## The Learning-Market Of Edtech In Brazilian Education: The Impacts Of The Covid-19 Pandemic On The Educational Sector

## Alisson Slider do Nascimento de Paula

Center University Inta (UNINTA), Sobral, Brazil.

### Abstract

The text seeks to discuss the impacts of the Covid-19 pandemic on the educational sector considering the rise and expansive of a learningmarket. The spread of contagion directly affected educational systems across the globe. Remote education emerges as a solution by governments to reduce the consequences of the suspension of classes. The use of these resources in a centralized way expresses the interests of the learning market, since the financialization of education is deepened by the purchase of packages from EdTech companies by the public sector. It appears that business sectors linked to some spheres of education, especially distance education through the sale of technological resources and with the work of EdTech seek to influence the learning-market in an opportunistic way and without considering the future of state public education and students from popular layers.

Keywords: Covid-19, Learning-market, EdTech

## Introduction

The nature and scale of the Covid-19 crisis is unprecedented in this century. Its impacts are felt in all aspects of life. The educational sector on a global scale was directly affected by the pandemic. For example, many nations, prevented the virus from spreading through the closure of education institutions. In effect,

schools had to cease their face-to-face activities as a result of lockdowns undertaken by several countries. Despite this scenario implying pedagogical losses in students' schooling, another aspect emerged from all this- the rise of digital learning through remote teaching and the consequent role of educational technology companies (EdTechs).

The reconfiguration of training processes through technological packages during the pandemic period made possible new forms of private-mercantile expansion within public education, in effect, resulting in the deepening and consolidation of a learning market that already existed, however, now supplemented for the Covid-19 planetary panorama to deepen the involvement of EdTech in thepublic school system.

With these considerations in mind, this text seeks to discuss the impacts of the Covid-19 pandemic on the educational sector considering the rise and deepening of the learning market. The opening section addresses the global landscape in which Covid-19 emerged and spread, consolidating itself as a pandemic and impacting educational systems across the globe. The second section analyzes the logic of the globalization of national states and the relations between the public and the private, which make the logic of exogenous privatizations feasible, expanding thescope of a learning-market. In the third section, in turn, the impacts of the pandemic on the Brazilian educational sector will be analyzed, emphasizing the emergence of remote education and the consequent performance of EdTech corporations on the national scene.

## The impacts of the Covid-19 pandemic on the global territory

The new coronavirus is called the acute acute respiratory syndrome coronavirus 2 (SARS-CoV-2) (Van Doremalen *et al.*, 2020). It appeared in Wuhan, the seventh largest city in China. The World Health Organization (WHO) issued a

global alert on the disease on 31 December 2019. The disease was officially named by WHO as COVID-19 on 11 February. In March, the organization defined the outbreak as a pandemic. The coronavirus is a zoonotic virus, an RNA virus classified as Nidovirales, of the Coronaviridae group. This group generates respiratory infections, being isolated "for the first time in 1937 and described as such in 1965, due to its profile under microscopy resembling a crown" (Lima, 2020, p. 5). In addition, according to the aforementioned author, the known types of coronavírus are: "alpha coronavírus HCoV-229E e alpha coronavírus HCoV-NL63, beta coronavírus HCoV-OC43 e beta coronavírus HCoV-HKU1", SARS-CoV (causing severe acute respiratory syndrome or SARS), MERS-CoV (cause of the Middle East respiratory syndrome or MERS).

The case of underreporting in Brazil is an aggravating factor in the pandemic scenario, since in the ranking *COVID-19: Government Response Stringency Index,* May 8, prepared by Hale, Petherick e Kira (2020) which points out the countries that perform the most tests for Covid-19, countries with very low testing rates are out of account due to the data generated by them being classified as irrelevant, and Brazil is within this group.

The contamination that has spread to all corners of the globe has had implications for all economic sectors. Indeed, the study by John Hopkins University exposes the rate of contamination and deaths by Covid-19, which shows an alarming logic<sup>1</sup>.



Graph 1 - Confirmed cases of COVID-19 contamination by country

Source: Johns Hopkins University (2020). Data: June 14, 2020.

The examination of graph 1 shows the ten countries that lead the ranking of the highest confirmed contamination. The United States of America (USA) is the country with the highest rate of contaminated2.084.506 (40%); Brazil ranks second with the highest contamination rate, accounting for 850.514 (16%) contaminated; then Russia comes with 528.267 (10%); India has 320.922 (6%) contaminated; The United Kingdom has 297.342 (6%) cases; Spain, in turn, has 243.928 (5%) contaminated; in Italy, 236.989 (5%) are contaminated; in Peru 225.132 (4%); with regard to France, there are 193.746 (4%) confirmed cases; finally, in Germany there are 187.518 (4%).

In this sense, in addition to the high rate of contagion, Covid-19 has impacted the daily lives of national states with its lethality. Certainly, Graph 2 departs from the countries with the highest number of confirmed cases and shows their number of deaths caused by SARS-CoV-2.





Source: Johns Hopkins University (2020). Data: June 14, 2020.

The analysis of graph 2 shows that the USA reached a total of 115.586 deaths (36%); 42.720 (13%) deaths are concentrated in Brazil; Russia reached 6.938 (2%) deaths; in India, up to the date of data collection there were 9.195 (3%); the United Kingdom, on the other hand, is a quantity of the order of 31.783 (13%); concerning Spain, there are 27.136 (8%); in Italy there are 34.345 (11%) deaths; in Peru 6.498 (2%); in France there are 29.401 (9%); and Germany has 8.801 (3%). Ultimately, the rate of contagion and deaths by Covid-19 show the need for social isolation as a strategy for its control.

The spread of contagion directly affected the economic sector, implying a crisis that expresses a different pattern when compared to the subprime crisis in 2008, since it is not restricted to purely economic and financial elements. In these circumstances, educational systems in several countries have been hit hard. One of the actions to contain the Covid-19 pandemic, according to the United Nations Educational, Scientific and Cultural Organization (UNESCO), was the temporary closure of educational institutions by the vast majority of

governments. This containment action impacted more than 70% of the global student population.

The closure of basic education schools has shaken the educational reality of 1,198,530,172 students, 68.5% of the total enrolled students, since 153 countries have joined the closure of schools as an action to combat the spread of Covid-19. In this scenario, governments in partnership with multilateral agencies met to outline strategies to act directly in the educational scenario so that there would not be so many losses. UNESCO (2020) seeking to reduce the consequences of the suspension of classes has shown that countries keepttheirschoolcalendars in progress from remote education, with special emphasis on the most vulnerable and disadvantaged populations.

UNESCO makes available a world map in which it identifies the places where schools were closed in pink, the purple color identifies the countries that closed their education systems and, finally, the blue color expresses the educational networks that remain open.





Source: UNESCO (2020)

The education systems have been adjusting within the limits of the guidelines of multilateral agencies and governments, since the implementation of the remote education model, as it was denoted, was not unanimous among national states. However, those who adhered to this format migrated their face-to-face classes to the Online form, according to a report in *The Economist* (2020a), China and South Korea have closed their schools since January. Until September, there is no forecast of returning to face-to-face classes in Portugal or in the subnational state of California. Concerning national examinations, China has postponed the Leaving Certificate (gaokao) exam. Britain and France canceled their 2020 exams.

In the United States, in the search for the realization of social distance during the pandemic, universities suspended their face-to-face activities. According to *O Globo* (2020), the higher education industry, of more than US \$ 600 billion, turned to an approach that many resisted, namely, online education. In addition, in the same report it is evidenced that in the USA there are 1.5 million teachers, however, 70% had no experience with educational technologies and virtual classes. In Italy, the Minister of Education, Lucia Azzolina, confirmed that classes will resume in September, however, within a mixed proposal varying in classroom and virtual classes.

Regarding basic education schools in the U.S., despite President Donald Trump's requests for schools to reopen, subnational states plan to keep their classes suspended for the rest of the academic year (*The Economist*, 2020a). China, in turn, according to *The Economist* (2020b), "To curb the spread of covid-19, the authorities have closed schools and universities indefinitely. But "study must not stop", says the education ministry. Under its orders, the country's biggest exercise in remote learning is under way, watched over by parents". In addition, in the same article, it is emphasized that in the Chinese country, even though the internet speed is slow, students will be able to download audio files and activities, in addition to encouraging parents to conduct education. In addition, when there is no access, the government has a state education channel that throughout the day addresses content that covers the basic education series.

# Combined and unequal development, public-private relations and the emergence of learning-market

The logic of globalization is not only configured as a set of national states, which are engaged in their interdependent relations, with themes pertaining to colonialism standing out. For Ianni (1997, pp. 13-14), national and subject states were "subsumed, real or formally, by global society, by the configurations and movements of globalization". Chesnais (1996, p. 13) asserts that it is a "configuration of world capitalism and the mechanisms that govern its performance and regulation". The centralization of large financial capitals - especially with regard to investment funds - expresses the mode of accumulation carried out by globalized capital. The centralization of these financial capitals plays an important role in creating great results, especially with regard to the financial sphere.

The creation of a unified world space made it possible to differentiate between center and periphery. In effect, national states located in the economic center can be characterized as "locus that apprehends a certain amount of the economic surplus produced in the peripheral countries, as well as having high technological and educational levels" whereas the peripheral social formations occupy a subordinate position (De Paula; Costa & Lima, 2020). In order to effect the conformation of the pattern of capital accumulation, mechanisms are necessary to enable the consolidation of imperialist intentions in the stage of globalized capital. The phenomenon of globalization deepens the logic of the international division of labor (De Paula; Costa & Lima, 2020). It is legitimate to emphasize the differentiation that exists in the position between national states regarding the structures and impacts of globalization. The analysis of asymmetric development between countries undertaken by Lingard and Rizvi (2000, p. 2.100) asserts that "globalization invades local contexts but does not destroy them; on the contrary, new forms of identity and local cultural self-expression are, consequently, connected to the globalization process".

Concerning the meaning of the concept of globalization, Sguissardi (2015, p. 95) explains this scenario:

For the decentralization of large companies, of the industrial branch, for example, whose units multiply and spread over several regions and countries, with lower costs and greater advantages regarding the labor force (cheaper), raw material, labor legislation, universities that research and train specialized labor for companies with state subsidies, etc. The economic strength of these companies would outweigh that of many national states and their republican institutions, such as the university and research institutions.

Republican institutions, especially educational institutions, suffer several implications in their modus operandi. Within this rationality, the knowledge economy stands out (Afonso, 2015; Olssen & Peters, 2015 & Jarvis, 2000). This concept makes it feasible to evoke a type of society that supports and legitimizes the approval of policies and the "definition of economic and business guidelines or the induction of social and educational practices aimed at meeting what are considered, in general terms, to [...] requirements of capitalism (Afonso, 2015, p. 270).

Thus, capital is in a painful situation, so it seeks other areas so that it can extract its surplus value. Education appears, then, as a strategic sector for capital, since public-state financing is configured as a seductive source to be absorbed. According to the research by Verger et al. (2017 apud Rikowski, 2017), the global educational market, in 2015, had a value of US \$ 4.9 trillion (USD). We add to this the investment of approximately US \$ 2 billion in venture capital in education, in 2014, which evidences a growth in investment of the order of 45% in the period of the Great Depression from 2009 to 2014. This global scenario of education, therefore, highlights the source of the interests of the business sectors, thus stimulating the marketification of education. For the realization of such rationality in the Brazilian reality it would be necessary to deploy a structural adjustment based on the precepts of globalization. Ball (2001) add sthat in the logic of globalization, the constitution and implementation of policies based on the rationality of international organizations can engender a kindof new paradigm of educational governance, contemplated by the logic of policy convergence (Dolowitz, Hulme, Nellis & Neill, 2000). From this understanding, Ball (2001, p. 100) considers that process is about the

[...] gradual disappearance of the conception of specific policies of the Nation State in theeconomic, social and educational fields and, at thesame time, the coverage of all these fields in a single conception of policies for the economic competitiveness, that is, the increasing abandonment or marginalization (not in terms of rhetoric) of the social purposes of education.

The financial sector constituted a complex web of processes for privatizing education. In Brazil, this configuration is in line with the guidelines of multilateral agencies, as well as their dependent capitalist particularity, which reflects in the inflection of the national state to the central countries. From the 1980s onwards, with the resumption of global economic expansion, structural adjustments were made in national states seeking to increase financial profitability. In effect, this procedurality stimulated a stunted action by the State regarding the guarantee of rights and, consequently, greater state linkage with the market was engendered. The greater link between the public-state sphere and the market made it possible to create a myriad of policies to dilute the limits between the public and the private, however these policies are not impartial, do not suggest from scratch, and carry with them orientations based on globalization. The logic of creating policies based on the phenomenon of globalization is explained by Ball (2001):

The creation of national policies is inevitably a "do-it-yourself" process; a constant process of borrowing and copying fragments and parts of ideas from other complexes, using and better using tried and tested local approaches, cannibalizing theories, research, adopting trends and currencies, and sometimes investing in everything that might work. Most policies are fragile, products of agreements, something that may or may not work; they are reworked, perfected, rehearsed, riddled with nuances and modulated through complex processes of influence, production and dissemination of texts and, ultimately, recreated in the contexts of practice. [...] These fields are constituted differently in different societies. In short, national policies need to be understood as the product of a nexus of influences and interdependencies that result in an "interconnection, multiplexity, and hybridization" [...], that is, "the combination of global, distant and local logics". (Ball, 2001, p. 102).

#### In this sense,

Education gains emphasis on the global stage, the guidelines of international organizations undertake guidelines for educational policy in the capitalist periphery through the United Nations Educational, Scientific and Cultural Organization (UNESCO), Organization for Economic Cooperation and Development (OECD), World Bank (BM et. Educational policies, initially, were part of the list of social policies in several national states allocated under the tutelage of the national government [...]. Despite the fact that since the organization of national states there

was a relevant connection between them and international political circles (De Paula; Costa & Lima, 2020, p. 05).

In the global scenario, educational policies are undergoing interventions, on an increasing scale, by new actors - many of whom are linked to the private sector - implying a new educational morphology in which the opportunity for profit is on the agenda (Ball, 2018). In these circumstances, the commodification of education is not an abstraction. For Peroni, Caetano & Lima (2017, p. 427), the boundaries between public and private "have changed in this period of crisis of capitalism, in which their overcoming strategies - neoliberalism, globalization, productive restructuring and the Third Way - redefine the role of the State, especially with regard to social policies ". In addition, social and economic changes do not directly determine educational policy, however, it is a constitutive aspect, since the State, as well as capital, must be understood as a process resulting from the movement of correlation of forces (Harvey, 2008; Peroni, 2003 & Thompson, 1981).

Leyshon and Thrift (2007) consider that in the last 30 years one of the most persistent financial histories has been the search for a reliable income that can be expanded. Certainly, the education sector is strategic because it is configured as an emergency trend. Ball (2018, p. 2) asserts that the "relationship of the State with private providers of educational services is now commonly articulated by the logic of the market, within which the State becomes a market maker, contractor and monitor", whereas "The private sector and other providers increasingly assume the practical work of the government, in the immediate and mundane sense".

Despite the fact that private and corporate actors have been involved in global basic education since the 19th century (Carnoy, 1975 & Moeller, 2020), in the

last decades they have gained more influence and power - due to the procedurality of financial capital - in the definition of educational guidelines and policies on a world scale. It is legitimate to consider that education, during this period, contributed significantly to the expansion of corporate profits and expansion of the market through exogenous privatization processes (Ball & Youdell, 2007). "This expanded reach of private actors occurred in the context and as a result of the reversal of state investment and the increase in ideological attacks on public education in several global contexts" (Moeller, 2020, p. 1). In this way, a true metamorphosis in education takes place, deepening the learning market, as a result of the sale of services that constitute professional training. This logic "expands in an increasingly broad and transnational scope, with the creation of [...] its tutoring systems supported by information and communication technologies" (Afonso, 2015, p. 280). Therefore, what we will agree to call "learning-market" concerns the contemporary and tendentious way of manifesting education as a commodity.

In Brazil, the Covid-19 pandemic has engendered several implications that have affected and are directly affecting school education, especially public education because the aspects related to infrastructure and the student body are different from those located in private-mercantile education, especially in what it concerns the objective conditions of the families served by the school system.

**Remote education as an expression of EdTech learning-market in Brazil** The Brazilian school system is faced with an attempt to disseminate the idea that basic education schools and universities are functioning normally through remote education, with the subterfuge of continuing the school and academic calendar in the country. On April 28, 2020, the National Education Council (CNE) approved guidelines for basic education schools and higher education institutions during the COVID-19 pandemic. The notes for basic and higher education, in summary, propose virtual approximation between teachers and families, non-face-to-face activities that use the family as a mediator, supervision of a family adult in the sense of accompaniment during online studies, in addition to the use of educational videos. Concerning remote teaching, the CNE Counselor, Maria Helena Guimarães de Castro, understands this teaching modality as a set of diverse teaching-learning practices that include online teaching, video lessons, activities sent to students and reading books (All for Education, 2020).

In this sense, it is legitimate to consider that since the 1990s, multilateral agencies such as the World Bank (BM), World Trade Organization (WTO) and UNESCO have proposed Distance Education (DE) to expand education in peripheral countries. However, despite these discussions permeating the scenario of Brazilian higher education, with the COVID-19 pandemic, basic education is also affected and gains a new face with remote emergency education. In addition, these multilateral agencies seek to disseminate a model of education and school institution advocated for capital, strictly speaking, a model oriented on the business agenda in which training is based on competences and aims at the formation of human capital.

Despite the rhetoric of distress about the educational situation as a result of social isolation, defending the interests of educational corporations and Information and Communication Technologies (ICTs) is the order of the day. The implementation of hybrid teaching, with synchronous classes, competency-based teaching, traditional study plans and memorization exercises to meet large-scale assessments (Giroux, 2018), highlights the need to pay special attention to assessments in the online format , such as the proposal for the National High School Exam (ENEM) digital.

The Colemarx document (2020, p. 13) points out that there is a global coalition involving business sectors and governments, and that this coalition is led by UNESCO and involves other multilateral agencies, in addition to business groups such as "Microsoft, Google, Facebook, Zoom, Moodel, Huawei, Tony Blair Institute for Global Change, Telefónica Foundation and others". The most used resources in the educational landscape during pandemics come from this coalition: "Google, Google classroom, Google suíte, Google Hangout, Google Meet, Facebook, Microsoft one note, Microsoft, Google Drive/Microsoft Teams, Moodel, Zoom, Youtube".

The use of these resources in a centralized manner expresses the interests of the learning-market, since the financialization of education is deepened by the purchase of packages from educational technology companies (EdTech) by the public sector. According to Moeller (2020, p. 3), EdTech owned software aimed at the development of competencies and skills in a given knowledge, even products that enable "significant changes in the operation and management of schools", including even in "hiring specific services or entire schools". This scenario was already operated in the USA through Educational Management Organizations (EMOs) for the purpose of developing and / or running schools. Examples of EMOs that best characterize this scenario are: Edison Learning Inc., which runs public charter schools, and Electronic Classroom of Tomorrow, which was set up as an online school. In addition, there are EdTechs, such as Pearson, that sell educational packages such as curricula, pedagogical programs, assessment and professional development services, although they are for-profit companies, they are financed by the public sector through financial operations (Koyama, 2010).

The British multinational company seeks from the educational business intends 'lead the 'next generation' of teaching and learning by developing digital learning platforms, including artificial intelligence in education (AIEd). It ispiloting new AI technologiesthat it hopes will enable virtual tutors to provide personalised learning to students, much like Siri or Alexa'.In addition, in the published document Pearson 2025: transforming teaching and privatising education data, it emphasizes that the corporation's mission until 2025 is to promote 'the benefits of technological developments and thei rcombination with new kinds of teacher professionalism. However, its corporate strategy is premised upon creating disruptive changesto (a) the teaching profession, (b) the delivery of curriculum and assessment and (c) the function of schools, particularly public schooling. These disruptions do not follow a coherent set of educational principles, but capriciously serve the interests of the company's shareholders.' (Sellar, Hogan, 2019, p. 1).

EdTech are a multibillion-dollar corporation field, and corporate actors like Google, Microsoft and Apple are at the epicenter. Moeller (2020, p. 6) asserts that "Google, Microsoft and Apple are fighting for dominance in the classroom. Everyone wants their devices to be in the hands of the next generation of consumers." It is a valuable marketing niche to be dominated. Strictly speaking, as a company, EdTech, in 2019, reached a value of US \$ 43 billion, with approximately half of this value being in basic education.

## Indeed,

(...) there are corporations whose entire business is education. This includes educational technology (EdTech) companies whose entire business is education, such as DreamBox, an online mathematics software. There are also significant shifts occurring in the operation and management of schools, which has led to the contracting out of particular services or entire schools (Burch & Good, 2014; Fabricant & Fine, 2012; Koyama, 2010; Saltman, 2005). Scholars have demonstrated how this occurs in the United States via for-profit educational management organizations (EMOs) that develop and/or administer schools (Levin, 2001). Examples include EMOs like Edison Learning, Inc., which run public charter schools, and the Electronic Classroom of Tomorrow, which was an online charter school, the largest in Ohio until it closed in 2018 after legal contestations with the Ohio Department of Education. Charter management organizations (CMOs), like Summit Public Schools or KIPP Schools, similarly operate networks of publics chools, but they are distinguished by being nonprofit rather than for-profit entities even though they often generate revenue and partner with for-profit institutions. In international contexts, there is also a proliferation for-profit companies like Bridge International Academies, Omega, Rising Academies, and Affordable Private Education Centers that operate low-fee, for-profit schools in countries like Kenya, Liberia, Ghana, Nigeria, Uganda, Philippines, and India, often through contracts with Ministries of Education. (Moeller, 2020).

Indeed, if we look at the movement of shares in the period from April 15th to May 14th on the São Paulo Stock Exchange (BOVESPA), we see a drop in the shares of the two largest holding companies S / A in the education sector, Cogna Educacional (COGN3 -24,18%) and YDUQS (YDUQ3 -20,52%), however, three of the companies that provide educational resources to operate remote education in the pandemic period obtained an appreciation of their shares, according to the NASDAQ index, the company Zoom Video Comunications (ZM 10.79%), Alphabet Inc.2 (GOOGL 7,92%) and Microsoft (MSFT 5,03%) express this capital appreciation.

In this sense, there is a scenario of continuity in the deepening of the financialization of education, however, deviating the emphasis from transactions, that is, it once concentrated on institutions, and started to emphasize on technological resources. This phenomenon stems from severe implications for the training of subjects, pedagogical work and access to and permanence in education. Teaching migrated from classrooms to video conferencing applications3.

With the migration in the format of the classes, the training processes, the forms of interaction, the teachers had to reorganize the pedagogical work by running over the school's Pedagogical Political Project, de-characterizing the training objectives. It is worth mentioning that a good part of the teachers do not have training and mastery of EdTech that are being used to mediate the teachinglearning process. At the limit, access and permanence is another glaring problem in Brazil, considering that there is a wall between public and private schools, constituting a true educational apartheid, moreover, in a recent study by the Covid-19 Social Observatory of the Department of Sociology from the Faculty of Philosophy and Human Sciences of the Federal University of Minas Gerais (Fafich-UFMG), exposes that 20% of Brazilian households are not connected to the internet, and access by the students to the distance learning materials available in the portals by several public elementary and high schools (Colemarx, 2020). This scenario is characterized by what Leher (2020) calls Social Darwinism, as there is a hierarchy of races, cultures and human natures. The defense for the cooling of social rights, and the understanding of the market as the locus of natural selection implies for those who are negatively selected, its succumbing as a side effect of the law of the strongest.

## By way of conclusion

Considering the guidelines of the CNE, there is nothing to indicate what the future of the lack of basic education will be like. The private-mercantile sectors point to the growth of educational technologies, since in Brazil there is a growth with more than 400 EdTech. In a live discussion on May 13th organized by the Brazil at Silicon Valley project, the theme discussed was: 'EdTech & Philanthropy: we will start soon'. Jorge Paulo Lemman from the Lemman Foundation and Sal Kahn from Khan Academy participated in the live discussion. The notes were that from Covid-19 governments and institutions become aware that digital education must be central and that in the future there

will be educational institutions in the cloud, and that teachers will need to master many soft skills4 to act in this new educational reality.

Public school students who are unable to study, either due to the lack of structure in their home or the lack of resources such as computers, notebooks, smartphones and the Internet will be left behind. In view of this, it is worth reflecting on the various praises to the North American educational model, despite the No Child Left Behind program, however, in the Covid-19 Pandemic scenario, the rise of remote emergency education via EdTech, ifyou use the expression of Bastos (2018) 'No Profit Left Behind', in fact, the scenario is conducive to implementing the learning-market experiment.

The scenario is perverse for humanity. The pandemic is sinking the global health system and the finances of the capital metabolism system. However, business sectors linked to some spheres of education, especially the work of EdTech, seek to effect the learning market in an opportunistic way and without considering the future of state public education and students from the lower classes. As a result, it is necessary to question this logic, to seek to implement the National Education System (SNE) supported by cooperative and collaborative relations between federated entities, thus seeking quality public education, in which technological resources supplement the curriculum, the pedagogical work and training, and that the interests of profit are eliminated so that the state public education can meet the desires of society in the post-pandemic scenario.

#### Notes

<sup>&</sup>lt;sup>1</sup>The exposure of the data in both graph 1 and graph 2 seeks to represent the severity of the Covid-19 pandemic. It is fair to point out that these are data collected from a specific day. At the time of reading this text, the data already exceeds that shown in the graphs.

<sup>2</sup>The holding company Alphabet Inc. is a conglomerate that owns Google and other companies that owned or were linked to Google.

<sup>3</sup>With regard to higher education, the vast majority of private institutions made this migration, however, according to the Monitoring in the Teaching Institutions of the Ministry of Education (MEC), of the 69 federal universities, only 12 universities are developing remote activities.

<sup>4</sup>Soft skills are skills, behavioral skills, that is, professional attributes that the subject needs to master in order to carry out their work function.

#### References

- Afonso, A. J. 2015. Higher education in the knowledge economy, the sub-socialization of social and human sciences and teacher training. *Evaluation*, Campinas, 20(2).
- Ball, S. J. 2018. Global educational policy: reform and profit. *Revista de Estudios Teóricos y Epistemológicas in Educational Policy*, 3(1).
- Ball, S. J. 2001. Global political guidelines and local political relations in education. *Curriculum without Borders*, 1(2).
- Ball, S. J. &Youdell, D. 2007. *Hidden privatisation in public education*. Education International.
- Bastos, R. M. B. 2018. *No profit left behind:* the effects of the global political economy on basic public education. Fortaleza: New Civilization.
- Carnoy, M. 1975. *Schooling in a corporate society:* The political economy of education in America. McKay.
- Chesnais, F. 1996. The globalization of capital. São Paulo: Xamã.
- Colemarx. 2020. *In defense of public education committed to social equality* because workers must not accept remote classes.
- De Paula, A. S. N.; Costa, F. J. F. & Lima, K. R. R. 2020. Global guidelines for dependent Brazilian academic capitalism: the search for the construction of the world class university. *Journal of Educational Policies*, 4(12).
- Dolowitz, D. P., Hulme, R., Nellis, M., & O'Neill, F. (2000). Policy transfer and British social policy: Learning from the USA? Buckingham: Open University Press. Giroux, H. A. 2018. La guerra del neoliberalismo contra la educación superior. Barcelona: Herder Editorial.
- Hale, W.; Petherick, P. & Kira. 2020. COVID-19: Government Response Stringency. *Our World in Data.*
- Harvey, D. 2008. Neoliberalism history and implications. São Paulo: Loyola.
- Ianni, O. 1997. *Globalization theories*. 4ª ed. Rio de Janeiro: Brazilian Civilization.
- Jarvis, P. 2000. Globalization and the learning market. In: Lima, L. C. (org.). *Adult education*. Fórum III. Braga: Universidade do Minho/UEA. p. 29-41.
- Johns Hopkins University. 2020. Coronavirus resource center.
- Koyama, J. 2010. *Making failure pay:* for-profit tutoring, high-stakes testing, and public schools. University of Chicago Press.
- Leher, R. 2020. Social Darwinism, epidemic and end of quarantine: notes on the immediate dilemmas. *Major Letter*, March 29.

- Leyshon, A. & Thrift, N. 2007. The capitalization of almost everything: the future of finance and capitalism. *Theory Culture and Society*, 24(7-8).
- Lima, C. M. A. O. 2020. Information about the new coronavirus (COVID-19). *Radiol. Bras.*, 2(6).
- Lingard, B. & Rizvi, F. 2000. Globalisation and the fear of homogenisation in education. In: Ball, S. J. (org.). *Sociology of education:* major themes. Londres: Routledge/Falmer, p. 2.091-2.117.
- Moeller, K. 2020. Accounting for the corporate: an analytic framework for understanding corporations in education. *Educational Researcher*, 20(10).
- O Globo. 2020. In times of coronavirus, the US \$ 600 billion education industry surrenders to the web advancing the pandemic empties universities and other institutions, which are forced to offer distance learning. *O Globo* economy. Published on March 28.
- Olssen, M. & Peters, M. A. 2005. Neoliberalism, higher-education and the knowledge economy: from the free Market to nowledge capitalismo. *Journal of Education Policy*, Londres, 20(3).
- Peroni, V. 2003. *Educational policy and the role of the State in Brazil in the 1990s*. São Paulo: Xamã.
- Peroni, V.; Caetano, M. R. & LIMA, P. 2017. Today's educational reforms: the implications for democracy. *School Portraits Magazine*, 11(21).
- Rikowski, G. 2017. Privatization in education and commodity forms. *School Portraits Magazine*, 11(21).
- Sellar, S., & Hogan, A. (2019). Pearson 2025: Transforming teaching and privatising education data.
- Sguissardi, V. 2015. *Diagnostic study of the expansion policy of (and access to) higher education in Brazil:* 2002-2012. Piracicaba.
- The economist. 2020a. The kids are not all right When easing lockdowns, governments should open schools first. *The Economist Today* published: April 30.
- The economist. 2020b. Getting to know your teacher The coronavirus is causing massive disruption to education in China. *The Economis Today* published: February 27th.
- Thompson, E. P. 1981. *The misery of theory or a planet of errors*. Rio de Janeiro: Zahar.
- All for education. 2020. Pandemic Education: Guidelines for taking advantage of post-
- pandemic school hours are almost ready, says CNE. *All for Education*. Apr 14 2020. UNESCO. 2020. *Suspension of classes and response to COVID-19*.
- Van Doremalen, N. et al. 2020. Aerosol and surface stability of Sars-CoV-2 as compared with sars-cov-1. *New Eng J Med.*, 17(1).

## **Author Details**

Allison Slider has a PhD in Education from the State University of Ceará

(UECE) and is Professor at Inta University Center (UNINTA) and Researcher

in the Research Group on Labor and Educational Policy (GPTPOED).

Postal correspondence: Fransico de Assis Fernandes, Domingos Olímpio, 128, Sobral-CE (Brazil). Cep: 62022-410.
E-mail: alisson.slider@yahoo.com
Phone: 55+ (88) 9 9792-5020