place online using ICT. Nevertheless, when they talk about e-education, they claim that it can be hybrid (both classroom-based and online) and pure (exclusively online).

The Ministry of Science and Education (2020b) put forward three models of organizing classes. “Model A: classroom-based classes” is the classic face-to-face teaching, where both the students and the teachers are in the same classroom. “Model B: mixed classes” entails both online and face-to-face teaching. “Model C: distance learning” is a model that presupposes both individual work and remote communication between students and teachers from their homes.

The subject of this paper is distance learning, the “pure” and the Internet-supported type of learning that takes advantage of information and communications technology, where students and teachers are completely physically separated from each other. All learning materials are available to students in a virtual environment and students and teachers engage in two-way remote communication.

Modern systems make it easy to share and save those learning materials on servers. The teachers can make them public, and the students can access them whenever they want. Forums and chat-rooms have also made communication faster and more immediate. Quizzes are an excellent tool for both student assessment and self-assessment. Collecting and checking homework online is one of the simpler ways of tracking and grading students’ schoolwork and homework (Jadrić, Čukušić, & Lenkić, 2012). Another big advantage of distance learning is that all the learning materials and resources are more readily available at different points of time and place (Šafhalter, 2013; Vuksanović, 2009).

All the research that has been conducted on this topic so far shows that students do not need more time while engaged in distance learning than while attending physical classes. It has also been shown that students’ self-confidence grows in proportion to the quality of communication with their teachers (Vuksanović, 2009). Communication can be distinguished between synchronous and asynchronous communication. Synchronous communication implies that

both students and teachers are simultaneously present in videoconferences and chat-rooms in real time, where both have access to materials and resources. In asynchronous communication, students and teachers alternate and communicate by e-mails or forums (Krpan, 2014). Despite all that, face-to-face communication in classrooms is much more flexible and immediate, because teachers can more easily give instructions and receive feedback much faster. Social processes are also more easily accomplished during physical classes (Vuksanović, 2009). During distance learning, students are isolated at home, so even though they have greater freedom and autonomy when choosing the time and place to study (Katavić et al, 2018), they need more self-discipline and motivation (Zenović & Bagarić, 2014; Akhtar & Wyne, 2006).

The cognitive and social development of students is formed by social connections. In a classroom environment, students adopt norms and patterns of behaviour and develop social and communication skills (Woolfolk, 2016). The long-term impact of distance learning on students is questionable.

Opara (2020) claims that distance learning can be boring for students because of materials that contain a great deal of text, which can have a demotivating effect. Students often encounter technical issues, which is an additional source of frustration when they are supposed to be fully concentrated on studying.

Basilaia and Kvavadze (2020) describe how teachers were forced to adjust their teaching methods during the Covid-19 pandemic. The pressure of developing new ways of teaching, tracking student progress and student assessment, was great. Distance learning was a challenge for many of them because they had to invest more time into learning new skills and mastering the technological aspect of it (Kalamković et al, 2013). Apart from that, there are always additional difficulties regarding copyright and the fear of saving one's own teaching materials in a virtual environment because of intellectual property theft (Hudec, 2009).

There is also the question of whether "the class-subject-period system can satisfy the net-generations' developmental needs and the need to learn" (Matijević, 2017, p.10). Generation Y, Generation Z or the NET Generation are all terms that researchers (Matijević, 2017; Postolov, Magdinceva Sopova, & Janeska Iliev, 2017) use when writing about children that have never lived, or were never growing up, without technology. The net-generations of students are growing up in the digital age, which demands more innovative teaching methods in order to satisfy their needs. Today it is also necessary to teach students how to learn from digital sources. Professional training for teachers is also inevitable (Matijević, 2014). The children of the net-generation, including those of elementary school age, are interested in distance learning (Tomaš, 2014). Furthermore, Ilišin, Bobinac and Radin (2001) claim that every other student uses a computer, mostly for playing video-games.

METHODOLOGY

The aim of the research

The research aim was to describe and analyse distance learning experiences of pupils at the upper elementary level (fifth to eighth grade), their parents and their teachers.

Research missions:

1. To examine the pupils' attitudes towards distance learning, how they felt and how much time their school commitments took them, their relationships with other pupils on the Yammer platform, difficulties of distance learning and suggestions for its improvement
2. To examine the parents' satisfaction with how distance learning was organized, their assessment of their child's work, their attitudes when comparing distance learning and class-

room-based learning, quality of communication, difficulties of distance learning and suggestions for its improvement

3. To examine the teachers' attitudes towards distance learning, difficulties they face and suggestions for its improvement.

Measuring instruments and variables

Three measuring instruments were used for the research. A measuring instrument that tests pupils' experience during distance learning was taken from the Institute for Social Research and adapted. The instrument contains modules that test: how the pupils are feeling, the time it takes them to finish their school commitments, their attitudes towards distance learning (what they like and what they dislike), difficulties they face during distance learning (which subjects present them with the most challenges, what their fears are regarding distance learning), the conditions for working at home (independence when doing their work, technical equipment, a quiet study corner, ability to concentrate), their relationship with other students on the *Yammer* platform and their suggestions for improving distance learning. Cronbach's alpha coefficient is 0,54.

The instrument intended for the parents was devised by psychologist Jelena Rukavina and school counsellor Katarina Crnković Polić. The instrument contains modules that test: parents' satisfaction with the organization of distance learning, their assessment of their child's work (class attendance, the time it takes them to finish their assignments, time management, independence), the comparison of distance learning and classroom-based learning (child's progress, the amount of commitments and workload), quality of communication (between the teacher and the child, and the classmaster and the parent), the difficulties that they face with the implementation of distance learning and their suggestions for improving it. Cronbach's alpha coefficient is 0,54.

The instrument intended for the teachers was made by the psychologist Irena Mosić Šajatović and school counsellor Jasminka Brkljača. It is used to test: the attitudes of teachers in grades 5 to 8 towards distance learning (what they like and what they dislike), the difficulties they face and their suggestions for improving distance learning practices. Cronbach's alpha coefficient is 0,82.

Sample

517 pupils from Grade 5 to Grade 8 of Vladimir Nazor Elementary School in Pazin participated in the research. Of those 517, 160 (30,9%) were fifth-graders, 112 (21,7%) were sixth-graders, 130 (25,1%) were in seventh grade and 115 (22,2%) were in eighth grade. The research covered students of Pazin Central School and Subsidiary Schools in Tinjan, Karojba, Sveti Petar u Šumi, Lupoglav, Trviž and Motovun. Of the 517 total participants, 274 (53,0%) were female, and 243 (47%) were male.

458 parents of pupils participants also took part in the research. Of those 458 total, 129 (28,2%) were parents of fifth-graders, 116 (25,3%) were parents of sixth-graders, 122 (26,6%) had a child who was in Grade 7, and 91 (19,9%) were parents of eighth-graders.

53 teachers at the upper elementary level at Vladimir Nazor Elementary School in Pazin participated in the research.

Data collection and analysis

The data was collected at the end March and the beginning of April 2020 by the use of "Google forms". During this stage of the research, all principles of research ethics were observed and complied with. The process of data collection was completely anonymous and the

results were interpreted in such a way that they cannot be traced back to the participants' answers. That ensured complete identity and data confidentiality.

The descriptive method was used in the research and the collected data was processed using the "IBM SPSS Statistics" software for statistical data analysis.

RESULTS AND DISCUSSION

Pupil experiences

An instrument was used to gauge how the pupils felt while taking part in distance learning. 49,7% (f=257) said that they felt strained. 39,3% (f=203) of pupils said that they felt confused, 28,2% (f=146) felt creative, 28,0% (f=145) felt happy, 24,2% (f=125) felt cooperative, 12,6% (f=65) felt bored and 4,4% (f=23) felt competitive. They also listed the following emotions: "weird, excited, insecure, rested, sad, exhausted, joyful, well, stressed, annoyed, fun, overloaded, responsible, depressed, nervous, worried, tired, normal, monotonous, demanding, independent, more productive, curious." This has also been shown by the research done by authors Ćurković, Krašić and Katavić (2020), who noticed greater stress and anxiety in both pupils and their parents.

Most pupils allotted three to five, or five to eight hours a day for their schoolwork, which is not significantly more than usual. Authors Bates and Poole (2003, as cited in Vuksanović, 2009) point out that students do not need more time for distance learning as opposed to traditional, classroom-based learning. However, distance learning requires greater independence and organization, and working on a computer for multiple hours is exhausting for students. Moreover, research has shown that they are exposed to computers for a significant amount of time (Ilišin et al, 2001), which was amplified because of distance learning, since they had to go over learning materials and fulfil assignments from their teachers. It is no wonder that almost half of the pupil participants said they felt strained during distance learning.

The pupils' attitudes on distance learning were also examined. They pointed out numerous benefits of the system. Diverse learning materials and interactive resources enable them to learn more easily and be more motivated ("*I like the interactive resources that you usually don't get in regular school*"). Quizzes, for example, can serve as a great tool for student assessment and self-assessment (Jadrić et al, 2012). Asynchronous communication grants students complete access to learning materials whenever they want them (Simensom et al, 2009, as cited in Katavić et al, 2018; Jadrić et al, 2012). That gives them autonomy and independence in organizing their schoolwork and managing their time: "*I like that I'm not restricted to 45 minutes per subject at an exact time. It gives me the freedom to manage my time just how I like it.*" The pupils emphasized the importance of teacher support, which boosted their self-confidence (Vuksanović, 2009). Besides the convenience of doing schoolwork at home, they said that distance learning made them become aware of their independence, but also helped them progress at their own pace, which is in line with theoretical explanations (Mandić, n.d.). Some pupils who had had to adjust to their colleagues in the classroom, accomplished their tasks and assignments much faster through distance learning. Another positive aspect of distance learning was the ability for the pupils to cooperate: "*I like that I can cooperate with my classmates.*", "*We've been helping each other more than usual.*", "*I like that we can help each other and give each other advice.*". Although researchers (Matijević, 2014) describe how today's "net-children" are growing up in the digital age, their usage of technology for education purposes is questionable. Students mostly use it to fill in their free time with various games, apps and social media (Ilišin et al, 2001). Distance learning implies the efficient use of technology in order to fulfil school commitments, acquire new knowledge and learn how to apply it. That requires the ability to work with various tools and software. The pupils were confused by the

amount of information and tools available on the *Yammer* platform. Another problem were technical difficulties. The pupils' replies suggest that they waited for times when the system was less overloaded, and then turned in their homework. Research has shown that this is sure to negatively impact pupils' concentration, cause frustration and can ultimately result in quitting (Opara, 2020; Katavić et al, 2018).

Some of the negative aspects of distance learning were: pupil overload (too much material, too many projects and assignments), lack of social contact between the pupils, their friends and their teachers, the time spent at the computer and receiving assignments from teachers at different times in the day. Copying materials and studying instructions took students a large amount of time. As researchers have explained (Opara, 2020; Zenović & Bagarić, 2014) this is demotivating, tiresome and boring work for students because they are required to study material with a lot of text, in addition to having to be responsible, self-disciplined and good at managing their time. They also lacked detailed explanations and clarifications of their schoolwork, so they frequently turned to their parents for help: *"Well, the teachers can't explain it as thoroughly as they can at school."*, *"I don't like that the teachers can't directly explain something to us if we don't understand it."*, *"I don't like online classes because I have trouble with certain things so I ask my mom for help, but she doesn't have a lot of experience. I also don't like it when our teacher sends us something new to study, because it's hard for me to learn it. I learn the best and the easiest with my class and my teacher."* Asynchronous communication also made things more difficult for the pupils, because the teachers did not stick to the schedule and would send assignments at different times. All of that resulted in long hours spent at the computer, exhaustion and fatigue. Furthermore, the pupils missed social contact with their peers (*"I don't like that I only have friends online"*, *"I don't like that I'm alone, I miss my friends and my company"*). Views and values are defined through social contact, and social contact intensifies the need for company. Distance learning physically separates students from each other, which is worrying for their further development (Woolfolk, 2016; Mandić, n.d.).

Most of the pupils felt safe in the online environment, they did what their teachers asked them to during classes, they did the best they could, they were active and answered their teachers' questions. They also thought that they had adapted well to the new system, and they said the materials and instructions were clear and that this type of schoolwork encouraged them to be more independent. They felt they were free to express their opinion and felt that they had someone to talk to in case of any difficulties. It can be concluded that the results are quite positive despite the many downsides - the pupils did not quit, they did not avoid being actively involved, they showed effort and they were committed. The teachers were mostly responsible for the feeling of safety and the positive virtual environment.

The following part of the research examined the difficulties the pupils face with distance learning. The results show that the mandatory subjects caused the most obstacles for the pupils - namely, mathematics (183, 35,4%), Croatian (139, 26,9%), English (90, 17,4%), geography (84, 16,2%), physics (82, 15,9%), history (72, 13,9%), chemistry (68, 13,2%). Many students (221, 42,7%) were afraid of failure: *"I'm afraid that my GPA will be lower because of distance learning and that we'll have a lot of exams when we return to school"*, *"I'm afraid I won't know enough when regular class resumes"*, *"I'm afraid we won't have enough grades at the end of the school year so our GPA will be lower and we'll have trouble getting into high school"*. According to *Pravilnik o elementima i kriterijima za izbor kandidata za upis u 1. razred srednje škole*, which is a regulatory act that proscribes the elements and the criteria that elementary school pupils have to satisfy in order to be eligible to enrol in high school, "the common element of evaluation for the candidate's enrolment in any high school educational programs are the grade point averages of all school subjects, rounded to two decimal places, in the last four grades of elementary school. For enrolment in grammar school and trade school educational programmes that last for four years, the grade point average of Croatian, mathematics and the first foreign language in the last two years of elementary school is added to the previously

mentioned element" (section 7, subsections (1) and (3), paragraph 3). With this taken into consideration, it is no wonder that the pupils were afraid of doing badly in these subjects, and it is not a surprise that these were the subjects that presented them with the most difficulty.

Regarding their conditions for doing schoolwork at home, most of the pupils (322, 62,3%) independently worked on their assignments and did not require parental assistance. They had a quiet space for studying (393, 76%) and they did not have to wait to use the computer or fulfil their obligations (446, 86,3%). However, 167 pupils (32,3%) said that they had difficulty concentrating. That can be connected to their ability to manage their school time and their free time. Even though the pupils had the elementary conditions necessary for distance learning, they were still isolated, and not all of them were equally successful in self-disciplining themselves and managing their time. The aforementioned technical difficulties were also present, which impacted their concentration and can result in pupils quitting (Zenović & Bagarić, 2014).

Relations between the pupils on *Yammer* were also tested. 93,0% (f=481) of pupils said that their relations with other pupils on *Yammer* were good, 1,9% (f=10) of them did not agree with this statement, while 5,0% (f=26) were undecided. Similarly, 97,7% (f=505) of the pupils said that their friends did not insult, humiliate or tease them on *Yammer*, 1,0% (f=5) said that they had experienced it, while 1,4% (f=7) were undecided. This shows that the communication between the pupils on *Yammer* was appropriate, but during the short time that they had been distance learning when this research was conducted, some pupils had experienced a form of online insulting, humiliation, or teasing from their peers. This emphasizes the importance of timely education about the appropriate usage of electronic media.

As a suggestion for improving the distance learning system and pupil success, more than half of the pupils (297, 57,4%) suggested that teachers reduce the curriculum. Some pupils suggested that the lessons should be prepared in a more interesting way (170, 32,9%), that the teachers should be more understanding (155, 30,0%), that they should spend more time revising and practising (145, 28,0%), and better communication with their classmates (109, 21.1%). Several pupils suggested that distance learning would be better with better ICT equipment (39, 7,5%).

Parent experiences

The parents' satisfaction with distance learning was tested. The results show that 1,3% (f=6) of the parents were not at all satisfied, 5,2% (f=24) said they were mostly not satisfied, 27,1% (f=124) were neither satisfied nor unsatisfied, while more parents said that they were either mostly satisfied (48,5%, f=222) or completely satisfied (17,9%, f=82) with how distance learning was organized.

Almost all of the parents (98,0%, f=449) stated that their children engaged in distance learning every day, 0,7% (f=3) of them said that their children did not engage in distance learning every day, and 1,3% (f=6) did not know the answer. Most of the parents estimated that it took four to six hours for their children to do their schoolwork, which is in line with both the pupils' self-estimates and previous research that has shown that children do not spend more time doing their schoolwork while distance learning as opposed to classroom-based learning (Vuksanović, 2009). Most parents (66,2%, 303) said that their children were sufficiently independent and that they managed their time well. Most parents (75,5%, 346) agreed that their children's work was satisfactory.

Regarding their comparison of distance learning with traditional education, 33,8% of parents said they did not agree their child can progress through distance learning as much as through traditional learning, 33,0% of them did not answer, and 33,2% of parents said they agreed with the statement. A possible explanation for that could be the lack and the diversity of experiences with distance learning that would shape their views. In spite of that, all of them

noticed that their children had more commitments during distance learning. The reason for it is that pupils usually do their schoolwork at school, and their homework at home. In this situation, however, the pupils had to read their teachers' instructions, do their schoolwork and then also do their homework and turn it in. Additionally, some of the characteristics of distance learning are longer lessons and less information (Vuksanović, 2019). On the one hand, that means that students receive substantial amount of texts that they have to work through on their own, and on the other hand, they receive resources that contain less information, so they have the need to look for additional explanations. In neither case do they have direct contact with the teacher (especially not in asynchronous communication) that would make comprehension easier. This can also be seen in the parents' comments: *"They mostly get written material (PowerPoint presentations, Word or pdf files or scans of hand-written assignments), there are no explanations of the subject matter (e.g. videos) so students need more time for comprehension"*.

Most of the parents (61,8%, f=283) agreed that the pupils are more overloaded in distance learning than in classroom-based learning, 24,7% (f=113) of them do not think so, while 13,5% (f=62) could not say if it was so. The parents who claimed that the students' workload was greater during distance learning, explain it with the greater amount of assignments and lack of pupil-teacher social contact. According to the parents, the pupils *"lack explanations for certain lessons, they have to be able to communicate with the teachers - the teachers have to record certain topics maybe through videos with explanations and enable the pupils to ask related questions. The students are forced to do schoolwork on their own or with the help of their parents, but they would have an easier time if the teachers explained everything orally, through video presentations, to assuage uncertainties and difficulties and enable the students to actively participate."* Another reason for the pupils' greater workload was that the pupils spent more time sitting in front of a screen. Technical difficulties such as several children sharing one computer or tablet and Internet connection issues were also a problem, along with unclear instructions and a time limit for assignments. The biggest drawback stated was the fact that students had to be more independent, and do their schoolwork according to their teachers' instructions. The aforementioned drawbacks have also been noted by other researchers (Opara, 2020; Zenović et al, 2018; Bagarić, 2014; Vuksanović, 2009; Akhtar & Wyne, 2006; Mandić, n.d.).

Another aspect of distance learning that was tested was quality of communication. Most parents said they monitored the teachers' communication with their children (84,3%), but the 6,3% of parents that did not is worrying. According to the Family Act (Obiteljski zakon) and the Primary and Secondary Education Act (Zakon o odgoju i obrazovanju u osnovnoj i srednjoj školi), parents are obliged to take care that their children regularly attend the obligatory part of the educational program they are enrolled in and to ensure their comprehensive and regular education. That means that parents are expected to cooperate and be involved in distance learning by monitoring their children's progress or by communicating through the distance learning platform. Parents evaluated the communication between the teachers and the students as good or excellent, with similar evaluations given for the communication between the classmaster and the parents.

Finally, the parents were also asked about the difficulties they faced with distance learning. A lot of them (171, 37,3%) said that they did not have any difficulties and were successful in keeping up with their children's commitments. For the parents that had some difficulties, the biggest problem was lack of time (167, 36,5%), work commitments (128, 27,9%) or not handling ICT well enough (96, 21,0%). Some of them said that not having the right equipment was also a problem (30, 6,6%). The parents also stated that not understanding the lesson content was an additional problem for them: *"Sometimes I don't understand the lessons", "As the parent of a seventh-grader I cannot keep up with the lessons, nor can I make them do their daily schoolwork"*. Following that, it is important to give students additional instructions and

clarifications of the lesson content through forms of synchronous communication, such as video-conferences and online chats (Krpan, 2014).

Teacher experiences

When asked about their attitudes towards distance learning, the teachers especially emphasized pupil participation, pupil adaptation to different forms of learning and how most of the pupils regularly turned in their assignments. They were pleased that the lessons were not restricted by time and space, which allowed them greater flexibility, comfort and enabled each of the students to individually ask questions. However, being constantly available throughout the day was a drawback for them. The pupils would turn in their homework and ask questions at different times because there was not a designated time to do that. That presented a problem because they could not separate their work life from their private life. This also made checking homework very hard because the teachers would receive great amount of it every day: *"There are a lot of pupils, they turn in their homework at different times and in different forms so it's hard to keep track of everything. I try to review each homework and give feedback and that takes a lot of time"*. The results here are not in line with the theoretical explanations given by Jadrić et al. (2012), who claim that turning in and reviewing homework online is one of the simpler ways of keeping track of and grading pupils' schoolwork and homework. Those researchers also explain that in distance learning some forms of plagiarism can be more easily noticed or detected, which was not confirmed in the teachers' comments: *"What I'm worried about is the assessment that follows and the ways of evaluating and testing pupils' work and knowledge. Pupils can cheat all they want. I haven't found a solution to the problem. Although there are no disciplinary issues present in classrooms, the inability to check attendance on Yammer presented a problem. Some of the pupils took advantage of that and did not cooperate or participate in class for longer periods of time, which was an additional challenge for the teachers. Just like the students and the parents, the teachers also state the nonexistence of "live" social contact as a drawback of distance learning, which is in accordance with the theory (Vuksanović, 2009). The teachers were satisfied with the communication with their pupils, but also with various digital tools available: "Communicating with the pupils is very pleasant, they are very polite", "Using various tools for class - we are forced to find new tools that will make it easier for the pupils, which will come in handy when we go back to traditional teaching". Other researchers have also written about that (Kalamković et al, 2013; Šafhalter, 2013; Vuksanović, 2009; Mandić, n.d.).*

Regarding the difficulties the teachers faced, they said that not being able to set their working hours and being constantly available in a virtual environment was very hard (44, 83,0%), which is very tiring, judging by their previous comments. For a lot of the teachers (48, 90,6%), not being able to check how well the pupils learned the subject content was a problem. Most of them lacked pupil feedback (48, 90,6%), they could not keep track of all the numerous posts in virtual classrooms and the staffroom (35, 66,0%), as well as the assignments their pupils turned in (38, 71,7%). On the other hand, most of the teachers found learning how to work with digital technology easy (33, 62,3%), 30,2% (f=16) of them found it a bit difficult, and 7,5% (f=4) found it extremely difficult. The reason for the last-mentioned result can be found in previous studies done by Matijević et al. (2017) who established that teachers rarely or never use digital media in their teaching process. If they do use digital media, it is in the form of *PowerPoint* presentations, Internet browsing, or using word processing software. Since distance learning enabled them to use diverse digital tools they had never encountered before, it is natural that learning new tools was challenging for them.

Finally, the teachers were asked an open-ended question about their suggestions for improving distance learning. Just like the parents, the teachers agreed that the continuous organization of communication with pupils via a video link would be an improvement, but they

would also like to receive guidance on which tools to use. They also expressed the need for constant education in this area. Choosing a different platform for distance learning would also be an improvement. The teachers also stated that they lacked clearer instructions from the Ministry of Science and Education about common practices in this type of education for both them and their pupils, their pupils' parents, and pupil assessment. They felt that distance learning could be improved if the whole school created a community of learning to cooperate and of exchanging experiences and educational materials. They also became aware of the importance of professional training and adaptation to new working conditions.

CONCLUSION

The implementation of distance learning was unplanned and sudden and it required swift organization. At the school level, it was important to examine the needs of students, parents and teachers in order to implement changes and plan the improvement of distance learning.

The results of the research show that the biggest problems for pupils were large amounts of subject content, spending long hours at the computer, short deadlines for assignments (which there were too many of) and too much homework. This was confirmed by the pupils' parents, who agreed that pupils were overloaded. Even though the pupils did their work in almost the same amount of time as they would normally do it at school, they were not doing it in the same environment so the daily workload seemed greater. Half of the pupils found the work tiring, while many of them felt confused. The reason for that could be the fact that they lacked "live" instructions and guidance. Despite that, they liked the interactive materials, the convenience and the flexibility of distance learning.

The teachers lacked the ability to clarify their instructions for pupils, while the biggest challenges for them were the inability to assess the pupils' knowledge of the subject content and the inability to set their own working hours (being constantly available). Another obstacle were pupils who were irregular with their work. Also, some teachers were unable to keep track of numerous posts in a virtual environment. The advantages of distance learning for teachers were the usage of various digital tools and sources in lesson preparation and the cooperation with their fellow teachers. Teachers also describe as positive the fact that the majority of pupils were regular and independent in their distance work.

The biggest challenges the parents faced were lack of time, lack of comprehension of educational resources, work commitments and not handling ICT well. Most of them claimed that they were satisfied with how distance learning was organized, most of them gave a positive assessment of their communication with the teachers by stating their thankfulness for all the hard work and the patience the teachers showed.

Distance learning changed daily habits and created new ones that took some time to get adjusted to. These research results serve as quality groundwork for further improvement and planning of the educational process but also for finding the best solutions possible in order for students to achieve educational goals and make the best of the situation. The accumulated data can also be of use to other education professionals at other elementary schools as guidelines for what to pay attention to when working with pupils or for planning future research studies.

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