

3 What Do We Need to Know in the Face of Pandemic?

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A summary of the extensive research carried out in Poland by a team of specialists together with significant remarks which are a result of a survey carried out in November-December 2020 in I Liceum Ogólnokształcące im Waleriana Łukasińskiego w Dąbrowie Górniczej

"Necessity is the mother of invention"

is an English-language proverb. It means, roughly, that the primary driving force for most new inventions is a need.

Whether we, as human species, have been in need and what kind of need it is and even more, what is the primary drive for it, will be under a close investigation for many years from now on. Still, after a year of abrupt shift in the lifestyle of majority of Earth's population, we are seeking the answer to the question "What lessons do we learn from Covid-19?" with the specific reference to education.

A vast research has been being carried out in Poland by a team of specialists including Professor Grzegorz Ptaszek, Maciej Dębski PhD in Social Sciences, Professor Jacek Pyżalski, social communication expert Magdalena Bigaj and Grzegorz Stunża PhD in Social Sciences, which was published online www.zdalnenauczanie.org, and which will serve as the basic material for the first part of the overview of the global pandemic impact on education in Poland. The provided scientific information will be completed by the coverage of the immediate outcome of the survey carried out in our high school I Liceum Ogólnokształcące im. Waleriana Łukasińskiego w Dąbrowie Górniczej, Poland in December 2020.

Importantly, not only did students and teachers participate in this extensive study but also parents, who in Poland constitute a significant part of educational process. The fields covered by the close investigation included:

1. the approach to distant learning of all the parties involved in the process
2. the change of the immediate use of ICT tools and Internet resources during distant teaching- learning process and comparison to their earlier engagement in education.
3. what kind of effort, whether cognitive, emotional, and even physical was involved in this very new situation.
4. what kind of competences were most necessary, whether technological only or organizational and both didactic and methodological, as well as social.
5. what emotional states accompanied all the participants
6. what kind of support was expected to be received and given
7. what types of solutions were sought and furthermore, provided

3.1 General mental and physical condition

According to the survey (www.zdalnenauczanie.org) there has been an obvious rise in the time scope of the ICT usage and the range expanded from average 1 hour to 6 and more during the weekdays and at the weekend in the case of both students and teachers. This rise is considerable, and clearly visible if we compare the percentage. Before the closure of school facilities only about 6% of the respondents used to spend 6 hours and more before the screens of available devices and after closure it is 49,5% students and 51% teachers.

Obviously, this shift has simultaneously influenced the lifestyle of all the respondents resulting in chronic tiredness and information overload. Teachers point out the fact that they are in constant readiness to connect and are exhausted by the amount of time they spend sitting in front of the computer screen – 85% of teachers. Students emphasize the fact of suffering from the lack of sufficient time to sleep. The phenomenon of spending nights with the ICT tools has become a necessity within the group of teachers, which was characteristic for the group of students before the closure.

This in turn corresponds to another consequence shown by the scientists – the fact that almost half of all the respondents admit they feel much worse both mentally and physically than before the pandemic. What is more, we can read in the survey, that 1/3 of students declare they permanently feel sadness, loneliness, and depression.

The authors also point out an extraordinarily strong need of the respondents to be inaccessible for anybody, which the necessity was the highest within the group of teachers – 59,3% whereas students 34,3% and parents 24,6%.

Concluding, the given data clearly show that “the time of distant education is a tough time, not only because of a new classroom environment formula, but also because of the digital weariness” (www.zdalnenauczanie.org, www.zdalnenauczanie.org “Raport” Badanie_zdalnenauczanie_org_prezentacja.pdf p.13), to which the lack of direct contact with peers greatly contributes.

3.2 SOLUTION

To find a solution the researchers refer back to the notion of digital hygiene, as the situation in which one maintains a balance between the online and offline activity.

In order to improve the situation, it is necessary to start honestly a discussion of the negative consequences involved with the abuse of new technologies. Behavior an adequate level of digital hygiene - in particular, in the period of distance education - is the key to improvement concentration, improvement of learning results and quality itself teaching. One of the necessary changes is working out clear guidelines for the time spent in front of the screen by specific age groups of students, and then adapting the tools used to them in remote learning, the essence of which should not entirely be based on constant contact between the student and the teacher over real time via the internet. Inclusion of traditional (not digital) teaching methods in the process of knowledge transfer, putting more emphasis on personal relationships, as well as educating students, parents, and teachers in terms of conscious rest from the screen and the Internet, which will allow to maintain a balance between the online and offline world. Selected results presented in this publication of our research, despite the ongoing in-depth analyzes of all the collected data are already clearly pointing to the fact that there is no responsible implementation of distance learning without taking digital hygiene into account, on maintaining of which not only does teaching quality depend, but most of all the students,' parents,' and teachers' mental and physical well-being. Skipping this one particular issue and focusing only on issues related to remote education tools will expose students, parents, and teachers to deepen the social trauma with which society still must face as the result to the long-term exposure to pandemic stress and social isolation (Augustyniak et al., 2020). (www.zdalnenauczanie.org “Raport” Badanie_zdalnenauczanie_org_prezentacja.pdf, pp13-14).

Summing up, the aforementioned study results point to the fact that we are still trying to map or imitate the model of offline or real-life educational environment onto the distant one with all the rules of social direct contact. Communication online, which has become known as intermediate communication (Polish: komunikacja zapośredniczona) because of the intermediary involvement is governed by different set of rules. Suddenly, we are deprived of body language in its full spectrum, educational context – school facility, rhythm of the day with its diversity and the physical proximity of those with whom we constitute a group of familiar

hunter-gatherers, as current-day neuropsychologist claim it is the undeniable inheritance from our ancestors, and should be taken into consideration during educational processes (e.g. <https://www.psychologytoday.com/us/blog/the-athletes-way/201706/hunter-gatherer-ancestry-may-be-why-our-brains-need-exercise>).

3.3 Learning How to Teach

As the report says “Effective distance education involves moving away from the traditional model of education towards the model constructivist, where the student himself produces knowledge on the basis of experiences and own individual activity or group and the teacher guides their students’ learning processes” (www.zdalnenauczanie.org p.16).

But this is only “mere” methodology. Sudden suspension of real-life education proves the fact that almost half of the teachers had to immediately acquire ICT skills, which they had not learnt so far. Additionally, lack of necessary equipment involving software and hardware as well as proper devices was a huge hindrance in fluent change from offline to online classes. As other studies show (Centrum Cyfrowe trans Digital Center, 2020) Plan digitalization had not been so advanced before the pandemic.

Referring to methodology, although the percentage of teachers involving group work, and quiz-based lessons rose. This result is believed to be still too little (about 4%) to declare that teachers use activating methods. Teachers has been using didactic instructional methods with the help of films, presentations, and blog publications.

Unfortunately, 50% of responding students evaluate online lessons as less interesting, probably resulting from the fact that a substantial number of teachers focused on simply sending material to be realized individually without any common work involved in real time with the use of digital tools.

3.4 What do we learn from it?

An extensive group of Teachers in Poland do not feel well prepared for the distant education. Furthermore, “It is therefore clear that in teacher training and preparation students to work in the teaching profession more emphasis should be laid on showing the relationship between digital tools and online resources and specific media, information and digital competences that can be used with them to shape, develop, or strengthen students.”

What do we miss from the before-pandemic period and how we should read these signals?

RELATIONSHIP

Real-life Relationship– described as “normal” versus “virtual” by all the respondents is the indispensable need we all have. We miss our daily discussion challenges, even arguments, simple observation, direct and real-life reactions to another person’s behavior.

Separating private life from professional life – blurring the boundaries between work and private life, which nowadays has been diminished in its quality.

According to the research there are a lot of side effects we were not expecting to occur, such as exceptional difficulties in work with disabled children, lack of workspace and home, lack of necessary electronic devices, which entails engagement of one’s private financial resources for work necessities, which in turn results in poor family relationships. (www.zdalnenauczanie.org p24).

Moreover, daily routines so much important for the healthy psyche and physique are disturbed. We do not care about the outfit; we tend to lose motivation to care about our general looks because we simply do not have any motivation any trigger to put us in motion to act.

More importantly, what the research has shown is the fact that teachers worry about the difficulty to react promptly enough when there is need to supply help.

The word cloud presented by the authors of the research below shows how frequently a given phrase was mentioned while answering the question what we miss most. It is in Polish but the largest inscription says direct contact, people, students, friends, work, children



Figure 1: Word cloud of most missing words in Polish: direct contact, people, students, friends, work, children.

IMMEDIATE reference TO THE INDIVIDUAL STUDY CARRIED OUT IN OUR SCHOOL I Liceum Ogólnokształcące im Waleriana Łukasińskiego w Dąbrowie Górniczej.

Many issues mentioned in the first part of the article were confirmed in the individual survey carried in December 2020 in our school. The survey focused also on general approach to strong and weak points. We can read the following outcomes from the results:

3.5 Troubleshooting

Almost all of the surveyed teachers indicated the lack of direct contact with students as a difficulty. The vast majority of them indicate the lack of certainty whether students perform tasks on their own, and a lot of time spent at the computer and related problems with the spine and eyesight. For more than half of the teachers, the problem is the time-consuming distance learning process, the realization of lessons at home and the lack of personal contact, almost half of responding teachers do not believe in the effectiveness of such teaching. Less than half of the respondents believe that the problem is computer freezing, overloading servers. Also, less than half indicate the students' hardware deficiencies, problems with the Internet connection and the ability to use computer programs. Three people point to their hardware deficiencies and one to the lack of tools for remote work. Nobody sees the problem with online safety, fear of information leakage or hacker attack.

3.6 Strengths

STRENGTHS OF REMOTE LEARNING • Most of the school community positively evaluates the level of remote school work • Almost all students and parents know about the possibility of using equipment on the school premises if necessary • The vast majority of students, parents and teachers do not report problems with the equipment and the Internet • Parents do well perceive the level of distance learning in our school. They have good contact with teachers. • All students have the option of connecting from home for lessons. They know they can use

computer equipment at school. • In the case of difficulties with increasing stress, students use the help of a psychologist and a pedagogue. • Teachers use a variety of methods in their work.

3.7 Weaknesses

WEAKNESSES OF REMOTE LEARNING • Too much time spent in front of the computer by both students and teachers • Lack of direct contact student-student, student-teacher, teacher-teacher, teacher-parents • No possibility to verify students' independent work • Excessive load of young people with homework • Too few lessons based on interaction - conversations, discussions, group work, problem solving • Students' problems with concentration and motivation to work • Many students use Smartphones to connect to lessons. This is certainly a big problem when editing longer statements. • The students pointed to the high workload that they also do on the phone or computer. • Almost half of the surveyed parents noticed a decrease in their child's mental condition. • Many teachers pointed to the problem of accurate and reliable assessment in distance learning.

3.8 Tips for improvements

CONCLUSIONS AND RECOMMENDATIONS • Do not submit papers for return at the weekend. • Limit the questioning in front of the camera as very stressful by the students. matura exam • Shorten the lessons in 3rd grade to 30 minutes, e.g., 2nd language, supplementary subjects, religion / ethics. • Reduce the volume of homework in basic subjects, especially in 4-year high school. • Encourage young people to discuss in the lesson. Don't ask, just talk to them • Don't make excessive use of online movies. • Use worksheets more often, do small projects. • If possible, leave notes in files for students • Individualize the work with the student, adapt it to the needs and possibilities of everyone with special educational needs, who are in special life situations through online contacts • Develop relationships through frequent contact and online conversations, remembering that students need direct contact with both peers and teachers, as shown by the surveys conducted both among students and parents • Contact students who irregularly log in to lessons in order to explain the reasons (students indicated in the surveys a lack of motivation for remote teaching) • Teachers should consult the scope and number of assignments to avoid overloading students with homework. • In class, aim for direct, visual contact with students, at least to the extent specified • Continue teacher improvement in remote teaching and assessment methods • Consult between teachers about the scope and number of assignments given to avoid overloading students with homework.

3.9 General overview

Since the beginning of pandemic, everybody hopes to get back to the previous state of education. We certainly have learned that direct relationships and contact with others is the major drive which gives motivation and triggers our readiness for any kind of action.

Still there are minor issues that should be worrying for the authorities and governments. There is a group of students coming from disadvantaged areas and abusive families. They noticeably disappear from the system of distant education in Poland. Mostly, these are primary school children.

Another issue is the use of cameras in Polish distant learning. Polish youth is claimed to show little acceptance of their own appearance and the situation in which they have to face their own image causes extremely traumatic experience. This in turn, distracts them to such an extent that they are unwilling to turn the cameras on even for a short period of time.

Taking all aspects into consideration, distant learning definitely showed us a lot about the value of learning in school facilities. It is a challenging time for all the nations and the needs

and approaches will differ with respect to culture, school curriculum, national restrictions with connection to pandemic. There is one factor that will remain. We, as humans, derive from our ancestors the need to gather, to be together and this very togetherness should be protected so that we overcome the adversities of life.