Hybrid Teaching: challenges and possibilities.

Hugo Brandão

PhD in Religious Sciences from the Catholic University of Pernambuco (2019). He has Degree in Philosophy from the Federal University of Alagoas (2010). Professor at Federal Institute of Alagoas. hugo.brandao@ifal.edu.br http://lattes.cnpq.br/2511182719855807.
http://orcid.org/0000-0001-9665-089X

Rafaella Caminha

Specialist in Religious Sciences and Graduated in Religious Sciences and Philosophy from the Federal University of Alagoas - UFAL (2019). https://lattes.cnpq.br/2214728658557442
https://orcid.org/0000-0001-9665-089X

Abstract

We address the behavioral transformations resulting from the collective use of technologies, especially in the field of education based on the Hybrid Teaching proposal. We highlight that, amid continuous technological advances, many educational institutions still follow traditional teaching models, unsuitable for a digital generation. Hybrid Learning is a proposed solution to part of the problems experienced in Education, but we highlight the significant challenges, especially related to social and economic inequalities in Brazil, specific difficulties, such as the lack of universal access to the internet, economic and social differences between students and the need for adaptation on the part of teachers. We cannot think about Hybrid Learning without considering the appropriate appreciation of education professionals, alerting to possible precariousness and increased workload. We conclude that there is a need for a critical and holistic approach to Hybrid Education, considering the social and economic inequalities present in Brazil, especially the basic living conditions for students.

Keywords: Education; Hybrid Teaching; Technology.

I.   Introduction and Rationale for the Present Paper

Hybrid education has been presented as the newest educational paradigm, in this education model, the aim is to teach the new generation through new digital technologies with the discourse of student autonomy and appreciation of their experiences and pedagogical practice occurs with activities that combine (hence the English term blended) the action carried out by the student and the sharing of these studies with other groups in online/offline studies, using digital resources (tablets, cell phones, computers, among others) as tools to be used in various locations,

with the group and teaching-learning not being restricted to the classroom. Among the advantages disclosed by the practice, the most important are flexibility, rotation, autonomy, insertion in the digital world, integration, and collaboration between students, among others.

Hybrid education or hybrid teaching, also known as blended learning, has become a key concept for understanding education today, even though hybrid teaching has always been present in education, since it is not limited only to what is it is planned intentionally and institutionally. Although learning also takes place through organized processes, it also takes place through open and informal processes (MORAN, 2015, p. 27), changing the relationship between the teacher and the students, that is, the teacher begins to play a role as a mediator of knowledge, no longer as a bearer and/or holder of knowledge, as traditional teaching was for a long time. According to Masetto,

The teacher, as already said, also takes on a new attitude. Although, from time to time, he will still play the role of a specialist who has knowledge and/or experiences to communicate, most of the time he will play the role of guiding the student's activities, of consultant, of learning facilitator, of someone who can collaborate to boost student learning, will play the role of someone who works as a team, together with the student, seeking the same objectives; in a word, it will develop the role of pedagogical mediation (MASETTO, 2000, p.142).

From the perspective of an emancipatory education, we must understand that teaching is not transferring knowledge, but rather creating possibilities for its development and construction (Cf. FREIRE, 2009). To understand more deeply what the methodological proposal of hybrid education consists of it is necessary to understand the concept of hybrid. In this sense, we refer to Moran's words:

Hybrid means mixed, blended, blended. Education has always been mixed, hybrid, it has always combined various spaces, times, activities, methodologies, audiences. This process, now, with mobility and connectivity, is much more noticeable, broad, and deep: it is a more open and creative ecosystem. We can teach and learn in countless ways, always, in multiple spaces. Hybrid is a rich, appropriate, and complicated concept. Everything can be mixed, combined, and we can, with the same ingredients, prepare different dishes, with very different flavors (MORAN, 2015, p. 22).

It is a pedagogical approach that mixes face-to-face activities and activities carried out through digital information and communication technologies (TDICs). What is essential in this strategy is understanding the change in focus, that is, the focus of this approach stops being the transmission of information that the teacher traditionally carries out and becomes the student's learning process. Therefore, the content and instructions on a given curricular content are not transmitted only by the teacher in the classroom. Students begin to study independently under guidance and following the teacher's planning. For example, students study content and access educational materials in different situations and environments, in this way, the classroom becomes the place to actively learn, carrying out problem-solving activities or projects, discussions, laboratories, among others., with the support of the teacher and collaboratively with colleagues (BACICH; NETO; MELLO, 2015, p. 14).

Hybrid education aims to provide a methodology that aims to create challenges to stimulate students, whether individually or in groups, such as, for example, solving problems or creating complex projects. It is a learning process that must be coordinated by teachers who, in theory, will supervise each student individually in activities that provide direct contact and the development of the learning process. Therefore, "hybrid teaching can be considered a new paradigm for social and educational practices and, therefore, a great challenge" (COLL 2010, p.119).

Despite the challenge of facing a new paradigm of the educational system and teaching-learning methods, changes constantly appear in the digital world that impact the lives of individuals and society, and it is in this digital world that, increasingly quickly, students and teachers are entering and inserting themselves. This "increasing integration between the classroom and virtual environments is fundamental to opening the school to the world and bringing the world into the school." (BACICH; MORAN, 2015, p.45).

Thus, based on the concept of hybrid teaching (blended-learning), teachers will analyze students individually, being able to identify in which aspects the student has learning difficulties, for example, using the flexible method, in which there is autonomy to plan and personalize what is perceived as fundamental for learning to develop, meeting the needs of each student individually based on more open teaching-learning processes, with a mix of various areas of knowledge and different students, with both physical and digital activities, promoting learning and integration in its hybrid form, contextualized in an environment in which technology can be inserted, enabling education capable of breaking down barriers and going beyond school walls. From this perspective, hybrid teaching will provide education with an intense, rich and uninterrupted exchange of knowledge, connected to the whole world, with its different ideas, people and events, given that, nowadays, technologies expand the possibilities of online research, with materials important and updated (Cf. MORAN, 2015).

There are countless definitions for hybrid teaching, however, the one that has been most accepted by education researchers and has been accepted as the most relevant for the educational context, in addition to being the first to be formulated, in relation to hybrid teaching such as is being discussed today, is the proposal by the Clayton Christensen Institute, formerly called the Insight Institute. It is based on this definition that we will discuss and analyze

hybrid teaching.

II.   Think critically about hybrid teaching and the danger of precarious teaching activities.

The behavioral transformations produced by the intersubjective dynamics resulting from the collective use of technologies occur uninterruptedly in all dimensions of social life, especially in relation to behavioral changes, in relation to the way in which subjects relate to each other, especially in the field. of technologies. This is a true behavioral revolution, from simple and insignificant changes in activities we carry out daily, to changes in extremely relevant activities, such as the way in which world powers communicate, deciding the direction of the planet.

However, even with all the importance of education, widely said and known by everyone, for several reasons that I will not be able to discuss in this text, such as, for example, the little or almost no interest of the dominant classes in offering quality education for the formation of critical subjects, unfortunately all these technological advances are not reaching schools and universities quickly and adequately. New technologies do not reach classrooms with the same intensity as they reach other social segments, or they arrive biased and devoid of meaning for the subjects of education (Cf. SILVA, 2017).

During this context marked by the daily and uninterrupted advancement and emergence of new technologies, during this digital reality, which, paradoxically, has become increasingly concrete in the lives of individuals, even today we have schools that only use the same pedagogical practices and teaching models applied for several decades, perhaps centuries. It is a school model designed in the mid-16th century, with professionals who run it, the majority of whom graduated in the 20th century, teaching 21st-century students, who for the most part were born in a digital world and they had access to this world in the first years of their lives, when they did not already have access in the first months of their lives. It is not uncommon to see babies watching cartoons on cell phones or tablets, while their parents hold the digital devices. According to Silva,

What we often have in this scenario are students unmotivated in relation to the relevance of remaining for years, sitting at an uncomfortable desk in the classroom and, on the other hand, teachers frustrated because they realize that their efforts do not always achieve the idealized objectives. All of this adds up to the contemporary problems that influence the formation of families, because families, which should provide young people with the support they need to build a citizenship perspective, often do not do so, leaving this task to the school environment, which is already so overloaded. of challenges and responsibilities (SILVA, 2017, p. 156).

In this sense, it is worth highlighting those educational institutions, whether schools or universities, are having to deal with a new profile of students, who are identified as belonging to generation Y, constituted, according to some authors, by subjects born in the mid-20s. 1980 and 2000. They are more questioning subjects and, for the most part, have vast and rapid access to information due to major technological advances and relationships based on the virtual environment. In this context, it is plausible to question whether traditional teaching-learning methodologies, even today, continue to be capable of being applied, as pedagogical practices, to members of this new generation.

Thus, it becomes noticeable, right from the start, that there are numerous difficulties faced by education professionals in adapting to hybrid teaching, especially for teachers, who have more direct contact with students and interact with them daily. One of the biggest obstacles to working with hybrid teaching is the economic and social differences present in a classroom. Our educational reality, in Brazil, is one of extreme inequality between educational institutions and among students, not all students have access to technological resources and when they do, there is a disparity between access to such resources. Students with powerful computers and access to quality internet and students who only access the internet in a precarious way and via cell phone, which is often shared with other family members.

This is a concrete reality that makes pedagogical practice in the model proposed by hybrid teaching impossible. According to Moran (2015, p. 22), "Education is hybrid also because it takes place in the context of an imperfect society, contradictory in its policies and models, between the stated ideals and the practices carried out." However, this cannot, under any circumstances, be considered natural and acceptable. On this point and on many others, as we will discuss later, we deeply disagree with Moran (2015); education is and can be hybrid, however, for other reasons, as we mentioned some previously, but never in being hybrid to adapt to the social and technological inequalities in which we are inserted in the Brazilian context, as we will demonstrate later.

In relation to Moran (2012), he is the former director of Distance Education at Anhanguera University, which is part of the Kroton conglomerate, the largest private education company in the world, as it defines itself. In this sense, it is worth at least making this record to contextualize our opposing positions and the interests behind the emphatic defense of the implementation of hybrid teaching, as we will discuss later.

These inequalities are alive and evident in classrooms and this impacts and makes teaching activity and the teaching-learning process precarious. There are profound difficulties in sharing information, because, even if

the teacher dedicates himself to producing, for example, videos, explaining the content for students to watch at home, not all students will have access to the information in this educational material, therefore, the final result will be harmed; not only due to the loss of content for one or a few specific students, but rather, due to the integration proposed by the rotation model that hybrid education proposes. If not, all students have access to technological resources and information from them in the same classroom, how can the rotation model proposed by hybrid teaching be applied? There will be no way to have collaborative and integrated groups without everyone having access to information. The damage to the rotation model is immeasurable. The entire organization designed by the teacher for his pedagogical practice, guided by hybrid teaching based on rotation models, with a view to achieving the best results from a learning point of view for his students, will be extremely harmed.

Students who did not watch the videos, still dealing with the previous example, will not have the same conditions as those who did and will not be able to integrate with others and interact in a collaboration system without having access to the videos. This is just an illustrative example of the difficulties encountered by teachers, but the difficulties and challenges are countless, such as making students who have access to technological resources realize the importance of using these means appropriately, a Since in the virtual world there are an infinite number of entertainment alternatives, which can interfere and harm the student's responsible use of time. It is up to the teacher to mediate this type of conflict. Realize, then, the size of the challenges for these professionals, who will need to create palliative mechanisms to overcome such obstacles and the proposed objectives with adaptation to hybrid teaching.

Now, it is not just teachers who must adapt to hybrid teaching if this work methodology is chosen. It is not possible to develop hybrid teaching in isolation and only with the good will and willingness of teachers and students. It is necessary to engage families, hold public authorities accountable and act by managers of educational institutions, as well as the participation of other education sectors and professionals, such as, for example, the pedagogical sector and pedagogues.

The actions of managers and public authorities, for example, can harm the results regarding the use of the aforementioned methodology, since the perspective of autonomy for learning, proposed by hybrid teaching, can be disconnected from its original meaning and be used or confused with opportunities to reduce education costs, that is, what a priori should be a tool for the student to enhance and develop their learning capabilities, starts to function as a mechanism to reduce education costs and/or to legitimize the lack of investments aimed at maximizing the quality of education.

In other words, it is extremely important to understand that the proposal for hybrid education is not to replace teachers in the classroom with "super teachers", recording very well-designed videos to be reproduced without distinction in any context, with the aim or erroneous intention of that students will learn on their own, without the teacher's quality intervention in the classroom, in order to increase profits or legitimize the narrative of the lack of resources in education. Far from that, the hybrid education proposal aims to have more prepared students and valued and qualified teachers to provide the necessary support for the gradual evolution of students, inside and outside the classroom.

With the hybrid education methodology, it is important to highlight that teachers' working hours, which outside the school environment, increase a lot, as they need more extra-class contact with students, as well as dedicating themselves much more to preparing better prepared materials, aiming to respond to the demands and needs of students and the advancement of learning, but, much more, in having to prepare teaching materials that correspond to the learning needs of each student in particular, taking into account, for example, their learning difficulty and which skills stand out the most and can be explored for personal and collaborative growth. Thus, as an effect, the dynamics of classes is much more productive, but also much more laborious, demanding even more from undervalued professionals and, even today, with an exhaustive demand for work, not to mention all the other problems here. of the profession, such as low wages.

We will not address this in this work, but we need to emphasize that adapting to the hybrid teaching approach in our educational institutions is inherent to a public policy of valuing education professionals and understanding the difficulties that are already faced today by these professionals and how much teaching hybrid will increase the demand for work, which could make the career and work of these professionals even more precarious.

Hybrid teaching presupposes, or at least we need to understand and defend this, a reduction in teachers' current working hours in the classroom so that they can develop quality teaching materials, have the ability to assess their students individually and design teaching methods and materials capable of correspond to the learning needs of different students, as well as organize their pedagogical practice to integrate students in a collaborative learning process and that allows student autonomy in this process, since, in addition to having to encourage students to take a position in autonomously, they need to be ready to provide the necessary support to the diverse inquiries and desires of a heterogeneous class, without, however, losing focus on the objectives set for each moment of the class; among other issues that we will not be able to address here.

Therefore, the teacher's critical positioning and performance are fundamental to ensuring the necessary

support for the development of the skills of the subjects involved. That said, we reaffirm the importance of valuing education professionals, such as better salaries and structure for the development of teaching-learning, as well as greater investments in education and combating social inequality which, consequently, generates technological inequality and makes it impossible, today, to fully implement the hybrid approach in our educational institutions.

It is evident, in this context, that public authorities in general have an undeniable role in achieving success with the pedagogical approach proposed by hybrid teaching in the face of the demands imposed by the modernization of the teaching and learning process in educational institutions, in this case, in particular, in public schools and universities. This is because, as a priority, in the hybrid teaching approach, we need teachers who are motivated and aware of their roles in this reality, as we have already mentioned previously, as well as, we need educational institutions that offer the necessary structure for the development of teaching- learning, better equipped and structured schools and universities, where the learning space is not restricted to the classroom and the teacher's work.

III. Hybrid teaching and inequalities in Brazil

As we mentioned previously, there is no way to discuss hybrid teaching without even, minimally, analyzing the Brazilian reality of inequalities, especially, in this case, the inequality of access to the digital world and technological resources. To get an idea of the scale of the problem, the challenges we need to face and the importance of analyzing this issue, it is necessary to understand that in every four Brazilians, in the 21st century, in the so-called digital era, one does not have access to the internet. A number that in mid-2018 represented 46 million Brazilians who did not have access to the digital world via the internet, according to the Continuous National Household Sample Survey - Information and Communication Technology (Pnad Contínua TIC) of 2018, released by the Brazilian Institute of Geography and Statistics (IBGE). Although the percentage of Brazilians with internet access has increased compared to the previous year, from 69.8% to 74.7%, it is not possible to make invisible the more than 25% of Brazilians who still do not have such access. This finding is more pronounced and exclusionary in rural areas, where the rate of Brazilians who do not have access to the internet is even worse than in urban areas, reaching 53.5%; in cities, it is 20.6%.

According to the ICT Households survey, released in 2019, only 44% of households in rural Brazil have access to the internet. In urban areas, the rate is much higher: 70% of homes are connected. The study, carried out annually by the Regional Center for Studies for the Development of the Information Society (Cetic), is one of the main ones in the country in the segment of access to technologies. The differences become even more evident when analyzing each social class: among the richest (classes A and B), 96.5% of homes have an internet signal; at the lowest levels of the pyramid (classes D and E), 59% cannot navigate the internet. This is only the third time that PNAD has collected data on Information and Communication Technology in Brazilian territory. This research was carried out in 2018 and deals with access to the internet and television in permanent private homes and access to the internet and possession of a mobile phone for people aged 10 or over, at the time equivalent to a total of around 181.9 million Brazilians (Cf. TOKARNIA, 2020).

What this and other research has demonstrated is that in Brazil there are great difficulties in implementing hybrid teaching, mainly due to limited access to technologies for a part of the most impoverished Brazilian population, which illustrates how latent our inequalities are and need to be addressed. For example, in more recent research, a survey formulated by Cetic, "TIC Households 2019", found that approximately 30% of homes in Brazil do not have access to the internet. So, how can we think and design hybrid teaching in these circumstances? At the very least, we need to investigate this data for a colder analysis of the challenges we must face. This research even reveals what we already suspected and experienced, but which have now been put into numbers, namely, that there is a significant difference between social classes: families that have an income of up to one minimum wage, half of them simply cannot surf the net at home. In class A, only 1% cannot access the internet. This is a mockery and reveals the size of our inequalities and that hybrid teaching cannot be discussed in a romanticized way or in denial of this concrete reality.

Research has also highlighted other obstacles and challenges to implementing hybrid learning, some of which are: houses without space to study and without basic sanitation; lack of equipment such as computers and notebooks; problems connecting to the internet; lack of teacher training to use technology in education; low reading rates.

IV. Conclusion

That said, before analyzing technological issues, it is necessary to reflect on basic aspects of student housing and even that of a significant portion of teachers in Brazil. Under what conditions did students and teachers stay in

their homes? Under what conditions did students stay at home to study? Still taking as a parameter data from the 2018 Continuous National Household Sample Survey (Pnad), released by IBGE, 17.3% of children aged 0 to 14 live in houses that do not even have access to the general water supply network and 40.8%, in places without connection to the sewage system. There is a lack of a vital and basic asset for our children: water. How then will we ensure technological resources and insertion in the digital world for the implementation of hybrid teaching? Well, that's what's at stake, there's no way we can think about our educational institutions and classrooms apart from our social reality in Brazil and the reality experienced by our students and teachers. In homes where there is no internet, sanitation conditions are even worse: 29.3% without a water network and 60% without a sewage system. This is the reality we live in, and it is what we will have to transform to effectively think about hybrid teaching; otherwise, it's just speech and demagoguery, or teaching designed for some, wealthier people, to the detriment of others.

References

(1) BACICH, L; MORAN, J. Aprender e ensinar com foco na educação híbrida. **Revista Pátio**, nº 25, junho, 2015, p. 45-47.

(2) BACICH, L; NETO, A; MELLO, T. **Ensino Hibrido: personalização e Tecnologia na Educação.** Porto Alegre: Penso, 2015.

(3) BRAGHINI, K. **Jornal Pensar a educação em pauta**. 2015. Disponível em: <https://pensaraeducacao.com.br/pensaraeducacaoempauta/ensino-hibrido-ou-ensino-franqueado-exclusivo/#comment-9760> Acessado em: 02/11/2020.

(4) CETIC - Comitê Gestor da Internet no Brasil. **TIC Educação – 2018 Alunos**. Disponível em: <https://cetic.br/pesquisa/educacao/indicadores/>. Acessado em: 03/11/2020.

(5) CETIC - Comitê Gestor da Internet no Brasil. **TIC Domicílios – 2019**. Disponível em: <https://www.cetic.br/pesquisa/domicilios/indicadores/>. Acessado em: 03/11/2020.

(6) CETIC - Comitê Gestor da Internet no Brasil. **TIC Educação - 2018 Domicílios**. Disponível em:<https://cetic.br/pesquisa/educacao/indicadores/>. Acessado em: 03/11/2020.

(7) COLL, Cesar. **Psicologia da educação virtual: aprender e ensinar com as tecnologias da informação.** Porto Alegre: Artmed, 2010.

(8) FREIRE, P. **Pedagogia da Autonomia**. São Paulo: Paz e Terra, 2009.

(9) FRIGOTTO; CIAVATTA, M; RAMOS, M. **Ensino médio integrado: concepção e contradições.** São Paulo: Cortez, 2005.

(10) FRIGOTTO, G. A polissemia da categoria do trabalho e a batalha das ideias na sociedade de classes. **Revista Brasileira de Educação**. São Paulo, Autores Associados, v.14, n.40, jan/abril. 2009, p.168 – 194.

(11) GASTARDELLI, G. **Aprendizagem ativa, desafios para uma aprendizagem disruptiva.** Porto Alegre: AESC, 2017.

(12) INSTITUTO PENÍNSULA. **Orientações de acolhimento para professores,** 2020. Disponível em: <https://www.institutopeninsula.org.br/reflexoes-e-recomendacoes/>. Acessado em: 16/11/2020.

(13) IBGE – Instituto Brasileiro de Geografia e Estatística. **A Pesquisa Nacional por Amostra de Domicílios Contínua - Tecnologia da Informação e Comunicação (Pnad Contínua TIC) 2018.** Disponível em: <https://www.ibge.gov.br/estatisticas/sociais/populacao/9173-pesquisa-nacional-por- amostra-de-domicilios-continua-trimestral.html?t=destaques>. Acessado em: 03/11/2020.

(14) MÉSZÁROS, I. **A educação para além do capital.** São Paulo: Boitempo, 2005.

(15) MOLL, J. **Educação profissional e tecnológica no Brasil contemporâneo: desafios, tensões e possibilidades.** Porto Alegre: Artmed, 2010.

(16) MORAN, J; MASSETTO, M; BEHRENS M. **Novas tecnologias e mediações pedagógicas.** Campinas: Papirus, 2012.

(17) MORAN, J; BACICH, L. Aprender e ensinar com foco na educação híbrida. **Revista Pátio,** nº 25, junho, 2015, p. 45-47. Disponível em <http://www2.eca.usp.br/moran/wpcontent/uploads/2015/07/hibrida.pdf.> Acesso em 09/10/2020.

(18) MORAN, J. Educação Híbrida: Um conceito chave para a educação, hoje. In: **Ensino híbrido: personalização e tecnologia na educação [recurso eletrônico]**. Porto Alegre: Penso, 2015.

(19) MORAN, J. **Desafi os da educação a distância no Brasil**. Rio de Janeiro: RCN, 2012.

(20) OLIVEIRA, M. S. **Diálogos com docentes sobre ensino remoto e planejamento didático**. Recife: EDUFRPE, 2020.

(21) SANTOS, J. A. Teorias da Aprendizagem: Comportamentalista, Cognitivista e Humanista. **Revista Sigma**. v.2. Macapá: IESAP, 2006, p. 97-111.

(22) SAVIANI, D. Trabalho e educação: fundamentos ontológicos e históricos. **Revista Brasileira de Educação**. v. 12, n. 34, p. 152-180, jan./abr. 2007.

(23) SILVA, E. O Ensino Híbrido no Contexto das Escolas Públicas Brasileiras: Contribuições e Desafios. **Revista Porto das Letras**, Vol. 03, Nº 01. 2017.

(24) TESSMANN, M; WASUM, T. **As metodologias ativas e o ensino híbrido no desenvolvimento da aprendizagem autônoma dos estudantes da EPT.** S/A Disponível em: <https://even3.blob.core.windows.net/anais/180888.pdf>. Acessado em: 01/11/2020.

(25) TOKARNIA, M. Um em cada 4 brasileiros não tem acesso à internet, mostra pesquisa. **Agência Brasil**, 2020.

Disponível em: <https://agenciabrasil.ebc.com.br/economia/noticia/2020-04/um-em-cada-quatro-brasileiros-nao-tem-acesso-internet>. Acessado em: 18/11/2020.

(26) THUINIE, D. **Conheça a diferença entre ensino remoto e EAD.** Curitiba: Unicesumar Educação a Distância, 2020.