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PANDEMIC'S IMPACT ON EDUCATION

CORINA GEORGETA DINCULESCU¹

Abstract: *In a world crisis generated by the spread of Covid-19, beyond the negative consequences, fast and efficient responses were needed from the authorities across the world, both for the scenario in which the crisis was on a short period and education would have recovered quickly, and especially for the scenario in which the crisis persisted for a longer period (several months), and in this case the solutions should provide equal access to education for all children and young people. We are still in the second scenario, and during this time momentary solutions have been found, yet far from being efficient and sufficient.*

At the beginning of pandemics, school closure was considered necessary by the authorities throughout the world, including Romania. On the long term, this action has had, and will continue to have negative effects on education, mainly for vulnerable and marginalised children and young people: the disappearance of direct learning opportunities (which can create serious inequality of opportunity), a high school dropout rate, etc.

Most school systems in the world have offered various ways of distance (online) learning, but some of them could not be applied in certain areas or in the case of certain categories of children/young people, due to limited access to internet and to a personal computer/tablet from home. Romania also embraced this idea, yet in practice the online teaching modalities have been extremely low (insufficiently trained teaching staff in using digital systems for online education and pedagogy, as well as in developing online teaching tools, insufficient platforms with free use – without cost to be used for online lessons, etc.).

This paper attempts to highlight the challenges that the education systems had to face as a result of the health crisis that began in early 2020 (which still continues, provided that the threat of infection has not disappeared yet). Another objective was to identify the solutions adopted by authorities to reduce the negative impact on education, avoiding the increase of discrimination of the already disadvantaged categories of persons, in particular (children and young people coming from low-income families, disabled children and young persons, with learning difficulties, etc.), as well as the disparities between residence areas.

Key words: *education, online learning, inequalities in education, urban-rural disparities*

JEL Classification: *I21, I24, J14, J15, R11*

INTRODUCTION

In a period of global crisis, generated by the spread of COVID-19 virus, fast and efficient reactions from the authorities are needed, both for the situation/scenario of a short-term crisis and fast recovery of education, and mainly for the scenario of a longer period of crisis (several months), in which case the implemented solutions should provide equal access to education for all children and young people.

School closure in the context of COVID 19 pandemic has been considered necessary by health authorities all over the world (there are also exceptions, Sweden for instance), by Romanian authorities inclusively, both for slowing down the spread of disease and for attenuating the effects on the health system that will not be able to cope with the potential massive number of critical patients (in the context in which the Romanian health system is the weakest in the EU, weaker than in Bulgaria, Albania, and also than in countries from former Yugoslavia, such as Macedonia or Montenegro. While the European Union average healthcare expenditure relative to GDP is 9.6%, Romania allocated only half of this average in 2019, i.e. 4.84% of GDP).

One of the most important aspects of education, in general, is its need to adapt to all categories of children/young people – be they disabled children and young people, with learning difficulties, from different social backgrounds or from disadvantaged areas. Such an adaptation method is the inclusive and discriminatory school, with no inequities between students from disadvantaged and advantaged backgrounds, a school that focuses on the inclusion of all categories of children/young people who have been previously marginalised.

In this context, children and young people in rural areas can be considered at high risk (of learning loss, in general, but mainly in this period of school closure, when they are unable to

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participate in direct learning (through courses taught at school), and not having access to internet, to a PC/Tablet from home, they risk becoming vulnerable.

The digital divide, being the most important factor that affects equal opportunities for people, should be avoided or minimalised as much as possible, so that these differences in opportunities should not grow larger and trigger an even greater negative impact on the learning process of disadvantaged children or of those from disadvantaged areas.

Home schooling is not only a massive shock for parents' lives, but also for children's social and learning life. This seems very unlikely to replace learning at school, and furthermore, the substantial disparities between families will even grow larger (the extent to which parents can help their children learn, the time available for teaching and learning testing, parents' non-cognitive abilities, resources, amount of parental knowledge). All these may have long-term consequences for the affected cohorts and increase human capital inequalities.

MATERIALS AND METHODS

One of the methods used to prepare the raw material for analysis was the personalised query of the official databases available. For the indicators on internet and computer access from home we used the results published by the National Institute of Statistics (NIS), in the Survey on Access to Information and Communication Technology (ICT). Therefore, the information base mainly consists of NIS and EUROSTAT databases.

For documentation, the *national and international literature* (treatises, monographs, research projects, articles/scientific communications from established journals), various *studies and analyses* of nationally and internationally reputed institutions represented significant benchmarks. The information from informal analyses, reports and studies as well as from regional development strategies was also used.

Another method used in this study was filtering, collecting and analysing complementary information (internet, publications), comparing the methodological content of indicators obtained from various data sources.

RESULTS AND DISCUSSIONS

The challenge has been (and will continue to be in the school year 2020/2021, which has just begun) to reduce as much as possible the negative impact that this pandemic will have on learning and schooling.

The school closure action may have long-term consequences, mainly for the vulnerable and marginalised people, increasing the already existing disparities, with regard to:

- (a) ***access to direct learning*** (which can create serious inequalities of opportunity, on the long run);
- (b) ***school dropout rate*** – is still very high (15.3% in 2019), by almost 10 percentage points higher than the EU average. In the rural area, this can reach much higher values (22.4%²). A long period of non-active participation can lead to a further increase of this rate;
- (c) ***access to food*** – access to the Government's Roll and Milk Programme 2019-2020, which, although it is allocated an extremely low budget per child, for certain children it can be a reliable food source and its loss could lead to a disequilibrium in these children.

Measures and solutions³ of other states

² EUROSTAT - https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=edat_lfse_30&lang=en

³ refers to the school year 2019/2020, which ended beginning with the month of May, depending on each country.

Many school systems across the world are offering **online learning modalities**, now when schools closed. To reduce the impact of school closure on children/young people, distance learning strategies can be developed, but some of them cannot be applied in certain areas or in the case of certain categories of children/young people due to the low access to internet and to a computer from home.

The school closure measure has determined *moving courses online*, which is a solution in order to avoid learning disturbances; thus distance learning has been organised, by various modalities: books and materials taken from school; different e-learning platforms, giving teachers and pupils the possibility to work together and interact, also with the help of national TV programmes or lessons developed quickly on social platforms.

According to Eurydice⁴, **most European countries have decided to close schools** as part of the measures to limit the spread of virus. The first country to close schools was Italy, on March 5, followed shortly by Albania, Greece, Czech Republic and Romania. Most European education systems closed their schools by March 23 (except for Sweden and Iceland).

Most European countries use the Internet, offering online platforms for lifelong learning (Croatia, Cyprus, France, Greece, Italy, Portugal, Serbia etc.).

In almost all countries, teachers and school managers have been encouraged to offer live lessons or record online lessons. The learning content have been also delivered via TV and other media (Croatia, France, Serbia, Spain, etc.).

Some countries have maintained a small number of schools to accommodate children who cannot be cared for at home (France, for instance).

Equity in access to ICT-based learning is a major concern, as schoolchildren from disadvantaged backgrounds tend to have less access to computers and other out-of-school devices, in the pandemic period in particular. In France, for instance, efforts have been made to lend devices and provide printed courses to those 5% of pupils who do not have access to Internet or computers, while in Portugal postal services were used to send worksheets at home.

Solutions for Romania

Romania has adopted the same distance learning modality, yet in practice online teaching has been inadequate, it was practically an improvisation in a time of crisis, teachers being insufficiently trained in using digital learning management systems and online learning pedagogy or they do not have the necessary infrastructure. At the same time, teachers' and children/young people's digital skills are insufficiently developed to access learning platforms and other necessary resources, etc.

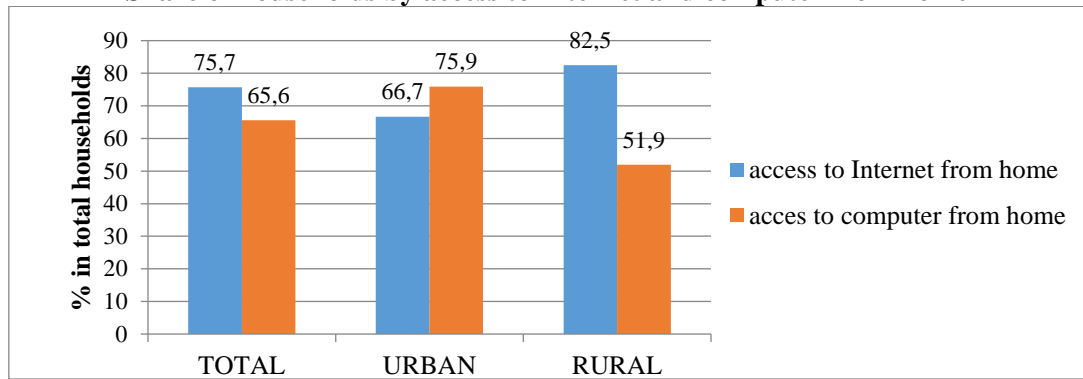
According to the results of Survey on Access to Information and Communication Technology (ICT)⁵ of the year 2019⁶, ***slightly more than three quarters of Romanian households had access to the Internet network at home***, almost two-thirds of these being found in urban areas and only one third in the countryside (almost double in the urban area compared to the rural area).

⁴ Eurydice Network is the network of information on education from Europe, its objective being to provide this information to political decision-makers from the EU member states.

⁵ Survey on Access to Information and Communication Technology (ICT), conducted by NIS, with the main objective to provide information on population's access to different communication technologies, such as computers, mobile phones, as well as Internet access.

⁶ The data source is NIS, the data referring to access to computer refer to the year 2017 (latest year available), and those referring to Internet access to the year 2019.

Share of households by access to Internet and computer from home



Source: NIS, Survey on Access to Information and Communication Technology (ICT)

Nationwide, *two-thirds of households have access to computer from home*. This indicator is differentiated by residence areas, namely three-quarters of households have access to computer from home in the urban area, while in the rural area only half of rural households have access to computer from home. In the rural area, the share of households with access to computer from home is lower than access to Internet from home (by 30 percentage points), the limited access being determined by the Internet connection mainly from mobile phones and other mobile devices.

For certain children from the disadvantaged categories (coming from low-income families, from different social backgrounds or from less-favoured areas), school is, among other things, the source by which they find out that they can have a different life from their parents (marked by physical work and multiple difficulties), with the hope for a better life. In these circumstances, it is important to identify the vulnerable communities and the necessary educational resources to continue home schooling.

In the early period of the pandemic, **solutions for distance learning** were provided, through *lessons delivered via TV* (Tele School training programme), as well as through various agreements/partnerships of the Ministry of Education with different platforms, companies, universities. Practically, after school closure, there have been many initiatives to mitigate the negative impact of the difficult access to educational resources, both for teachers and for children/young people.

The campaign *#ÎmiPASĂ #ȘcoaladeACASĂ [ICARE #SchoolfromHOME]* – developed by the Ministry of Education and Research together with the University of Agricultural Sciences and Veterinary Medicine from Bucharest (USAMV) and Cora Romania – is a project by which tablets with Internet connection will be donated to high school pupils from disadvantaged areas, with subscription included, supported by USAMV for 24 months, with *the aim of ensuring a fair and quality education for rural pupils*. Taking into consideration the urban-rural discrepancies, between the communities with access to technology and the disadvantaged communities, the tablets and subscriptions with unlimited Internet access for a 24-month period are purchased by USAMV Bucharest, aiming at an efficient online training.

Another initiative is *“Reaction for Education”*, by which Narada, with the support of the Ministry of Education and Research and Cora Romania, launched a digital platform through which *teachers can make public the necessary equipment for them and their pupils*, in the context of continuing education in a digital context, and companies, communities and any natural person can choose, in real time, where to contribute.

EduPedu.ro, a non-profit organization, *has published a multitude of resources and references for distance teaching and learning*, since the authorities decided to close schools.

A recent measure of the Ministry of Education and Research (MER), MER Order no. 4135/21.04.2020, regulates the pre-university education system by on-line learning. This document contains the guidelines for creating and/or strengthening the pre-university education system

capacity through online learning. The Ministry has also outlined new responsibilities and tasks for teachers, as well as for parents – the obligation to provide the necessary means for children’s participation in online courses (which became mandatory, by this order), yet without mentioning concretely how to ensure the necessary means for this action, in the case of those who do not have them.

At the same time, by this ministerial order, the digital portal on educared.ro has been operationalised, as the whole of e-learning platforms and online learning resources, including tutorials and other learning aids dedicated to teaching staff training and support, some of these resources already made available for potential users even since the closure of schools.

The analysis of the access to Internet and computer from home reveals that in the countryside, access to the Internet and, in particular, to a home computer is quite limited, so that the practical applicability of measures taken by the Ministry of Education is quite limited.

CONCLUSIONS

Those marginalised before the pandemic are even more at risk now. The correlation between the socio-demographic factors (gender, ethnicity, age, residence area) and the economic factors (poverty) can highlight multiple forms of discrimination and exclusion. At the same time, despite the existence of such initiatives to create distance learning platforms and systems, even though these have gradually appeared since the authorities decided to close schools, they cannot reach/and have not reached all children/young people. Despite repeated assurances from the authorities, it has not been possible to create distance learning platforms and systems to include all children/young people, as access to distance learning is conditioned by their social background, parents’ level of education, etc. This deepens the inequality of educational opportunities for the disadvantaged children/people, with a negative effect upon the future of these persons.

If these measures taken for the school year that is about to begin become operational, part of the rural children will be able to benefit from online courses delivered by their teachers, like their colleagues with access to Internet and PC. The sooner these initiatives reach the disadvantaged categories of children/young people, i.e. those from rural areas, the more children/young people will become equal in continuing learning.

Yet we express our reservation about the operationalization of all these large-scale projects and we want them not to remain only at declarative level.

Regardless of the formula adopted by authorities to support, encourage and streamline education, through online courses, during this period, pupils will remain with a deficit of knowledge. Even though small steps have been taken in the implementation of online education during the state of emergency, nobody knows exactly if these measures will be efficient, but they are certainly not applicable to all children/young people, mainly to those in the categories at risk.

Hence the conclusion that, although even before this exceptional situation, facing our country and the entire planet, obvious disparities existed between residence areas, between different areas of the country, between the disadvantaged and non-disadvantaged areas, inequalities of opportunity regarding the education of children/young people in Romania, now these disparities are deepening even more. Therefore, practical, applicable emergency measures are needed to ensure access to distance learning programmes for all children and young people – increased funding for education and broad access to distance education and learning, so that education can continue on the short and medium term, and the health of teachers and children/young people can be protected. At the same time, it is necessary to analyse and find fast, applicable solutions to problems related to: access to information technology for pupils and teachers, especially in the communities and families

that are economically disadvantaged and have no access to ICT; training teachers in online teaching and improving their digital skills, training children/young people in using the necessary devices and applications for the participation in online courses. All these, in the conditions in which the new school year will start soon.

REFERENCES

1. World Bank – <https://www.worldbank.org/en/news/>
2. <https://www.edupedu.ro/>
3. EUROSTAT - <https://appsso.eurostat.ec.europa.eu/>
4. NIS, Tempo online
5. NIS, Survey on Access to Information and Communication Technology (ICT), years 2017, 2018, 2019
6. Ministry of Education and Research – MER Order 435/21.04.2020
7. <https://narada.ro/reactie-pentru-educatie/>
8. UNESCO - <https://en.unesco.org/covid19/educationresponse>; <http://data.uis.unesco.org/#>
9. <https://digital.educared.ro/>