

*Student Points of View – Pedagogical,  
Psychological, Social and Technical Issues*

## **DISTANCE LEARNING IN THE CONDITIONS OF COVID-19, THE POINT OF VIEW OF STUDENTS AND PUPILS**

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**Abstract.** The global problem COVID-19 presents the human kind with new and unknown things. Problems, solutions to whom have no analogue in the human history. Those problems didn't surpass the area of education- one of the main public spheres which dictates the tendencies of development of human kind. Looking for solutions for the ways to organize the education was one of the first problems to enter the big picture yet there still are no answers to how effective the online education is and to what degree it satisfies the different sides involved in the process of learning.

While looking for answers to some of the already mentioned problems we made an online questionnaire where 189 students in high school and university answered 16 questions regarding their opinion on organization and attitude towards the online education during the state emergency. The point was to study the opinion of college and high school students towards the organization and effectiveness of the online education and through the results to help making this type of education more effective.

The analysis and interpretation of the results of the questionnaire give us the right to make the following conclusions:

- The most used platform for online education with all 189 asked is Google classroom.

- The communication between teacher and student during the online education is most often made through sending the students the teaching material in different text formats and presentations on account of online connection.

- As leading problems in the online education, we can point out the quality of the internet connection, the lack of time for completing the given tasks, the lack of opportunity for instant communication with the teacher for discussing the subject and lack of certain schedule.

- With college students, as with the high school ones, we can notice the opinion that traditional education is far more effective than the online one and their preferences are that in the future the traditional education should be completed by the online one.

*Keywords:* distance learning; education; students; pupils

## **Introduction**

Originating in China, the first case of COVID-19 was reported on December 8, 2019 (Wu, McGoogan, 2020) created a global situation at the beginning of 2020. As a result of the emergence and spread of COVID-19 has posed many unknowns and trials to both society and the individual. These unknowns did not pass the field of education as one of the leading areas of development in modern society. The leaders of this direction of search are connected to the organization and the effectiveness of distance learning. For example, Cook & Dupras (2004) think that quality distance learning is available with a user-friendly and intuitive website design that is integrated with self-assessment features and that will be engaging learners in the material. Heafner, et al. (2015) seek objective information about the effectiveness of distance learning. Gewin, (2020) highlighting that the involvement of learners is possible through continuous feedback with information about the work they have done. We looked for, and still are looking for answers to questions such as whether and to what extent is it possible to conduct distance learning, whether it can replace traditional learning, at which age groups it is possible to implement this type of training, its effectiveness and more.

A study aimed at researching the current problems of distance learning in the country during quarantine was conducted during the months of April and May by an interdisciplinary team, representing four scientific organizations in the country. One of the main conclusions of the report is that “As far as distance learning is concerned, neither the students nor the teachers tend to agree with the statement that it should become the basic form of learning. On one side some disciplines connected to practical exercise cannot be adapted for online teaching at all (in this respect the problem in National Sports Academy “Vassil Levski” (NSA) is the most serious). On the other hand, the process of distance learning itself has limitations even for the applicable disciplines.”<sup>1)</sup> A similar opinion was expressed during a video conference held on June 23, 2020, by most EU ministers of education. According to them, “distance learning can never replace the present interactive and socially intensive teaching and learning”<sup>2)</sup> .

## ***Aim and tasks***

Based on the above statements, we set out to study the opinions of students and pupils about the organization and effectiveness of distance learning conducted during the distance learning period. To achieve the presented goal, we set ourselves the following tasks:

1. Research the problem based on literature and information sources.
2. Development of a questionnaire and conducting a survey.
3. Processing and analysis of the obtained results.

## **Methods**

The questionnaire developed by us consists of 16 questions about the organization and effectiveness of distance learning, as well as 3 questions that specify personal information about the respondents. We conducted the survey online through the tool “Google Forms” in the period 10-16<sup>th</sup> of June 2020. The sample method is a convenience sample which includes 189 respondents, students from NSA “Vassil Levski” and students from two high schools in Sofia. The sample is not representative. The results of the conducted research were processed by SPSS v.19, using one-dimensional and two-dimensional frequency distribution. We checked the reliability of the revealed differences by means of the correlation coefficient for alternative variables F and its adjustable guarantee probability.

The research contingent includes a total of 189 respondents, of which 116 pupils and 73 students. The gender ratio of the respondents includes 84 males and 105 females. The respondents are between the ages of 14 and 44, and their average age is 20 years and 2 months.

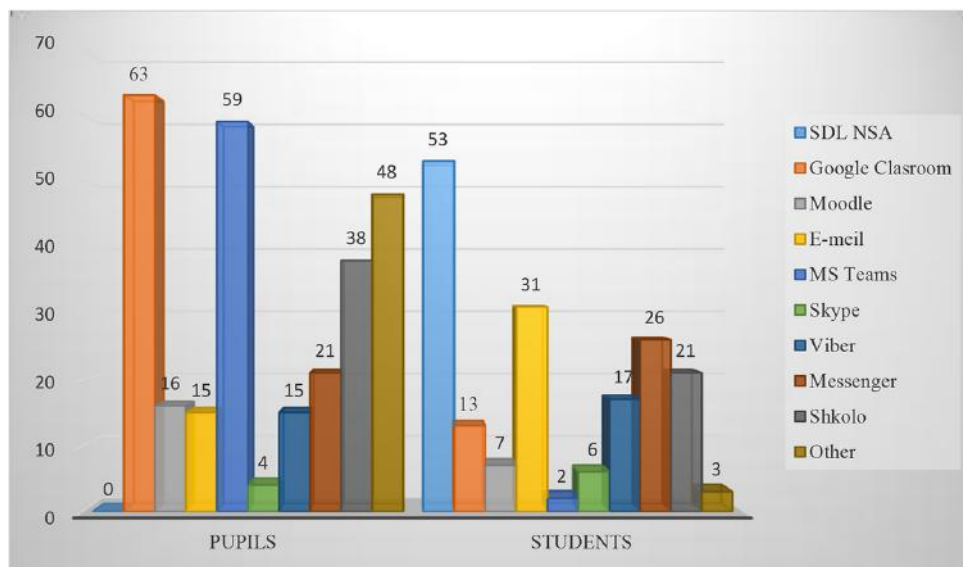
## **Results**

In the analysis of the results we separate the respondents into two groups of pupils and students, looking for differences in their preferences, which in our opinion will allow extraction of approaches to improve distance learning that are valid for both groups. The analysis of the results obtained from the survey begins with information about the opinion of the respondents about the organization of distance learning.

In Figure 1 we present the results of the first question which we asked the respondents. Each of them had to indicate up to three platforms through which they most often participated in the conducted distance learning. The most frequently used platform by all 189 respondents is Google Classroom, which was indicated by 86 of the respondents, which is 45,5% of the total surveyed population. After dividing the respondents into groups, the platform Google Classroom is leading among the group of pupils, and coming after it are MS Teams and Shkolo. Among the students 53 out of all 73 indicated that they most often used the distance learning system of NSA, 31 gave the answer “email correspondence” and 26 – Messenger.

From the answers given by both groups of respondents it is clear that the preferences are directed at usage of well-known software products, which are subject to repeated updates and their corresponding improvement which drastically eases the work of learners and teachers.

Other main issues related to the possibilities for organized distance learning are related to the availability of a schedule for the activities and the type of device which is used. 50% of respondents worked on a specific schedule, another 35% had a schedule with only some of their teachers, and the other 15% did not have a schedule for their classes. The distribution of the answers to the same question in the division of the respondents into pupils and students reveals that in 54% of



**Figure 1.** Display up to 3 platforms through which most often was implemented distance learning

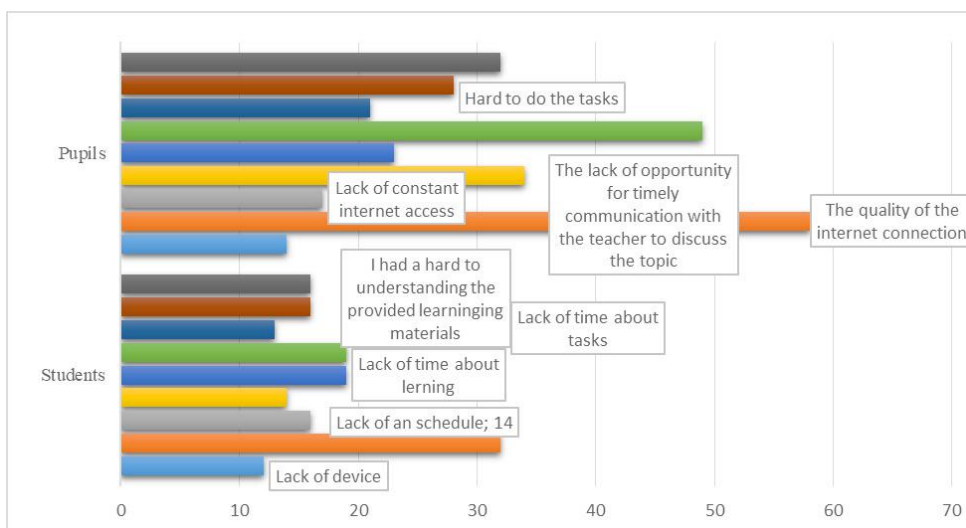
the pupils the classes took place on a precise schedule, while among the students this percentage is 42%, which is logical in view of the better self-study abilities of students. However, the two-dimensional distribution of frequencies shows great similarity in the presence of a schedule for pupils and students. This finding is confirmed by the value of the coefficient  $F=.201$  and its corresponding level of significance ( $\alpha=.053$ ) which show the presence of unreliable weak dependence.

With regard to the most commonly used device, both pupils and students indicate first the laptop, then the smartphone, the computer, and the last choice is the tablet.

The peculiarities of the communication teacher-learner are an essential part of the organization of distance learning. The interesting thing here is that in 23% of pupils and only 1.4% of students the learning took place through a video connection in real time. Another 29% of pupils and 64% of students have been receiving their materials through which they self-study, and in 47% of pupils and 34% of students learning took place as a combination between received materials and a video connection in real time. In this direction, we were also interested in the type of materials learners were receiving. According to the respondents' answers, the study materials provided to them were most often developed as text files or through various presentations, only 4% of students and 8% of pupils received video files.

In order to bring out the difficulties in the implementation of distance learning we asked the learners the following question "Which were the most common

difficulties in the implementation of distance learning?”, asking them to give up to 3 answers. The distribution of answers is shown in Figure 2. After dividing the research contingent into groups, among all 189 of the surveyed pupils and students the main problem is the quality of the internet connection, followed by the lack of time to complete the tasks, which was indicated by 26% of students and 42% of pupils. As a significant problem in both groups we can point out the lack of opportunity for timely communication with the teacher to discuss the current topic of the studied subject, indicated by 22% of students and 27% of pupils. 24% of pupils and 22% of students have difficulty in performing the set tasks.

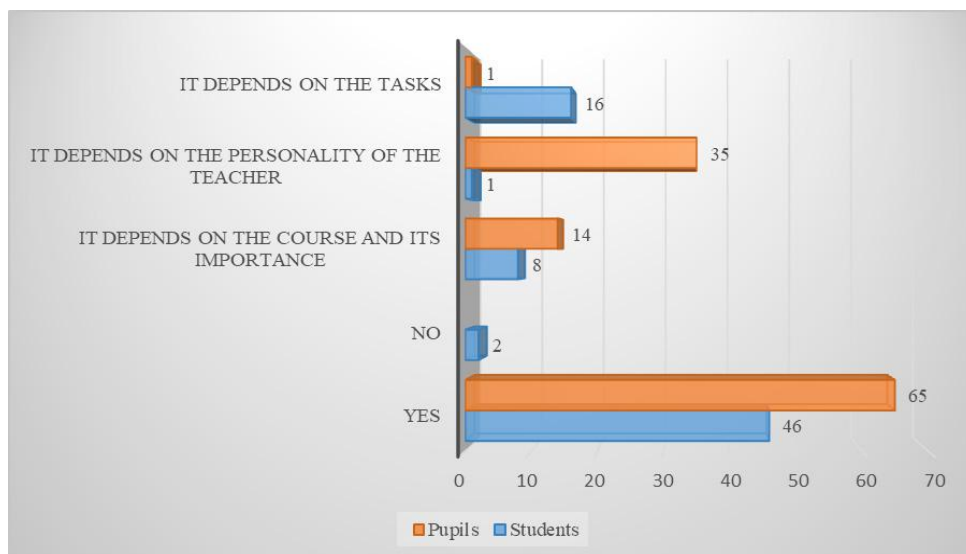


**Figure 2.** What were your most common difficulties in the distance learning?

We studied the attitude of the learners to the distance learning through the answers to the next eight questions from the questionnaire. 42% of pupils and 60% of students answered positively to the question “Did you get acquainted with the provided study materials in time?”, while for other 16% of pupils and 52% students the answer is “it depends on the quality and the quantity of the delivered materials”.

The timely implementation of the set tasks also determines the attitude towards learning. As it appears in Figure 3, 56% of pupils answered in the affirmative to this question, and among students this percentage is 63%. The interesting thing here is the second answer, in which we found a difference in the relationship between the two surveyed groups. In the group of pupils leading in the term for completion of the tasks is the personality of the teacher, an answer given by 35

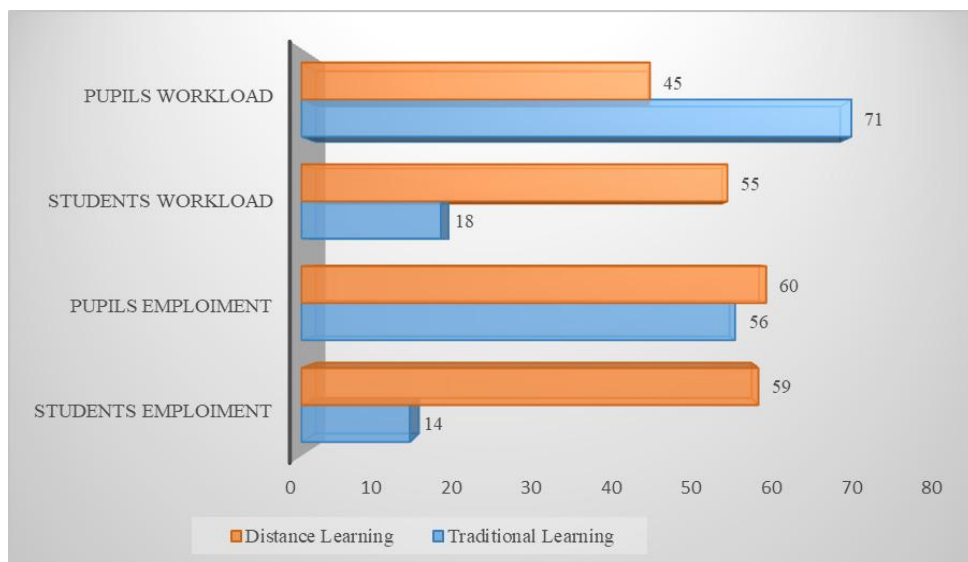
pupils or 31% of the respondents. The type and volume of the tasks are what is decisive for the students. Third factor in both groups is the studied discipline and its importance.



**Figure 3.** Did you complete the set tasks on time?

We also sought the opinion of the respondents on the effectiveness of distance and traditional learning and their preferences on their course of study in the future. Both pupils and students rated traditional and the combination of traditional and distance learning as more effective in comparison to distance learning, with the percentage of both pupils and students who indicated these answers varying between 42% and 48%. Only 18% of students and 9% of pupils indicated distance learning as more effective. Regarding their preferences for the way of conducting their learning in the future, the trend observed in the answers to the previous question is preserved and they express preferences for traditional learning but supplemented by distance learning.

We are also interested in the opinion of our respondents on the issues of their busyness and the amount of workload they endure during the distance and traditional learning. According to the results presented in figure 4, the surveyed pupils experience a greater load during distance learning than traditional, but in terms of busyness the trend is reversed. Among the group of surveyed students, both their workload and busyness are higher than in traditional education.



**Figure 4.** Data on the employment and workload of the respondents in the distance and traditional learning

Through the answers to the last two questions from the questionnaire, we sought the assessment of the six-point system of the respondents regarding the quality and effectiveness of distance learning. In the group of pupils, the average grade in terms of quality is 4.57, and in effectiveness 4.12. For the surveyed students these grades are 4.52 and 4.43 respectively.

### Discussion

The analysis of the results obtained from the survey gives us a reason to draw the following conclusions:

- The most frequently used platform among all 189 respondents is Google Classroom, which is the most commonly used in the group of pupils, while among the students the distance learning most commonly took place through the distance learning platform of NSA.
- The communication teacher – student during the distance learning is most often done by sending the students learning materials in different text formats or presentations, at the expense of an immediate online connection.
- As leading problems in distance learning we can point out the quality of the internet connection, the lack of time to complete the set tasks, the lack of opportunity for immediate communication with the teacher to discuss the current subject, and the lack of an accurate schedule for distance learning. If the first of the problems is purely technical, then the rest are directly related to the quality of the conducted learning and its results.

– The attitude of the respondents towards distance learning can be defined as serious given the high percentage of respondents from both groups who were timely acquainted with the provided learning materials and completed their set tasks on time. However, both pupils and students are of the opinion that traditional learning is more effective than distance learning and their preference for the future is traditional learning complemented by distance learning.

#### **NOTES**

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2. Videoconference of the Ministers of Education, 23 June 2020 (2020). Retrieved July 13, 2020, from <https://www.consilium.europa.eu/bg/meetings/eys/2020/06/23/>

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