Experiencing digital education

Dr. Szilárd Malatyinszki

Kodolányi János University

Theoretical background

The predecessor of digital education is the correspondence education launched by Isaac Pitman. The peculiarity of distance learning is that the spatial-temporal agreement between the teacher and the student does not appear and the student spends a significant part of the training time alone. Distance learning is suitable for “mass education”, it provides a way to take into account individual learning aspects, to deal with problems, and to ensure the pace of individual learning. The above system has evolved with the digital tools of the 21st century and this is what we consider to be digital education today. We have been talking about electronic distance learning in Hungary since 2000 (Kovács I. 2006).While the possibility of face-to-face learning appears in traditional distance learning, it was not possible in the epidemiological situation examined in the present research. The digital work schedule announced in Hungary on 13 March 2020 and introduced on 16 March 2020 due to the COVID-19 epidemic set a new learning process in motion, which represents a future-proof methodological opportunity for educators, parents, and students alike.

Figure 1. Do you have all the necessary tools (laptop, internet, tablet, etc.) for digital

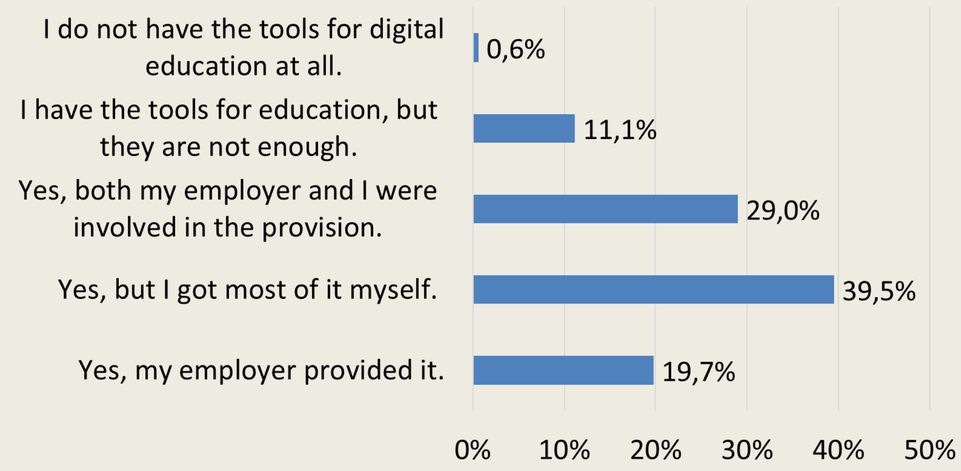
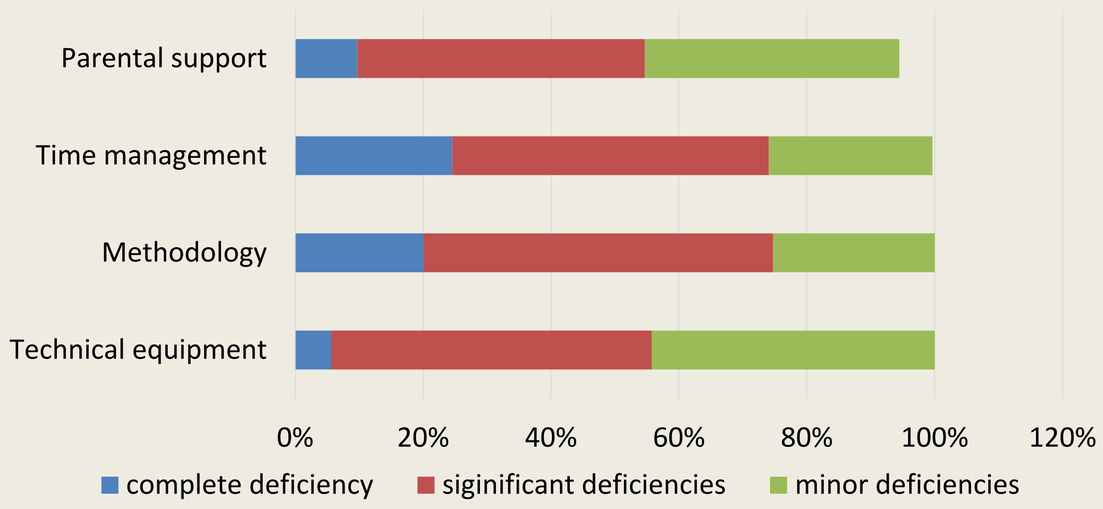


Figure 2. If you have a deficiency, in what area and to what extent do you notice it? (educators)



Research questions, hypotheses

In recent years, a significant volume of teacher training has been provided to educational institutions, partly from the resources of the European Union's SROP and then the EFOP. These pieces of training also supported the methodological renewal, the use of IT tools, and curriculum developments. Educators, children, and institutions were able to wait for the emergence of online education with a sufficient number of IT tools. Did all the knowledge and conditions really exist for this? Did the educators have the right equipment and competence? Are the subjects taught suitable for teaching them online? Are the students' methodological, IT preparedness, and time management suitable for the quality implementation of distance learning? How do educators experience online education? Parents also have a heavy burden to study with their children in addition to their work. Are they able to follow their child's studies? Do they have the tools, time frames, professional foundations to support them? We sought answers to the above questions in our research and publish our results.

Methods

In our secondary research, we were the first to clarify the conceptual framework of distance learning, digital distance learning, and to examine international experiences of distance learning during the viral crisis. In our primary survey, educators and parents provided answers to open and closed questions using an online questionnaire survey and non-random sampling. 312 educators completed our questionnaire. Based on the age group delimitation, a significant part (47%) are between 36 and 50 years old, while one third of them are between 51 and 60 years old. The share of educators under 35 and over 60 is around 10%. Accordingly, most (51.9%) have more than 20 years of experience, with a quarter teaching between 10 and 20 years of education. In terms of types of institutions, with almost equal distribution of lower and upper secondary teachers, 43% of respondents teach in primary school, 15% in higher education, and the rest in secondary education. In terms of settlements, the feedback is 9% from settlements with less than 5,000 inhabitants, 22% from small towns, 51% from settlements with 20-100,000 inhabitants, and around 10% from large cities and Budapest. Among the parents, 901 responses were received to our online questionnaire, of which 887 responses can be evaluated. Based on age group, four-fifths (79.8%) of the respondents are between 36 and 50 years old, and 12.4% of those younger have completed our research. Older people were present in 7.8%. In our research, those with higher education were over-represented (60.5%), graduates in 26.5%, while those with vocational qualifications participated in our research in 11.2%.

Figure 3. To what extent can you reconcile working from home with family life? (educators)

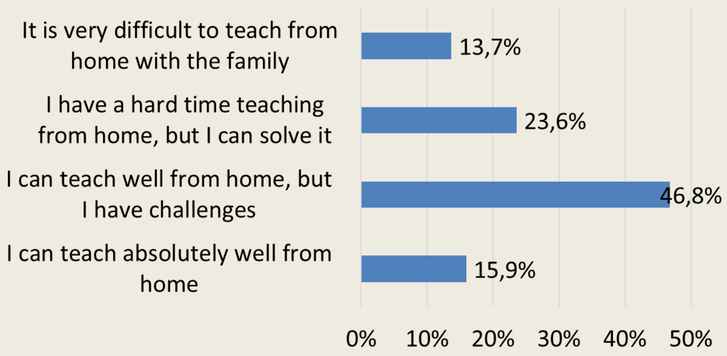


Figure 4. Real and expected time spent by parents on digital distance learning a day

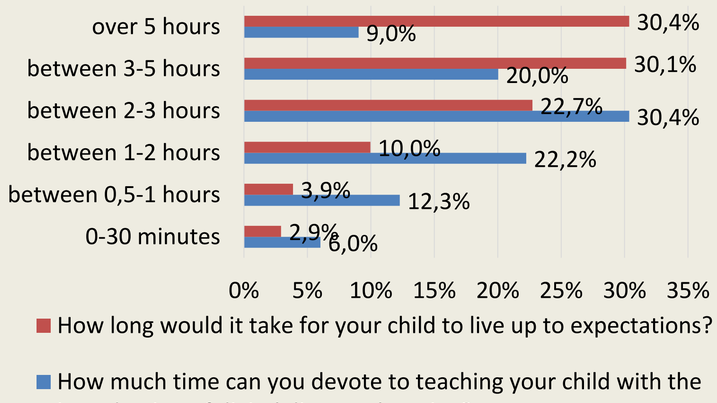
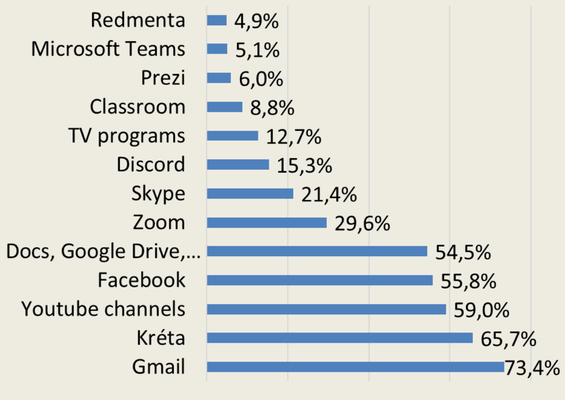


Figure 5. What programs do you use for digital distance learning?



Results

At the international level, many countries have good practices in operating and developing curricula for distance learning, and in many countries, it has already become an integral part of learning processes.

Two-thirds of educators have received appropriate training within 3 years and 72% feel close to teaching with digital tools. 90% of them have the right tools. Students lack access to equipment and the Internet, the use of digital tools at a skill level, and proper time management. There is a significant lack of parental support (balance of work-home schooling-private life) among pre-school and lower secondary teachers. 47% of educators can teach well from home but have challenges, while 24% have difficulty teaching.

Parents spend a significant amount of time (2.5 hours) teaching, but their ideal indication would be nearly 4 hours. Most of them can provide education through 3-5 programs, but much feedback suggests that the tools are not available for a number of children - especially if the parent also works from home. Those who can devote time to it, often do not feel methodologically and professionally suitable for the delivery of the curriculum.

There are also significant differences between parents and educators as to what expectations are realized in the implementation of digital distance learning. Many parents require more contact with the child, while others criticize the methods of delivering the curriculum (just sending one page at a time). The 232 individual parental responses also show that digital distance learning is a serious challenge for them, which is an issue worth paying attention to in future development.

Findings

With the introduction of digital distance learning, it has become apparent that the IT methodological competencies of both teachers and children need to be developed. The methods of information transfer should be managed in a segmented way according to the kindergarten, lower grade, upper grade, secondary school students. Thus, parental relief can be done better and tensions between groups are reduced.

Contrary to popular belief, it is a problem for today's young people to pay electronically for a check or to book a train ticket. Device usage is often exhausted in social or multimedia features.

In disadvantaged areas, the development of the Internet and device supply is key, while little attention is paid to the education of children with special and different educational needs (whether lagging behind or being more talented).

For a compelling reason, digital distance education can minimally replace school education and kindergartens, and schools cannot perform their socialization function. In addition to working online, it is advisable to pay special attention to time management, a healthy lifestyle, and maintaining mental health.

References

S. R. Covey: A bizalom sebessége – A rejtett tényező, ami mindent megváltoztat, HVG Könyvek, Budapest, 2011

Kovács Ilma: Távoktatástól távoktatásig (Egy kutató elemzései és részvétele Magyarország távoktatásában 1973 és 2006 között) Válogatott tanulmányok, cikkek és előadások gyűjteménye, Budapest, 2006

http://regi.ofi.hu/tudastar/tavoktatas-learning#13, document downloaded 26. 04. 2020

Digitális munkarend – pedagógiai megoldások, Digitális Pedagógiai Módszertani Központ, https://dpmk.hu/2020/03/27/digitalis-munkarend-pedagogiai-megoldasok/, document downloaded 25. 04. 2020

Magyarország Digitális Oktatási Stratégiája, https://www.kormany.hu/download/0/cc/d0000/MDO.pdf, document downloaded 25.04. 2020

SUPPORTERS

MAGYAR PEDAGÓGIAI TÁRSASÁG EST. 1891.

KODOLANYI JANOS UNIVERSITY

Hungarian HERA Educational Research Association