

Today's education towards tomorrow's planetary education

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Abstract: This article sets the beginning of a broad and open discussion about the issues affecting education today concerning the impacts of digital media in a context of permanent connection with the teaching-learning process. The basic premise is that the demands and challenges of Distance Education (DE) are, in principle, the same as those that affect education as a whole, both profoundly affected by the complexity paradigm of planetary dimension – illuminating concepts approached in Edgar Morin's work. At the end of this series of reflections, we aim to highlight the need for an outlook that transcends purely technological and operational issues, while reaffirming the importance and pertinence of the educommunicative approach.

Keywords: education; distance education; digital media; educator training; educommunication.

Resumo: Este artigo propõe o início de uma discussão ampla e aberta sobre as questões que afetam a educação hoje por conta dos impactos das mídias digitais num contexto de permanente conexão com o processo de ensino-aprendizagem. A premissa básica é que as demandas e os desafios da educação a distância (EaD) são, em princípio, os mesmos que afetam a educação como um todo, ambas profundamente impactadas pelo paradigma da complexidade em dimensão planetária – conceitos iluminadores abordados na obra de Edgar Morin. Ao final desta série de reflexões, almeja-se pontuar a necessidade de um olhar que transcenda as questões puramente tecnológicas e operacionais, ao mesmo tempo que reafirme a importância e a pertinência da abordagem educomunicativa.

Palavras-chave: educação; educação a distância; mídias digitais; formação de educadores; educomunicação.

1. Introduction

From the basic idea that distance education (DE) is not different from education in general, that is, from its demands and challenges, this article presents some considerations about the possibilities that distance education offers for the development of a really effective educational process.

Digital media, in turn, is a separate chapter as it completely alters what used to be practiced in terms of communication resources for education. While the development of digital technologies is growing at a breakneck pace, the same cannot be said about its use in education in general, which demands the proposition of public policies capable of defending its possibilities in favor of a quality and inclusive education for all those that need to be included in it.

It should be noted here that the authors share, on these issues, the educative view, that is, one aligned with the assumptions of educommunication as re-signified by Soares¹. Thus, two initial approaches are presented: (1) The need for inclusion and access to quality education; and (2) education and DE as different instances of the same process. Next, we discuss digital media and the demands related to student and teacher education, which point out new avenues while at the same time bringing new questions and uncertainties. Section number 5 emphasizes the “planetary” character of education as glimpsed in this historical moment. Finally, some considerations indicate possible future directions to which this discussion may be directed.

2. Educating In A Changing World

Edgar Morin's complex thinking² emphasizes that education must be embedded in what the author called the planetary age, with a twofold challenge – educating “in” and “for” the planetary age – that must consider the complex situation of the world beyond the techno-economic conception, which seems to ignore the human problems related to identity, community, solidarity and culture.

To pursue the proposal of treating the DE issue as a form of education circumscribed in a much broader context, such as that of the planetary age presented by Morin, Curana and Motta³, we sought the work of sociologist José Joaquim Brunner⁴, former general minister in Chile, who states:

Human values differ across civilizations and change with the evolution of societies. They depend on the cultural path of peoples, on the ethical and religious foundations of each community, on their institutions and backgrounds, on the organization of work and on the means of communication, on the ways of knowing and living.

Thus, as regards today's network society, sociologist Manuel Castells⁵, already in the title of his seminal work, proposes the knowledge developed by the internet, which substantially alters the way information circulates among everyone, so that technology takes a prominent role in the world and institutions in general, especially schools, at all their levels. Hence, through the

1 SOARES, Ismar de Oliveira. **Educomunicação**: o conceito, o profissional, a aplicação: contribuições para a reforma do ensino médio. São Paulo: Paulinas, 2011.

2 MORIN, Edgar. **Introdução ao pensamento complexo**. Porto Alegre: Sulina, 2007.

3 MORIN, Edgar; CURANA, Emilio-Roger; MOTTA, Raúl Domingo. **Educar na era planetária**: o pensamento complexo como Método de aprendizagem no erro e na incerteza humana. São Paulo: Cortez, 2003.

4 BRUNNER, José Joaquim. Los valores se modernizan o permanecen inmutables? **Revista Universum**, Talca, n. 13, p. 21-32, 1998. p. 21.

5 CASTELLS, Manuel. **A sociedade em rede**. São Paulo: Zahar, 2009.

reconstruction of knowledge and the action of educators, this school takes an important role in the way it educates its students, in permanent negotiation with other educational instances, especially the family and the so-called “media”, that is, the set of means of communication – including the internet.

So, education has been changing as a result of technological development in the teaching-learning process, although this does not occur in a completely regular and systematized way, since the process sometimes ceases to take this role, sometimes exacerbates the value attributed to the technological supports to the detriment of what it expects to be able to provide in terms of content, values and other essential aspects inherent to the development of the educational process, in its various degrees and modalities.

Distance education is then part of this debate, within the scope of the educational process in general, with the same questions regarding education in the broad sense. The specificities begin to be glimpsed in the aspects that deal with the presence of the participants, the mediations performed, and the time devoted to the study, which are responsible for the main differences found between them.

3. RESIZING THE DISTANCE IN EDUCATION

If, in the not too distant past, the difference between distance education and the usual pedagogical processes – understood as those based on the concomitant presence of teachers and students in school time and space – was well known, the same is not so clear at present. An example of this, in addition to the variable mix between synchronous and asynchronous activities offered in schools – the so-called blended learning – is the permanently connected nature of student-teacher interactions, not only in the context of the classroom itself, but also in the didactic relationship that keeps them in touch, even away from school.

Some authors even reject the term “distance” to call this didactic approach, which they prefer to call “virtual” or “online” – such as Romero Tori when he points out that “distance education” is “an expression that highlights the problem rather than the solution”⁶ (distance being precisely the obstacle to be eliminated).

“Distance” is no longer the big difference, since it can no longer be considered as it was before, especially from the 1970s, when large distance education projects began to expand in Brazil. States such as those of the Brazilian Amazon region, among others, because of their large extensions and difficult access to the advantages of transportation and locomotion existing in the other regions of the country, due to rivers, forests and other geographical and/or socioeconomic circumstances, were responsible for the best distance education programs developed in those times, most probably because the need was the driving force for the development of this type of education in Brazil.

Today, in addition to being no longer understood as a determining factor, the idea of distance is no longer the same, even by the breadth of the so-called global

6. TORI, Romero. **Educação sem distância**: as tecnologias interativas na redução de distâncias em ensino e aprendizagem. São Paulo: Editora Senac São Paulo, 2010. p. 19.

cities, connected by the technological resources available to most populations, which allowed Litto to state that with mobile learning it is possible to learn anytime and anywhere⁷, leading to the use of distance education methodology to overcome time, transportation and other difficulties, even in large metropolises, such as São Paulo.

In addition, with the promulgation of the current Law of Guidelines and Bases of National Education (LDB, or Law No. 9394/1996)⁸, DE may be used at all levels of education (as long as the student is over 18). The legislation also provides that DE should be encouraged with differentiated treatment with respect to the media. A good example of the law is the existence of Ordinance No. 4.059/2004, of the Ministry of Education⁹, which regulated semi-attendance classes of up to 20% of contents in recognized courses of higher education institutions, regardless of accreditation by the unit.

Therefore, more than twenty years after the promulgation of the LDB, it can be seen that many of the issues dealt with at the time (in 1996), such as the so-called second-rate education, are still evident. Today, however, they are much less important, as the means of communication have multiplied exponentially and the so-called “information society” brings with it the ever-increasing use of these tools, essential for the development of distance learning and education in general.

Likewise, the need to tune communication and education is proposed, not only with the use of working materials, but also for the dissemination and socialization of what is done in terms of content and methodology, which forces us to discuss the media approach.

4. THE ISSUE OF DIGITAL MEDIA IN STUDENT AND EDUCATOR TRAINING

Digital media is a separate chapter, as it completely altered what was usually practiced in terms of communication resources for education. While the development of digital technologies grows at a breakneck pace, the same cannot be said about their use in education in general. Many are the examples of successful educational work, but to a much lesser extent than current technological development, in part because of the lack of economic resources, management and public policy, but also, and above all, the lack of interest by many – including managers, educators, and even students – in following this irreversible change in global times, of high-speed and deterritorialized space.

In this line of thought about the indispensable resources for education in the digital age, in increasing expansion and development, the United Nations Educational, Scientific and Cultural Organization (UNESCO) proposes important guidelines regarding the formulation of public policy strategies for formal and non-formal education, so that the following benefits can be achieved: (1) greater active and democratic participation; (2) increased awareness of the ethical responsibilities of global citizenship; (3) attention to diversity; (4) openness to dialogue; and (5) promoting tolerance¹⁰.

7 LITTO, Fredric Michael; FORMIGA, Manuel Marcos Maciel (org.). **Educação a distância: o estado da arte**. São Paulo: Pearson Education do Brasil, 2009. p. 19.

8 BRASIL. Ministério da Educação. Lei nº 9.394, de 20 de dezembro de 1996. Estabelece as diretrizes e bases da Educação Nacional. **Diário Oficial da União**, Brasília, DF, p. 27833, 23 dez. 1996. Available from: http://www.planalto.gov.br/ccivil_03/leis/l9394.htm. Access on: Dec. 30, 2019.

9 BRASIL. Ministério da Educação. Portaria nº 4.059, de 10 de dezembro de 2004. **Diário Oficial da União**: seção 1, Brasília, DF, p. 34, 13 dez. 2004. Available from: http://portal.mec.gov.br/sesu/arquivos/pdf/nova/acs_portaria4059.pdf. Access on: Nov. 15, 2019.

In education, both in the face-to-face approach and in distance learning, the main benefits for a needed change would include: (1) the use of digital media in a context of media and information literacy, favoring the creation of a bridge between the physical classroom and the digital environment; (2) the reach of education professionals' training through online strategies and resources, expanding their didactic-pedagogical repertoire and giving them an active role in what is called continuing education; and (3) the training of students and teachers for/through digital media, ensuring greater and fuller participation in economic, political and social life to achieve the development of active citizenship (digital inclusion).

As we think about competence – of students, teachers, and DE specialists – the following question, albeit latently, arises: What does this competence mean? To Niskier¹¹, educator training includes the technical dimension, the human dimension, the political-economic context and the part of the knowledge to be transmitted, all these summarized in what can be called competence acquisition, which necessarily includes: knowing and doing, theory and practice, and the principles and processes of educational technology.

Thus, while not the pinnacle of the communication/education/digital technology tripod – in terms of importance in the teaching-learning process –, technology is a necessity for the development of education in these new times. As Castells states¹², “each is a product of their time,” which allows us to reflect on the possibilities that teachers have to deliver educational material and scientific content through increasingly specialized electronic platforms, which demand technical knowledge from those who make use of them.

Therefore, there are professionals responsible for adapting the content to the new forms of presentation and delivery of the material to the receiving subject, who may be present or distant. From this reflection, several questions emerge:

1. Does the teacher need to be educated for the teaching work involved in this new pedagogical setting?
2. Will the teacher's tasks be diversified between content generator and organizer on digital/electronic platforms?
3. Does the tutor perform differently to assist students?
4. Does the student necessarily have to be computer literate?
5. Can the difficulties encountered be more of a technical character than related to an understanding of the subject?
6. Can distance learning be unfocused on the cognitive needs of the receiving subject?
7. Can the distance between the actors in the teaching-learning process be easily overcome by the online universe provided by the internet?

These questions – and many more that can be added – address the above-mentioned ideas, such as face-to-face and virtual education, simultaneously; teacher training for the present and the coming times, ever faster and rampant; private and public education systems; the level of students in terms of schooling; the quality of the technological supports of schools and residences, besides the access provided mainly by public education policies.

10 ORGANIZAÇÃO DAS NAÇÕES UNIDAS PARA A EDUCAÇÃO, A CIÊNCIA E A CULTURA. *Alfabetização midiática e informacional*: diretrizes para a formulação de políticas e estratégias: resumo sobre as políticas da AMI. Brasília, DF: Unesco, 2016.

11 NISKIER, Arnaldo. Os aspectos culturais e a EAD. In: LITTO, Fredric Michael; FORMIGA, Manuel Marcos Maciel (org.). *Educação a distância*: o estado da arte. São Paulo: Pearson Educação do Brasil. p. 30.

12 CASTELLS, Manuel. *Ruptura*: a crise da democracia liberal. Rio de Janeiro: Zahar, 2018. p. 149.

5. BACK TO THE PLANETARY AGE

In order to place the possibilities of DE in the context of education in general, comparing its situation in the various countries of this globalized world with highly interconnected inhabitants, the propositions suggested by Morin (Figure 1), Curana and Motta are used¹³. In their book *Educar na era planetária*, they explain that “planetarization” is a more complex term than “globalization” (often used to describe only the globalization of economic and technological dimensions) because it is a radically anthropological term that encompasses the planet Earth in its complex totality: physical, biological and anthropological. “In other words, we need to understand life as a consequence of the history of Earth and humanity as a consequence of the history of life on Earth”¹⁴.



Figure 1: Edgar Morin in 2011 photo

Source: Fronteiras do Pensamento¹⁵.

Thus, raising awareness of this need to address education in the context of the planetary age leads to a twofold challenge: that of educating “in” and “for” this age, considering the complex world situation beyond the techno-economic

13 MORIN; CURANA; MOTTA, op. cit.

14 Ibidem, p. 63.

15 Available from: <https://commons.wikimedia.org/w/index.php?curid=55840215>. Access on: Dec. 30, 2019.

conception, which ignores the human problems of identity, community, solidarity and culture.

It is therefore necessary to make a leap over the “ideology” of progress as a sufficient engine for all social, psychic and moral developments – something that it is not. Hand in hand with this ideology of progress are digital technologies and media, which we are concerned with in the field of education, in its different spaces beyond school, with the primary purpose of providing a *worldology of everyday life* (phrase inspired by an expression by Argentine writer Ernesto Sabato) to address the urgent need for society to have “worldologists” who can guide to civility in the perception of the most urgent and global problems.

So, following the analysis of the role of digital technologies in today’s educational work, with the web’s transformation of the world (as suggested by the book *Como a web transforma o mundo*¹⁶), one can glimpse the virtuality of a new space, yet to be explored, capable of leading to collective intelligence, an essential characteristic of a network society – connected, interconnected, of collaborative aspects between everyone and individual mutations for constitution of collective behaviors.

More than dealing with the use of digital technologies, it is important to think about how they are changing the world and how far they can go. The authors of *Como a web transforma o mundo*, Francis Pisani and Dominique Piotet¹⁷, along with Antoine Sire¹⁸, who writes the afterword, address this question quite interestingly. The main propositions of the work are:

1. The web as a social space of adolescence – the social tool and the space in which relationships occur;
2. Technology matters little and disappears for the benefit of its use;
3. What young people love are social networks, using the internet as a powerful socialization tool;
4. The lack of mobility and access to a real and physical space for young people, where they can be together without being interrupted and observed, leads to the transformation of websites into public spaces, although virtual ones;
5. The web serves to establish links between people (it is its most popular dimension);
6. Networks are the new geometry of the modern world, and understanding them has become the equivalent discipline of cartography a few centuries ago;
7. The dynamics of linkage are evidenced in a metaphor according to which networks have the architecture of complexity, so that messages circulate along internet links like chemical reactions that happen, similarly, in the connections between cells;
8. The web age is a connected age, in which the number of people online and their form of connection constantly change as technological and economic aspects change;

16 PISANI, Francis; PIOTET, Dominique. **Como a web transforma o mundo**: a alquimia das multidões. São Paulo: Editora Senac São Paulo, 2010.

17 PISANI, Francis; PIOTET, Dominique. **Como a web transforma o mundo**: a alquimia das multidões. São Paulo: Editora Senac São Paulo, 2010.

18 Ibidem.

19 Ibidem.

9. Each connection says something about what is connected, about the one who made the connection, and about the culture he/she is part of;
10. Specialists are no longer the same as before: they do not disappear, but we witness a kind of social negotiation of knowledge;
11. Knowledge has become social knowledge, and students are online when they do homework, as well as when they are at school.

Finally, as formulated by Antoine Sire¹⁹, the big challenge seems to be: how to bet on a “collective social intelligence” without the direct modulation of the constituent powers of society as it is known? This challenge is directly linked to those who dedicate themselves to education, either in the class-based, virtual or class-based and virtual model, as conceptualized since the beginning of this work.

To be educated “for” and “in” the planetary age is to consider mankind in all its complexity, circumscribed on planet Earth and, therefore, in communication with all other living natural beings. This includes children and young people, regardless of whether they are considered “digital natives” – as the term is quite controversial – because they already live in the web age, of connections between everyone and between information and people.

6. Final Considerations

How do we, educators, face the challenge of educating today? First, it is necessary to hold the knowledge that gives legitimacy to participating in the education process, having to go through the disciplines, in an inter or transdisciplinary way, without, however, giving up the knowledge proper to each specialty. On the other hand, we must know the participants of this educational process: to know who the students are, with all their complexity, be it from an intellectual, cultural or other point of view. This pedagogical action needs to be carried out through the ethics of understanding, as proposed by Edgar Morin²⁰, which is equivalent to the need for affection in its broadest form.

As for digital media, which is currently at a very advanced stage as regards the online world, we must use them in all their possibilities and nuances, without putting them in the foreground, as this is not their place. Prior to this, there is a whole web of human relationships, of content systematically produced by the sciences over the centuries, of intellectual needs and other cognitive skills of learners to be developed by educators.

It is worth concluding by stating that this issue and its consequences are at the center of discussions in most educator training centers – including the degree course in Educommunication at the School of Communications and Arts (ECA) of the University of São Paulo (USP).²¹ These professionals today are important to play the role of mediation between the world, with all its possibilities and difficulties, and the students – the true subjects of the educational process.

20 MORIN, Edgar. *Os sete saberes necessário a educação do futuro*. São Paulo: Cortez; Brasília, DF: Unesco, 2003.

21 Available from: <https://www5.usp.br/ensino/graduacao/cursos-oferecidos/educomunicacao/>. Access on: Dec. 30, 2019.

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TORI, Romero. **Educação sem distância**: as tecnologias interativas na redução de distâncias em ensino e aprendizagem. São Paulo: Editora Senac São Paulo, 2010.