THE CONCEPTIONS OF HYBRID OR MIXED TEACHING IN THE BRAZILIAN EDUCATION: A SYSTEMATIC REVIEW OF THE LITERATURE

AS CONCEPÇÕES DE ENSINO HÍBRIDO NA EDUCAÇÃO BRASILEIRA: UMA REVISÃO SISTEMÁTICA DA LITERATURA

LAS CONCEPCIONES DE LA ENSEÑANZA HÌBRIDA O MIXTA EN LA EDUCACIÓN BRASILEÑA: UNA REVISIÓN SISTEMÁTICA DE LA LITERATURA

Elisa Maia Velloso CALDEIRA [1]
e-mail: elisamvcaldeira@gmail.com

Fábia Magali Santos VIEIRA [2]
e-mail: fabia.magali@unimontes.br

How to reference this paper:

Editor:	Prof. Dr. José Luís Bizelli
Deputy Executive Editor:	Prof. Dr. José Anderson Santos Cruz

---

[1] State University of Montes Claros (UNIMONTES), Montes Claros – MG – Brazil. Master's student in the Postgraduate Program in Education/Multiliteracies and Educational Practices. Professor and Coordinator of the Pedagogical Support and Teaching Experience Center at the Unifipmoc Afya University Center.
[2] State University of Montes Claros (UNIMONTES), Montes Claros – MG – Brazil. Professor of Educational Technologies, Didactics, and Research Methods and Techniques in Undergraduate and Stricto Sensu Postgraduate Programs. Doctoral degree in Education (UnB).

ABSTRACT: From the measures taken to face the COVID-19 pandemic since 2020, adopting hybrid teaching has become one of the issues to be addressed in the educational agendas, however, it entails uncertainties and difficulties to carry out emancipatory practices. Conceptualizing hybrid teaching is not an easy task, several authors have done it, but in different ways. To identify the concepts of hybrid teaching that have prevailed in Brazilian education in the last 10 years, a Systematic Literature Review (SLR) has been carried out at the Brazilian Digital Library of Theses and Dissertations (BDTD) and the Google Scholar and works that present superficial conceptions of hybrid teaching were identified, as well as others by Moura (2018); Costa (2019) and Fialho (2020), who based on Moran (2015) defend a new vision of hybrid teaching, which understands hybridization as a sociocultural process, in which structures and practices, once separated, become combine to generate new structures, objects and methods.

KEYWORDS: Hybrid teaching. Education. Systematic review of the literature. Conceptions of teaching.

RESUMO: *A partir das medidas de enfrentamento da pandemia em 2020, a adoção do ensino híbrido tornou-se um dos temas de pauta nas agendas educacionais. Entretanto, essa modalidade de ensino acarreta incertezas e dificuldades na realização de práticas emancipatórias. Conceituar ensino híbrido não constitui uma tarefa fácil: vários autores a conceituam de maneiras diferentes. Com o objetivo de identificar as concepções de ensino híbrido que têm predominado na educação brasileira nos últimos 10 anos, realizou-se uma Revisão Sistemática da Literatura (RSL) na Biblioteca Digital Brasileira de Teses e Dissertações (BDTD) e Google Scholar, e foram identificados trabalhos que apresentam concepções superficiais de ensino híbrido e outros, como Moura (2018); Costa (2019) e Fialho (2020), que, fundamentados em Moran (2015), defendem uma nova visão sobre ensino híbrido, que entende a hibridação como um processo sócio-cultural, cujas estruturas e práticas, uma vez separadas, combinam-se para gerar novas estruturas, objetos e práticas.*

PALAVRAS-CHAVE: *Ensino híbrido. Educação. Revisão Sistemática da Literatura. Concepções de ensino.*

RESUMEN: *A partir de las medidas tomadas para enfrentar la pandemia del COVID-19 desde 2020, la adopción de la enseñanza híbrida se ha convertido en uno de los temas de abordaje en las agendas educativas, sin embargo, ésta conlleva incertidumbres y dificultades para realizar las prácticas emancipatorias. Conceptualizar la enseñanza híbrida no es tarea fácil, varios autores lo han hecho pero de diferentes formas. Para identificar los conceptos de la enseñanza híbrida que han prevalecido en la educación brasileña en los últimos 10 años, se ha llevado a cabo una Revisión Sistemática de la Literatura (SLR) en la Biblioteca Digital Brasileña de Tesis y Disertaciones (BDTD) y en el Google Scholar, y fueron identificados trabajos que presentan concepciones superficiales de la enseñanza híbrida, así como otros de Moura (2018); Costa (2019) y Fialho (2020), quienes con base en Moran (2015) defienden una nueva visión sobre la enseñanza híbrida, que comprende la hibridación como un proceso sociocultural, en el que las estructuras y las prácticas, una vez separadas, se combinan para generar nuevas estructuras, objetos y prácticas.*

PALABRAS CLAVE: *Enseñanza híbrida. Educación. Revisión Sistemática de la Literatura. Concepciones de la enseñanza.*

Introduction

In the context of the COVID-19 pandemic that occurred in 2020, in-person education was replaced by Emergency Remote Education (ERE). Teachers and students, who used to share physical time and space, began to occupy virtual environments; teaching and learning activities became mediated by Digital Information and Communication Technologies (DICT). The primary measure adopted was Emergency Remote Education (ERE), which constitutes a temporary shift to an alternative teaching mode due to crisis circumstances. In addition to the use of DICT, ERE required the adoption of new teaching methodologies and strategies to promote student engagement and continued learning; however, not all institutions were prepared for ERE. Santos *et al.* (2020) warn about the dangers of creating vulnerabilities in the teaching and learning process, as pedagogical strategies based on remote teaching, technology, and hybrid teaching had to be rethought.

Studies conducted in the Research Project "*Pesquisa Observatório Tecnologias Digitais e Educação* (Observatory Digital Technologies and Education)"[3], at the State University of Montes Claros (UNIMONTES), funded by the Research Foundation of the State of Minas Gerais (FAPEMIG), aimed at researching the use of DICT by higher education institutions following the suspension of in-person classes during the pandemic, have shown that the development of educational practices capable of making knowledge accessible to students, such as hybrid teaching, still entails uncertainties and challenges in implementing more emancipatory procedures.

Hybrid teaching has gained even more prominence with the pandemic under control and the gradual return of in-person activities. Defining the concepts of hybrid teaching is not an easy task, as there are various conceptions related to this term, which is often confused with other modes of teaching, such as Distance Education (EAD), ERE, and Online Education (EOL); or sometimes, they are conceived superficially, reducing them to a blend of in-person and online teaching (ANJOS; SILVA; ANJOS, 2019; MARTIN; OLIVEIRA; RODRIGUES, 2020).

The concept of Horn and Staker (2015, p. 34, our translation), for instance, illustrates this state of conceptual ambiguity as follows: "Hybrid teaching (HT), consisting of a teaching strategy in which activities are planned and implemented to combine in-person and online

---

[3] Research Project approved by *CEPEx RESOLUÇÃO CEPEx/UNIMONTES Nº. 194, DE 08 de dezembro DE 2021* (CEPEx RESOLUTION CEPEx/UNIMONTES No. 194, ON December 8, 2021). Approval from the Ethics Council – Plataforma Brasil, CONSUBSTANTIAL EVALUATION OF CEP No. 5.032.594. Funded by the DEMANDA UNIVERSAL 2021 - FAPEMIG - Public notice No. 001/2021

resources and methods." Whether conceived as a methodology, a mode of teaching, or even a teaching strategy, the fact remains that hybrid teaching is increasingly being adopted by educational institutions, making it pertinent to delve deeper into the underlying conceptions that manifest in contemporary education, providing insights for advancements in the teaching-learning process. The movement driving the adoption of this form of teaching over the past ten years may bring new elements to consider and comprehend the so-called hybrid teaching, which emerges as one of the possibilities in the post-pandemic era.

To identify the conceptions of hybrid teaching in recent decades, we have opted for a Systematic Literature Review (SLR), a study used to comprehensively explore works related to a specific research question (SAMPAIO; MANCINI, 2007). Thus, for its execution, we have defined the research topic as the predominant conception of hybrid teaching in Brazilian academic literature over the past 10 years. The prominence justifies the temporal scope this topic gained during this period, as evident in the publications of Bacich, Tanzi Neto and Trevisani (2015) and Moran (2015).

The presented study is organized as follows: in the introduction, a brief presentation of the study; in the following section, the theoretical concepts and central themes of the research will be discussed; subsequently, the results obtained in the SLR will be presented; and finally, the concluding remarks.

What is Hybrid Education?

Until 1996, Brazilian education was exclusively conceived in the face-to-face mode. However, with the promulgation of the National Education Guidelines and Bases Law (LDBEN) No. 9.394/96 (BRASIL, 1996), a new phase in education began, where the government started to encourage the development and dissemination of distance education programs at all levels and modalities. Continuing this educational process, in 2017, Decree No. 9.057, dated May 25, 2017 (BRASIL, 2017), which regulates Article 80 of Law No. 9.394, dated December 20, 1996, establishing the guidelines and bases of national education, recognized that this modality occurs through the use of information and communication technology, with qualified personnel, as well as through access policies, for the development of educational activities for students and professionals who are in different times and places.

Regarding the organization to achieve its goals: education is conceived heterogeneously, combining various spaces, times, activities, methodologies, and cultures. It is essential to

envision what to learn, why, and how to educate. In this perspective, hybrid education, which means "mixed" or "blended," proposes a process of teaching and learning in numerous ways in multiple and diverse spaces and moments. Education can also be considered hybrid for both learning and teaching, facilitating the production and appropriation of knowledge either freely or under supervision (BACICH; TANZI NETO; TREVISANI, 2015).

Horn and Staker (2015) assert that hybrid education can be any formal educational program in which the student learns, at least in part, through online teaching, with some degree of control over the time, place, path, and pace. Hybrid education traces its roots to online education, but the authors emphasize that it should not be confused with merely equipping classrooms with technology. Instead, it represents a blend of face-to-face and online education, offering various ways of teaching and learning (HORN; STAKER, 2015). The authors also highlight that the technologies used in hybrid education can challenge the content-centric paradigms of traditional teaching, fostering autonomy and independence among students in this mode of education, not solely through the use of digital tools by the teacher (HORN; STAKER, 2015).

According to Bacich, Tanzi Neto and Trevisani (2015), hybrid education is not merely a face-to-face and online teaching of traditional classrooms with other spaces. Instead, it should enable numerous teaching opportunities, fostering reflection on the challenges of realizing one's potential and evolving to overcome the difficulties in the teaching-learning process. Thus, mobile and networked technologies facilitate connecting various spaces and allow for the development of differentiated teaching and learning processes adapted to the contexts of students and educators (BACICH; MORAN, 2018).

In this context, hybrid education can currently be a reality for a significant portion of teachers and students at all levels of education. In line with this understanding, Camargo and Daros (2018) emphasize that the pedagogical proposals of hybrid education should offer students learning tailored to their actual needs and, as a result, should be disseminated in educational networks worldwide. Faced with the COVID-19 pandemic, which imposed sanitary barriers, social isolation, and measures to contain the spread of the coronavirus, educational institutions had to adapt almost instantly to the new context. Coscarelli (2020) highlights the emergence and establishment of new ways of teaching and learning, interacting, and communicating in this new scenario, emphasizing the need for a profound understanding of the education being used today to consolidate it in the future.

Methodology

To conduct this study, we adopted Systematic Literature Review (SLR), as we believe it is valuable in integrating information from a set of studies conducted separately on a specific topic, presenting their convergent and divergent results, as well as identifying areas that require further investigation, thereby assisting in guiding future research (SAMPAIO; MANCINI, 2007).

According to Galvão and Pereira (2014), an SLR can be carried out through eight steps, namely: (1) formulating the research question; (2) literature search; (3) article selection; (4) data extraction; (5) assessment of methodological quality; (6) data synthesis; (7) evaluation of evidence quality; and (8) writing and publication of the results.

In this manner, the selected databases were the Brazilian Digital Library of Theses and Dissertations (BDTD) and Google Scholar, as they encompass the majority of the country's indexed academic production. The search in these databases was conducted across all fields using the descriptors "teaching AND hybrid" from 2011 to 2021 to address the objective proposed by this study of analyzing conceptions on this subject over the past ten years. The initial search yielded 107 theses and dissertations in BDTD and 118 articles in Google Scholar. The material was saved in a research drive folder; subsequently, abstracts were read, and the keyword "Hybrid Teaching" was identified as the inclusion criterion for this study. Exclusion criteria included works that couldn't be identified and those that were unavailable. Thus, 92 theses and dissertations in BDTD and 87 articles in Google Scholar remained after this selection process. These works were then read and cataloged in a spreadsheet with descriptions of titles and abstracts to identify the conceptions of hybrid teaching.

The formulation of the guiding question constituted the first step of this research: What conceptions of hybrid teaching have predominated in Brazilian education over the last ten years?

To establish the consistency of the research corpus, a categorization was performed for the 92 Theses and Dissertations identified in BDTD and the 87 articles selected from Google Scholar that focused on hybrid teaching as a theme. For this purpose, a survey of recurring terms in the keywords of the selected works was conducted, identifying keywords such as education, active methodologies, health, and digital technologies.

Results and Discussion

According to the initial data analysis of the research, it was possible to identify that, on the BDTD platform, there was an increase in published works, particularly from 2016 to 2019 (Table 1).

Table 1 – Published Works on Hybrid Teaching in BDTD

Year	Number of Works	%
2011	2	2,1
2014	1	1,0
2015	2	2,1
2016	14	15,2
2017	17	18,5
2018	21	23,0
2019	20	21,8
2020	9	9,8
2021	6	6,5
Total	**92**	**100**

Source: Research Data (2022)

A growth trend on the Google Scholar platform is also evident within the sample considered for this period. Two articles were published in 2017, and 56 papers were published in 2021, resulting in a percentage of 2.3% for 2017 and 64.3% for 2021 (Chart 1).

Gráfico 1 – Trabalhos publicados sobre ensino híbrido no *Google Scholar*
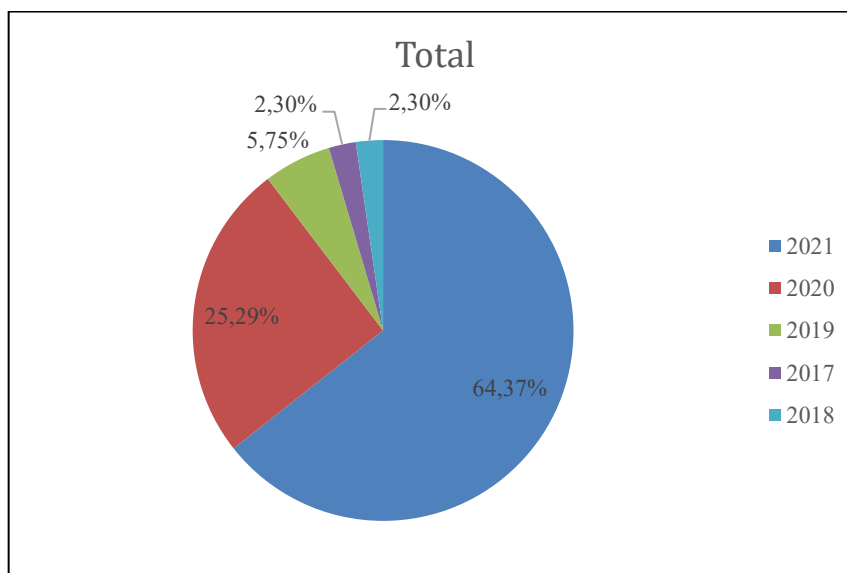
Source: Research Data (2022)

This significant increase in 2021 can be attributed to the COVID-19 pandemic period when topics related to hybrid teaching, remote learning, social isolation, ICT, redefinition of teachers' work, and student learning were widely discussed.

Thus, the analysis of the study revealed that among the 92 theses and dissertations on hybrid teaching selected in BDTD and the 87 articles in Google Scholar published over the past decades:

Table 2 – Works by Category – BDTD and Google Scholar

	BDTD		*Google Scholar*	
Categories	**Number of Works**	**%**	**Number of Works**	**%**
Education	44	47,8	31	35,6
Digital Technologies	31	33,7	22	25,4
Health	06	6,5	19	21,8
Active Methodologies	11	12,0	15	17,2
Total	**92**	**100**	**87**	**100**

Source: Research Data (2022)

These data were also analyzed as percentages to understand the two databases in question better. While these works are categorized, they cannot be comparatively evaluated in terms of percentages due to the different nature of each database. However, it is observed that in both databases analyzed, works related to Hybrid Teaching and Education had a higher number of publications, followed by the Digital Technologies category.

The works identified in the adopted categories were analyzed using the publication year as a parameter. It is worth noting that in the Education category, among the theses and dissertations identified in BDTD, the highest quantitative value falls within the period from 2017 to 2019. In the Digital Technologies category, this period is from 2016 to 2019. The analysis of these same results in the Google Scholar database shows a significant increase in all categories in 2021, particularly those related to Education and Health, which may be linked to the pandemic context, as efforts were made to expand discussions on these topics. It is also noteworthy that in the Active Methodologies category, there is a jump in the number of publications, going from 4 articles published in 2020 to 10 articles published in 2021. There was also gradual growth from 2017 to 2021 in the Digital Technologies category

Analyzing the selected works based on the theme, descriptors, category, and parameters, this research explored the conceptions of hybrid teaching in the results. It was found that not all of them presented a clear vision of hybrid teaching in their references. Therefore, among the 44 works selected in the BDTD platform in the Education category, which included the keyword "hybrid teaching," 8 theses/dissertations with superficial conceptions of hybrid teaching were identified.

In the works, we identified conceptions like the one mentioned by Casagrande (2018), which states that hybrid teaching seeks to harness the best aspects of traditional in-person teaching and online elements. In this context, Pequeno (2017) suggests that hybrid teaching is a methodological approach that impacts both teachers and students, leading to changes in the teaching and learning proposals.

In the selected articles on Google Scholar, also in the Education category, among the 31 works we identified, only 06 articles contain superficial conceptions of hybrid teaching in their content. The remaining 25 articles, despite including the keyword "hybrid teaching," do not provide a conceptual framework for it within the text. Among these 06 works, the predominant conception still reduces this teaching method to a blend of in-person and online activities, as seen in the work of Lemos and Almeida (2020).

It is important to note that Machado's study (2018) aimed to understand the changes in pedagogical models in higher education through the reinterpretation of learning theories, the use of digital technologies, and the reconfiguration of old tools. These modifications result in new education configurations, allowing for the discussion and implementation of hybrid teaching. Thus, the author's research involved a reflection on the strategies and choices made, pointing out that different definitions of "hybrid teaching" can be found in the literature. In general, there is a convergence of two learning models: the face-to-face model, where the process takes place in the classroom, as it has been done for a long time, and the online model, which uses digital technologies to facilitate the teaching-learning process. In line with this understanding, Tori (2009) notes that hybrid teaching, or blended learning, represents two learning environments historically developed separately. The traditional in-person classroom and the modern virtual learning environment are discovering themselves to be mutually complementary, with the result being the quest to leverage the advantages of each modality, taking into account the context, cost, pedagogical suitability, educational objectives, and student profiles (TORI, 2009 apud BATISTA JÚNIOR, 2018).

Among the selected studies that provide a clear definition of hybrid teaching in their theoretical framework, it can be inferred that hybrid teaching can be characterized as a formal education program in which a student learns, at least in part, through online learning, over which they have some degree of control over time, place, path, and/or pace, and at least in part, in a physical location, supervised, away from home (HORN; STAKER, 2015). This understanding is evidenced in some works, such as those by authors Roza, Veiga and Roza (2020), Casagrande (2018), Pequeno (2017) and Martin, Oliveira and Rodrigues (2020).

However, as Horn and Staker (2015), assert, not all types of learning are valid; it must be characterized as formal education to fit within the framework of hybrid education. It must also have some form of control or supervision over students studying away from home, and they must have some degree of control over what they learn, how they learn, and when they learn, at least at some point.

Authors identified in this research, such as Anjos, Silva and Anjos (2019), refer to the different models that systematize hybrid teaching regarding the different ways of shaping and applying it in schools to develop strategies for teachers' practices to contribute to student learning. In line with this understanding, Bacich, Tanzi Neto and Trevisani (2015) define that hybrid teaching is related to the concept of hybrid education, where there is no single way of learning, and learning is a continuous process that occurs in different ways and different spaces. The hybrid teaching modality is an approach that combines in-person activities and activities carried out through digital information and communication technologies (BACICH; TANZI NETO; TREVISANI, 2015).

The proposals on how to carry out activities follow the criteria and creativity of the teacher, who acts as a mediator in the teaching and learning process. However, the primary goal of this teaching and learning format will always be to focus on the student rather than on the transmission of information, which the teacher has traditionally done for a long time (BACICH; TANZI NETO; TREVISANI, 2015).

According to Graham (2006), hybrid teaching should combine two historically separate teaching and learning models: the traditional, involving learning systems and the distance model, with learning systems distributed in Virtual Learning Environments (VLEs), adaptive platforms, and gamification. In this context, some authors found in this research, such as Anjos (2019), Martin, Oliveira and Rodrigues (2020) and Fialho (2020), state that hybrid teaching can be understood as a blend of in-person and online education. It emerges as a viable path because it does not break with the known and widely adopted teaching strategies but expands them and promotes the integration of digital technologies in education, converging with pedagogical practices that lead to student development.

Rodrigues (2010 apud BORBA, 2014), offers another perspective on hybrid teaching, where the concept can encompass the blend of various technological resources and the combination of different teaching and learning methods. A similar consideration is mentioned by Litto (2010 apud BORBA, 2014, p. 28, our translation), who "employs 'hybrid' for courses that are partially distance and partially in person; and 'hybrid learning,' which mixes or

alternates in-person and distance methods." The discussion highlights that the teacher chooses the methods of learning and resources, as they are not limited to the analysis of teaching modalities and do not necessarily involve the opposition of in-person vs. physical distance.

According to Moran (2015), hybrid teaching is not limited to active methodologies or a mix of in-person and online learning in classrooms and other spaces. Instead, it demonstrates that, on the one hand, teaching and learning have never been so fascinating due to the numerous opportunities offered, and on the other hand, so frustrating due to the difficulties in ensuring that everyone develops their potential and genuinely mobilizes to improve continually.

This same understanding was presented by Moran (2015 apud FIALHO, 2020), who believes that hybrid teaching is a promising and significant educational trend. In this teaching modality, education progresses differently, offering activities that develop competencies more aligned with contemporary and multicultural society. Thus, there should be a change in the attitude of both the teacher and the student. In the same thesis, Silva Neta and Capuchinho (2017 apud FIALHO, 2020) add that with the use of hybrid teaching, it is possible to transform aspects of the educational process, remove the teacher as the center of knowledge and the primary source of information, and enable the student to take ownership of their learning. In this approach, the student assumes a more participative role that aligns with student autonomy and the expansion of critical thinking, allowing them to relate what they are studying to real-life situations.

Lévy (1999 apud MOURA, 2018), asserts that new learning methodologies meet the needs of the new student profiles, addressing the necessity for adaptation to the rapid technological advancement that began in the last century. These methodologies are particularly suited to meet the social demands of this emerging globalized society. With the change in worldview, now globalized, and the radical alteration in the form and speed of communication, there is no longer any possibility of maintaining the educational paradigm in which the transmission and memorization of information predominate, sustaining and underpinning the development of educational work.

Valente (2015 apud COSTA, 2019), comments that the responsibility for learning now lies with the student, who takes on a more participative role by solving problems, developing projects, and creating opportunities to construct their knowledge. The teacher's role is that of a mediator and consultant to the learner.

As the mentioned studies suggest, conceptions of hybrid teaching are still limited to the model that blends in-person and online teaching. However, some of the referenced authors,

such as Moran (2015), Moura (2018) and Costa (2019), bring a new perspective on hybrid teaching, aligning with the understanding advocated in this work. They align with the ideas of García Canclini (2011), who views hybridity as a socio-cultural process in which separate structures and practices combine to generate new forms, objects, and procedures. Hybridization occurs unplanned, resulting from migratory and economic exchange processes emerging through individual and collective creativity. This process manifests itself in everyday life and technological development.

For Santaella (2008), hybrid spaces constitute connected spaces in which the traditional distinction between physical spaces on one side and digital spaces on the other is broken. Hybrid spaces go beyond the need to move from physical to digital spaces, becoming convergent spaces. This author asserts that the trajectory of hybrid conceptions tends to expand in multiple directions, and the technological revolution is contributing to advancing its possibilities.

Final considerations

When analyzing the scientific productions from the BDTD and Google Scholar platforms spanning the years 2011 to 2021 to identify the prevailing conceptions of hybrid teaching in Brazilian education over the past decade, it can be inferred that hybrid teaching is still conceived under an approach that combines in-person activities with activities conducted through digital information and communication technologies. However, authors such as Moran (2015), Canclini (2011) and Santaella (2008), shed light on a new conception of hybrid teaching, expanding it as an interchange between physical and digital spaces, resulting in a crossroads of cultures, media, and technologies.

Hence, the proposals for conducting activities should adhere to the criteria and creativity of the teacher, who must act as a mediator in the teaching and learning process. Nevertheless, the primary objective of the teaching and learning process, whether in-person or online, should always focus on the students. Consequently, the definition of hybrid teaching should evolve to encompass a range of learning strategies and dimensions grounded in an education that blends techniques, practices, spaces, individuals, technologies, and cultures to enhance knowledge construction.

REFERENCES

ANJOS, R. A. V.; SILVA, L. M.; ANJOS, A. M. Ensino híbrido: organização e sistematização de conceitos com base em revisão sistemática de literatura. **Em Rede:** Revista de Educação a Distância, v. 6, n. 2, jun. 2019. Available at: https://www.aunirede.org.br/revista/index.php/emrede/article/view/467. Accessed in: 22 Jan. 2022.

BACICH, L.; MORAN, J. **Metodologias ativas para uma educação inovadora:** uma abordagem teórico-prática. Porto Alegre: Penso, 2018.

BACICH, L.; TANZI NETO, A.; TREVISANI, F. M. **Ensino híbrido, personalização e tecnologia na educação.** Porto Alegre: Penso, 2015. e-PUB.

BATISTA JÚNIOR, R. O. **Ensino híbrido:** um estudo sobre a inserção de até 20% de EAD na carga horária de cursos presenciais da UFPE. 2018. 176 f. Dissertação (Mestrado em Educação Matemática e Tecnológica) – Universidade Federal de Pernambuco, Recife, 2018. Available at: https://repositorio.ufpe.br/handle/123456789/30888. Accessed in: 7 Feb. 2022.

BORBA, K. L. A. **Educação a distância na sala de aula conectada:** a percepção discente e docente sobre uma experiência no curso de Pedagogia da Universidade de Brasília. 2014. Dissertação (Mestrado em Educação) – Universidade de Brasília, Brasília, 2014. Available at: https://repositorio.unb.br/handle/10482/17221. Accessed in: 7 Feb. 2022.

BRASIL. **Lei n. 9.394, de 20 de dezembro de 1996**. Estabelece as diretrizes e bases da educação nacional. Brasília, DF: Presidência da República, 1996. Available at: http://www.planalto.gov.br/ccivil_03/leis/l9394.htm. Accessed in: 8 Feb. 2023.

BRASIL. **Decreto n. 9.057, de 25 de maio de 2017**. Regulamenta o art. 80 da Lei nº 9.394, de 20 de dezembro de 1996, que estabelece as diretrizes e bases da educação nacional. Brasília, DF: Presidência da República, 2017. Available at: https://www.planalto.gov.br/ccivil_03/_ato2015-2018/2017/decreto/d9057.htm. Accessed in: 8 Feb. 2023.

CAMARGO, F.; DAROS, T. **A sala de aula inovadora:** estratégias pedagógicas para fomentar o aprendizado ativo. Porto Alegre: Penso, 2018. e-PUB.

CASAGRANDE, A. M. **Ensino híbrido de física utilizando o MOODLE**. 2018. Dissertação (Mestrado em Ciências do Programa de Mestrado Profissional) - Escola de Engenharia de Lorena, Universidade de São Paulo, Lorena, SP, 2018. Available at: https://bdtd.ibict.br/vufind/Record/USP_5758c044dcba1302062360ce6c46ab8e. Accessed in: 26 Sept. 2022.

COSCARELLI, C. V. Ensino de língua: surtos durante a pandemia. *In*: RIBEIRO, A. E.; VECCHIO, P. M. M. (org.). **Tecnologias digitais e escola**: reflexões no projeto aula aberta durante a pandemia. São Paulo: Parábola, 2020. p. 15-20. (Linguagens e tecnologias, 8). *E-book*.

COSTA, A. C. J. **Ensino híbrido em foco**: estratégias para o ensino de funções orgânicas oxigenadas. 2019. Dissertação (Mestrado Profissional em Química - Profqui) - Centro de Ciências Exatas e da Terra, Universidade Federal do Rio Grande do Norte, Natal, 2019. Available at: https://repositorio.ufrn.br/jspui/handle/123456789/27857 Accessed in: 7 Feb. 2022.

FIALHO, W. Á. **Aluno cocriador?:** os efeitos da cocriação de valor no ensino superior híbrido. 2020. Tese (Doutorado em Administração), Pontifícia Universidade Católica de Minas Gerais, Belo Horizonte, 2020. Available at: http://www.biblioteca.pucminas.br/teses/Administracao_WaldianeDeAvilaFialho_8854.pdf. Accessed in: 7 Feb. 2022.

GALVÃO, T. F.; PEREIRA, M. G. Revisões sistemáticas da literatura: passos para sua elaboração. **Epidemiologia e Serviços de Saúde,** Brasília, v. 23, n. 1, p. 183-184, 2014.

GARCÍA CANCLINI, N. Culturas híbridas: estratégias para entrar e sair da modernidade. Tradução de Heloisa Pezza Cintrão e Ana Regina Lessa. Tradução da introdução: Gênese Andrade. 4. ed. São Paulo: Ed. Universidade de São Paulo, 2011. (Ensaios Latino-americanos, 1).

GRAHAM, C. R. Blended learning systems: definition, current trends, and future directions. *In*: BONK, C. J.; GRAHAM, C. R. (ed.). **Handbook of blended learning:** global perspectives, local designs. San Francisco: Pfeiffer Publishing, 2006.

HORN, M. B.; STAKER, H. **Blended:** usando a inovação disruptiva para aprimorar a educação. Porto Alegre: Penso, 2015.

LEMOS, F. C.; ALMEIDA JUNIOR, P. L. Avaliação docente no Ensino Híbrido: Estudo de Revisão no Portal de Periódicos da CAPES. **Revista Semiárido De Visu**, Petrolina, v. 8, n. 2, p. 284-299, 2020.

MACHADO, N. S. **Fazendo o semipresencial e sonhando com o ensino híbrido na graduação, a voz dos estudantes:** uma análise comparativa de modelos pedagógicos nos cenários público e privado. 2018. Dissertação (Mestrado em Educação) – Centro Universitário Internacional, Curitiba, 2018. Available at: https://repositorio.uninter.com/handle/1/116. Accessed in: 9 Aug. 2021.

MARTIN, J. A. P.; OLIVEIRA, E. A.; RODRIGUES, V. Ensino Híbrido no Brasil: uma revisão de literatura. *In*: CONGRESSO INTERNACIONAL DE EDUCAÇÃO E TECNOLOGIAS; ENCONTRO DE PESQUISADORES EM EDUCAÇÃO A DISTÂNCIA, 2020. São Carlos, **Anais** [...]. São Carlos, SP: CIET/ENPED, 2020. Available at: https://cietenped.ufscar.br/submissao/index.php/2020/article/view/1009. Accessed in: 17 Jan. 2022.

MORAN, J. Educação híbrida: um conceito-chave para a educação, hoje. *In:* BACICH, L.; TANZI NETO, A.; TREVISANI, F. de M. (org.). **Ensino híbrido:** personalização e tecnologia na educação. Porto Alegre: Penso, 2015.

MOURA, R. P. **Ensino híbrido no ensino de eletromagnetismo**. 2018. Dissertação (Mestrado em Ensino de Física em Rede) – Universidade Federal de Goiás, Catalão, GO, 2018. Available at: https://bityli.com/NFtNWC Accessed in: 7 Feb. 2022.

PEQUENO, H. S. L. **Digital class:** um modelo para a criação de cursos no paradigma de ensino híbrido. 2017. Tese (Doutorado em Ciência da Computação) – Universidade Federal do Ceará, Fortaleza, 2017. Available at: https://bdtd.ibict.br/vufind/Record/UFC-7_10ca38e554558617abbfa04f1c01df49. Accessed in: 22 Aug. 2022.

ROZA, J. C.; VEIGA, A. M. R.; ROZA, M. P. Blended learning: revisão sistemática da literatura em periódicos científicos internacionais (2015 - 2018). **Educação em Revista**, Belo Horizonte, v. 36, p. 1-18, 2020. Available at: https://www.scielo.br/j/edur/a/PDGg3zvjgc6LS6jKhtttQZn/?lang=pt. Accessed in: 4 Jan. 2022.

SAMPAIO, R. F.; MANCINI, M. C. Estudos de revisão sistemática: um guia para síntese criteriosa da evidência científica. **Revista Brasileira de Fisioterapia**, São Carlos, v. 11, n. 1, p. 83-89, fev. 2007.

SANTAELLA, L. A ecologia pluralista das mídias locativas. **Revista FAMECOS**, Porto Alegre, v. 37, p. 20-24, 1 dez. 2008. Available at: https://revistaseletronicas.pucrs.br/index.php/revistafamecos/article/view/4795/3599. Accessed in: 6 Aug. 2018.

SANTOS, B. M. *et al*. Educação médica durante a pandemia da Covid-19: uma revisão de escopo. **Revista Brasileira de Educação Médica**, Araranguá, v. 44, n. 1, 2020. Available at: https://www.scielo.br/j/rbem/a/8bxyBynFtjnSg3nd4rxtmhF/?lang=pt. Accessed in: 8 Feb. 2021.

TORI, R. Cursos híbridos ou blended learning. *In*: LITTO, F. M; FORMIGA, M. **Educação a distância**: o estado da arte. São Paulo: PEARSON Prentice Hall e ABED, 2009. p. 121-128.

CRediT Author Statement