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Regulatory Foundations for Hybrid Teaching and Learning in Higher Education

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Abstract: This article analyzes the regulations for hybrid education in Brazilian higher education, focusing on CNE/CP No. 34/2023 and MEC Regulation No. 2,117/2019, highlighting their contributions and limitations. Through documentary analysis, the need for flexibility in the regulations to integrate presential and online practices is explored. The results point to challenges in teacher training and infrastructure for the adoption of hybrid teaching processes.
Keywords: Hybrid education; Higher Education; Information and Communication Technologies (ICTs).

Bases regulatórias para o ensino e o aprendizado híbridos em Educação Superior

Resumo: Este artigo analisa as regulamentações para a educação híbrida no ensino superior brasileiro, com foco no Parecer CNE/CP n. 34/2023 e na Portaria MEC n. 2.117/2019, destacando suas contribuições e limitações. Por meio de análise documental, explora-se a necessidade de flexibilização das normas para integrar práticas presenciais e on-line. Os resultados apontam desafios na formação docente e infraestrutura para a adoção de processos educacionais híbridos.
Palavras-chave: Educação híbrida; Educação Superior; Tecnologias de Informação e Comunicação (TICs)

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Bases reguladoras de la enseñanza y el aprendizaje híbridos en la enseñanza superior

Resumen: Este artículo analiza la reglamentación de la educación híbrida en la enseñanza superior brasileña, centrándose en el Dictamen CNE/CP nº 34/2023 y en la Ordenanza MEC nº 2.117/2019, destacando sus aportes y limitaciones. El análisis documental explora la necesidad de flexibilizar las normas para integrar las prácticas presenciales y en línea. Los resultados señalan desafíos en la formación docente y en la infraestructura para la adopción de procesos educativos híbridos.

Palabras clave: Educación híbrida; Educación Superior; Tecnologías de la Información y la Comunicación (TICs)

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1 INTRODUCTION

The advancement of Information and Communication Technologies (ICTs) and the context of the novel coronavirus (Covid-19) pandemic have led to significant changes in educational practices worldwide. In Brazilian higher education, hybrid teaching methods and distance education (EaD, as it is called in Brazil) have emerged as alternatives for the continuity of academic activities. Given this scenario, this article aims to analyze the Brazilian normative documents that guide and regulate the integration of hybrid pedagogical approaches in higher education, including the Opinion of the National Education Council/Full Council (CNE/CP) no. 34/2023 and the Regulation of the Ministry of Education (MEC) No. 2,117/2019.

The regulation of hybrid approaches contained in these documents aims to provide a normative framework to guide the integration of pedagogical practices that combine presential and ICT-mediated instruction, in order to promote greater curricular flexibility.

For example, CNE/CP Opinion No. 34/2023 establishes general guidelines for the development of hybrid education, emphasizing the integration of presential and ICT-mediated activities, while MEC Regulation No. 2,117/2019 defines the percentage of workload that can be offered in distance learning modalities in presential undergraduate courses.

As Lencastre (2013) explains, hybrid education should not be understood as a simple combination of face-to-face and distance learning. With the evolution of educational practices and the increasing incorporation of digital technologies in educational institutions, this perspective has broadened considerably. Today, hybrid education involves a more complex and dynamic integration of different methodologies, spaces, and educational contexts. This approach allows the creation of more flexible and personalized learning environments that meet the individual needs of students and promote meaningful interactions between teachers and students.

The method adopted for this research is qualitative documentary analysis, as described by Chizzotti (2008), Martins (2004), Lüdke and André (1986), and Oliveira (2007). The approach consists of examining and interpreting Brazilian normative documents - CNE/CP Opinion No. 34/2023 and MEC Regulation No. 2,117/2019 - to identify their contributions, limitations, and implications for hybrid education. This analysis was carried out based on the formal aspects and

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specific content of the documents, allowing a critical and detailed view of the pedagogical and legal guidelines for hybrid teaching and learning in higher education.

The results of this study aim to provide a comprehensive overview of the current state of regulation of hybrid education in Brazil, identifying the main points of convergence and gaps between regulatory documents in this area.

It is based on the premise of Horn and Staker (2015, p. 54, translated by us) when they state that "blended learning is the engine that can make student-centered learning possible for students around the world, not just a privileged few". Even in light of this statement, Silva, Maciel, and Alonso (2017) warn of a perceived deficiency related to the lack of studies that specifically address the implementation process of offering blended education, in addition to recognizing that there is a long way to go to make it a permanent and effective reality in Brazilian higher education institutions (HEIs). This makes the initiative of this work even more relevant to strengthen the debate on the future of education in the country, especially in times of accelerated transformations and challenges imposed by digitalization and the need for greater flexibility in teaching and learning practices.

2 THE BASIC CONCEPT OF HYBRIDISM BASED ON CNE/CP OPINION NO. 34/2023

The basic concept of hybridism, as outlined in CNE/CP Opinion No. 34/2023, refers to an educational approach that combines elements of presential teaching with practices mediated by Information and Communication Technologies (ICTs), creating a flexible learning experience that is adaptable to contemporary needs. Educational hybridism is characterized by the integration of different learning times and spaces, allowing the alternation between presential and distance, synchronous and asynchronous activities. This combination aims to overcome the traditional educational model based on the unidirectional transmission of knowledge in closed environments and to promote more dynamic and student-centered learning.

CNE/CP Opinion No. 34/2023 emphasizes that hybridism is not limited to a mere combination of presential and distance moments, but proposes a profound transformation of pedagogical practice. The use of ICT in hybrid teaching allows the creation of learning environments that go beyond the physical classroom, connecting students to diverse and contextualized experiences.

The regulation warns that the hybrid pedagogical approach

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> (...) It should not be confused with Distance Education (EaD), provided for in Article 80 of the Law of Guidelines and Bases of National Education (LDB) No. 9,394, of December 20, 1996, and regulated and characterized by Decree No. 9,057, of May 25, 2017, as a specific educational modality, differentiated and parallel to face-to-face teaching, a substantive form of educational provision (Brasil, 2023, p. 4, translated by us).

In a complementary manner, the document also addresses that the flexible hybrid teaching and learning process constitutes

> (...) in a list of methodologies developed in the common offer of any and all courses, both in basic education and higher education, complementing and adding possibilities of organization and flexible and innovative pedagogical practices that translate, temporally and spatially, differentiated curricular paths and the dynamics of relationships and mediations between the different actors in the school community, as well as interactions between the school and the broader external environment (Brasil, 2023, p. 7, translated by us).

The emphasis that the hybrid approach is different from distance education runs throughout the document. While distance education is a specific modality in which all or most activities take place at a distance, hybridism combines elements of face-to-face and distance education in an integrated and flexible way. Hybridism is not limited to the exclusive use of digital environments but uses a strategic combination of both environments.

Furthermore, the concept of hybridism presented in the opinion emphasizes the need to recognize and value the knowledge acquired by students in different contexts, whether formal, non-formal, or informal. This inclusive vision proposes more flexible curricula that can be adapted to the individual needs of students, thus promoting personalized learning. Educational hybridism therefore promotes innovation, encourages autonomy, and enables students to become protagonists of their learning journey, better preparing them to face the challenges of the contemporary world and to engage in continuous learning throughout their lives.

Notably, CNE/CP Opinion No. 34/2023 adopts specific terminology when addressing the new guidelines for education in Brazil, avoiding the use of the term "hybrid teaching" and instead

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preferring expressions such as "hybrid education", "hybrid approaches", "hybridism", "hybridization" and, above all, "hybrid teaching and learning process". This choice of words is not merely semantic; it reflects a deliberate intention to broaden the understanding and scope of hybrid educational practices, emphasizing the complex and integrative nature of the concept.

The use of the term "hybridization" indicates that the movement to integrate diverse elements into the educational process is ongoing and dynamic. "Hybridization suggests a process that is constantly evolving, adapting and transforming according to the conditions and needs of students and the educational environment. The use of this term suggests that hybrid education is not a final state, but an evolving practice that can and should be continually improved.

3 CONTRAST BETWEEN REGULATORY FLEXIBILITY AND RIGIDITY

CNE/CP Opinion No. 34/2023 and MEC Ordinance No. 2,117/2019 present contrasting approaches to the regulation and implementation of hybrid teaching and learning practices in higher education. The Opinion highlights the need for greater flexibility in the application of activities mediated by information and communication technologies (ICTs) within presential courses, while Ordinance No. 2,117/2019 imposes greater restrictions on the regulation of these activities. This contrast highlights a conflict between the flexibility proposed by CNE/CP Opinion No. 34/2023 and the current regulatory framework established by the MEC.

The rigidity imposed by MEC Regulation No. 2,117/2019 contrasts with practical and pedagogical experiences that point to the need for flexibility to respond to the diversity of contexts and student demands. The experience of implementing hybrid methodologies in higher education courses, as described by Ruy and Belda (2023), shows that the effective application of hybrid practices depends on a flexible structure that allows the adaptation of educational activities to different institutional realities.

Furthermore, the imposition of strict rules ignores the technological barriers and infrastructure limitations that many higher education institutions face. The lack of adequate equipment and stable Internet access can jeopardize the implementation of hybrid activities, especially in less privileged contexts.

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3.1 Contrasts between CNE/CP Opinion No. 34/2023 and MEC Ordinance No. 2,117/2019

CNE/CP Opinion No. 34/2023 suggests that greater flexibility in the hybrid teaching and learning process is presented as an alternative to overcome the regulatory barriers that exist between face-to-face teaching and distance education. The proposal presented in the opinion is that institutions should not be constrained by the restrictive rules that currently govern distance education activities when introducing hybrid activities in in-person courses.

In contrast, MEC Ordinance No. 2,117/2019 establishes guidelines for the provision of distance learning hours in face-to-face higher education courses but imposes clear limits. The ordinance stipulates that up to 40% of the total workload of in-person courses may be offered in the distance learning modality, subject to specific regulations and approvals by the higher education institution. While this percentage allows for some flexibility, the CNE opinion considers it a limitation that limits the possibilities of integrating presential and distance activities in a more fluid way.

The regulation sets out requirements for the infrastructure, content, disciplines, methodologies, and assessment methods for the provision of distance learning activities. In addition, accreditation and assessment standards for presential and distance education courses are treated separately, making it difficult for the two modalities to interact. Higher education institutions need to ensure not only adequate digital platforms but also assessment and activity monitoring systems. While these requirements are necessary to ensure the quality of teaching, they may create barriers to innovation and limit the introduction of new technologies or methodologies.

Ordinance No. 2,117/2019 reinforces an evident distinction between in-person and distance education courses, which contributes to the segmentation of educational practices. This separation limits the possibility of creating a pedagogical continuum, where in-person and remote activities can be dynamically combined to optimize learning. In this regard, CNE/CP Opinion No. 34/2023 argues that the management of in-person and distance education courses are "marked by the duality and segmentation between these two distinct offerings, with difficulties in the interaction between them" (Brasil, 2023, p. 9, translated by us). This binary categorization of in-person and distance education courses results in a compartmentalized view of education, which can inhibit the development of innovative pedagogical approaches that integrate the best practices of both modalities.

The contrast between the flexibility proposed by CNE/CP Opinion No. 34/2023 and the

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regulatory requirements of MEC Regulation No. 2,117/2019 has important implications for educational policy. The opinion suggests that in order for Brazilian higher education to advance in terms of innovation and quality, it is necessary to revise the current regulatory framework, which limits the possibilities of hybridization. At the same time, the opinion recognizes the importance of ensuring quality and equity standards and proposes a more integrated and less segmented approach.

The challenge is to strike a balance between the flexibility of hybrid practices and the maintenance of effective quality control that allows universities to innovate in their curricula and teaching methods without becoming "victims of possible restrictive regulation" (Brasil, 2023, p. 9, translated by us), as mentioned in the document.

4 CHALLENGES AND ALTERNATIVES FOR IMPLEMENTING HYBRID TEACHING PROCESSES

According to Moran (2015), hybrid education integrates classroom activities with activities that use digital media. The author argues that "what technology brings today is the integration of all spaces and times," allowing teaching and learning processes to occur "in a symbiotic, deep, and constant interconnection between the so-called physical and digital worlds" (Moran, 2015, p. 39, translated by us).

Hybrid teaching processes that combine presential and ICT-mediated elements have the potential to transform higher education, but their practical application is often limited by institutional, pedagogical, and technological regulatory factors (discussed in previous themes).

Silva et al. (2017) argue that regulatory documents do not clarify how the hybrid workload foreseen in curricula should be taught, which makes it difficult to conduct an in-depth analysis of the hybrid models used by higher education institutions that offer or have already regulated the hybridization of teaching.

Based on the challenges highlighted by Silva et al. (2017), the implementation of hybrid teaching processes highlights a gap in normative guidelines, which still lack specific guidelines regarding the workload and pedagogical structure appropriate for hybrid education. In this context, institutions should strive to establish internal guidelines to regulate and monitor the adoption of these methodologies. The lack of specific guidelines

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also creates uncertainty among teachers and managers, making it difficult to standardize and control the quality of these practices.

4.1 Institutional Resistance and Organizational Culture

Institutional resistance is a significant challenge. Organizational cultures rooted in traditional teaching models limit the transition to a hybrid model, which requires not only adjustments to curricula and lesson plans, but also changes in the mindsets of administrators, teachers, and students. To be effective, hybrid education requires a collective effort to abandon traditional "classism" and adopt an approach that is more student-centered and responsive to the needs of society.

Resistance to change is exacerbated by the lack of adequate training for teachers to work with hybrid methodologies. Many teachers still lack specific pedagogical skills to use digital tools and implement teaching strategies that effectively integrate presential and distance activities, resulting in limited or inadequate use of digital technologies, as predicted by Selwyn (2017).

Bacich, Tanzi Neto, and Trevisani (2015) identify the lack of infrastructure and technological resources in educational institutions as one of the main barriers that teachers face when using digital technologies in the classroom. According to the authors, elements such as reliable and stable access to the Internet and adequate availability of computers and devices for all students are essential to enable the implementation of activities and pedagogical strategies that depend on technology.

The implementation of hybrid learning processes requires significant investments in digital technologies, learning platforms, and technical support. Inequalities in digital access, especially in more remote or less-resourced regions, can affect the effectiveness of hybrid teaching processes and undermine educational inclusion and equity.

The need for constant technological updates is also a limiting point. HEIs must ensure that both teachers and students have access not only to technological tools but also to the training necessary to use them effectively and safely. In this sense, Matos and Coutinho (2024, p. 1076, translated by us) warn that continuous training for teachers "is essential to ensure that they are up to date with the latest trends and practices related to the use of technology in education".

CNE/CP Opinion No. 34/2023 emphasizes the importance of paying special attention to the

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initial and continuing training of teachers, highlighting the need for teacher training in the experience, learning and use of digital language in teaching-learning contexts. It is worth noting that the appropriation of digital language by teachers should not be limited to the technical mastery of tools, but should also include an understanding of how to integrate them in a meaningful way into pedagogical practices, promoting the construction of more dynamic, interactive learning environments that meet contemporary demands.

Continuous teacher training is essential to ensure the implementation of hybrid teaching processes. The transition to the hybrid model requires the consolidation of an appropriate training culture that allows teachers to develop new skills and competencies, as well as an in-depth understanding of the use of educational technologies. Higher education institutions should invest in training and professional development programs that address not only the use of digital tools, but also the integration of active methodologies such as project-based learning (PBL), flipped classrooms, and others.

4.2 Evaluation and Monitoring of Results

Assessing and monitoring outcomes in hybrid education environments is another major challenge that needs to be addressed. The integration of different teaching methods and modalities requires assessment systems that are equally flexible and adaptable. However, the rigidity of current assessment models, which still rely heavily on presential testing and traditional assessment methods, may limit the development of more dynamic and personalized learning. Moura (2023, p. 18, translated by us) recognizes the need to deconstruct a historical culture of misguided conception and practice of learning assessment, characterized by the predominant use of tests and exams for the sole purpose of classifying students, a model that has persisted for five centuries.

According to Silva (2023), reflecting on these issues is essential to identify viable alternatives that promote the development of activities integrated with methodologies that encourage students to create, produce, and build knowledge based on mistakes and successes in hybrid processes. With the support of ICTs available in the social environment, these alternatives should work together to improve learning through planned actions that integrate active methodologies, redefining teaching and learning practices.

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To meet this challenge, it is necessary to rethink assessment methods to include different ways of demonstrating learning, such as collaborative projects, self-assessment, and continuous feedback, among others. This implies a paradigm shift in which the assessment process is not limited to the final moment, but is continuous and formative, supporting learning throughout the academic pathway.

4.3 Curricular Flexibility and Incorporation of Active Learning Methodologies

The adaptation of Pedagogical Course Projects (PPC) is an important step in the implementation of hybrid teaching processes. However, it is necessary to take into account the institutional difficulties of integrating new methodologies appropriate to hybrid education, seeking to maintain a balance between pedagogical innovation and compliance with national curricular guidelines and established regulations.

Methodologies recognized as active are based on the inclusion of students as protagonists of their learning process, promoting meaningful and participatory learning (Filatro; Cavalcanti, 2018). The implementation of hybrid processes offers a unique opportunity to incorporate active learning methodologies, such as the flipped classroom, problem-based learning (PBL), gamification, and collaborative projects. The use of Learning Management Platforms (LMS), virtual conferencing tools, simulators, and augmented reality environments can also enhance these methodologies and create a dynamic and interactive learning environment.

As presented in the CNE/CP Opinion No. 34/2023, the flexibility of curricula and pedagogical course projects (PPC) is one of the most important strategies for implementing hybrid teaching processes. This flexibility should allow higher education institutions to develop hybrid educational offerings that cohesively integrate presential and distance activities. The ability to make the curriculum flexible and to create diversified educational pathways allows institutions to adapt teaching to the demands of the job market, while at the same time meeting the interests and needs of students.

This adaptation of the curriculum requires a revision of the Pedagogical Projects (PPCs) of the courses to include activities suitable for both in-person and remote environments. Curricular components can be adapted to include modules that can be completed online, promoting autonomy and self-directed learning.

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The focus given by CNE/CP Opinion No. 34/2023 to home-based activities, which are not characterized as hybrid education, stands out. Home-based activities, contrary to what is proposed for hybrid education, are generally limited to practices such as reading texts, solving exercises, individual studies, and other tasks that students carry out on their own outside the institutional environment. These activities, although they may be part of the educational process, do not promote continuous and structured interaction between students and teachers, nor do they use the possibilities of digital technologies and active methodologies in an integrated way. In hybrid processes, distance activities need to be conceived as extensions and complements to presential activities, enabling continuous, collaborative, and interactive learning that goes beyond what is generally provided by activities conducted only at home.

According to the opinion, distance education activities carried out in higher education institutions must be aligned with institutional policies and pedagogical projects and provide a variety of educational experiences that go beyond conventional teaching. These include virtual classes, lectures, debates, seminars, exchanges, and other forms of interaction that promote active and collaborative learning.

Carrying out virtual activities within the university ensures that there is adequate mediation, appropriate pedagogical and technological support, and the necessary supervision to maintain academic quality and integrity. By connecting students to new realities, cultures, and contexts, virtual activities in an institutional environment provide a space for the development of intercultural competencies, critical thinking, and communication skills, in line with the proposal of a more flexible, inclusive higher education that is prepared for today's challenges.

5 CONSIDERATIONS

The exceptional situation created by the Covid-19 pandemic has accelerated the need to find new ways to reorganize the dynamics of teaching and learning in Brazilian higher education, promoting the integration of differentiated processes that involve teachers and students in more flexible institutional times and spaces.

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CNE/CP Opinion No. 34/2023 proposes an integrated educational policy that includes both presential courses and those offered in the distance education modality. This approach promotes convergence between teaching modalities, allowing higher education institutions to take advantage of the best of both worlds to create a more enriching and adaptable educational experience. By integrating offerings, courses that have traditionally been taught presentially can incorporate remote and asynchronous activities, allowing for greater personalization of instruction and inclusion of diverse student profiles.

The flexible approach to the hybrid teaching and learning process aims to expand the current regulatory boundaries by overcoming the percentage limits currently imposed on remote practice and learning for students, both in face-to-face courses and those offered in the distance learning modality. By promoting a more harmonious integration between face-to-face and distance learning activities, this approach aims to make the curriculum more flexible and to allow higher education institutions (HEIs) to develop more dynamic, adaptive pedagogical models that meet contemporary needs.

This article opens the way for future research on the implementation of hybrid pedagogical approaches in higher education, especially in the Brazilian context. Although the study explored the regulatory framework and the real challenges faced by higher education institutions, there is a need to deepen the research with practical examples and case studies that show how these institutions deal with barriers and explore opportunities to innovate in their pedagogical practices. Future research could focus on how different HEIs, in different regional and resource contexts, are adapting their infrastructures, training their faculty, and adjusting their curricula to integrate face-to-face and remote teaching effectively and sustainably. This empirical deepening is essential to strengthen the debate on hybrid education and contribute to the formulation of more flexible and inclusive educational policies that better respond to the contemporary demands of higher education.

REFERENCES

BACICH, L.; TANZI N., A.; TREVISANI, F. M. **Ensino híbrido**: Personalização e tecnologia na educação. Porto Alegre: Penso, 2015.

BRASIL. Conselho Nacional de Educação. **Parecer CNE/CP n. 34, de 8 de agosto de 2023.**

DOI: http://doi.org/10.53628/emrede.v11i.1099 ISSN 2359-6082

Estabelece diretrizes nacionais para o ensino e aprendizado híbrido destinado à formação graduada, pós-graduação stricto sensu e à pesquisa institucional presenciais, mediados por tecnologias de informação e comunicação. Diário Oficial da União: seção 1, Brasília, DF, 2023. Available at: http://portal.mec.gov.br/secretaria-de-regulacao-e-supervisao-da-educacao-superior-seres/30000-uncategorised/91051-educacao-hibrida. Accessed on: Jul. 21, 2024.

BRASIL. Ministério da Educação. **Portaria n. 2.117, de 6 de dezembro de 2019.** Dispõe sobre a oferta de carga horária na modalidade de Educação a Distância - EaD em cursos de graduação presenciais. Diário Oficial da União: seção 1, Brasília, DF, 11 dez. 2019. Available at: https://www.in.gov.br/web/dou/-/portaria-n-2.117-de-6-de-dezembro-de-2019-231491820. Accessed on: Jul. 21, 2024.

CHIZZOTTI, A. **Pesquisa qualitativa em ciências humanas e sociais.** Petrópolis: Vozes, 2008.

FILATRO, A. CAVALCANTI, C. C. **Metodologias Inovativas**: na educação presencial, a distância e corporativa. São Paulo: Saraiva, 2018.

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

LENCASTRE, J. A. (Coord.). **Blended learning em contexto educativo**: perspectivas teóricas e práticas de investigação. 2. ed. Santo Tirso, Portugal: De Facto Editores, 2013.

LÜDKE, M.; ANDRÉ, M.. **Pesquisa em Educação**: abordagens qualitativas. São Paulo: EPU, 1986.

MARTINS, H. H. T. de S. Metodologia qualitativa de pesquisa. Educação e Pesquisa, São Paulo, v. 30, n. 2, p. 289-300, maio 2004. Available at: https://www.scielo.br/j/ep/a/4jbGxKMDjKq79VqwQ6t6Ppp/?format=pdf. Accessed on: Jul. 12, 2024.

MATOS, C. C.; COUTINHO, D. J. G. Desafios Educacionais: A resistência do professor às novas tecnologias e a necessidade de capacitação. **Revista Ibero-Americana de Humanidades, Ciências e Educação**, v. 10, n. 5, p. 1069-1079, 2024. DOI: 10.51891/rease.v10i5.13181. Available at: https://periodicorease.pro.br/rease/article/view/13181. Accessed on: Jul. 12, 2024.

MORAN, J. M.; Educação Híbrida: um conceito-chave para a educação hoje. In: BACICH, L.; TANZI NETO, A.; TREVISANI, F. de M. (Orgs.). **Ensino Híbrido**: personalização e tecnologia na educação. Porto Alegre: Penso, 2015. p. 27-45.

MOURA F. R. C. **Avaliação da aprendizagem**: princípios e perspectivas. Iguatu, CE: Quipá Editora, 2023.

OLIVEIRA, M. M. **Como fazer pesquisa qualitativa.** Petrópolis, Vozes, 2007.

RUY, Rosimari; BELDA, Francisco Rolfsen. Experimentando estratégias do ensino híbrido mediado por TDIC na educação superior. **Ciências em Foco**, Campinas, SP, v. 16, n. 00, p. e023005, 2023. Available at:

DOI: http://doi.org/10.53628/emrede.v11i.1099 ISSN 2359-6082

https://econtents.bc.unicamp.br/inpec/index.php/cef/article/view/18586. Accessed on: Jul. 12, 2024.

SELWYN, N. **Educação e tecnologia**: Questões críticas e futuros possíveis. Porto Alegre: Artmed, 2017

SILVA, M. Q. V. Avaliação personalizada: reflexão a partir do ensino híbrido. EDUCTE: **Revista Científica do Instituto Federal de Alagoas**, v. 14, p. 47-62, 2023.

SILVA, M. R. C.; MACIEL, C.; ALONSO, . M.. Hibridização do ensino nos cursos de graduação presenciais das universidades federais: uma análise da regulamentação. **Revista Brasileira de Política e Administração da Educação - Periódico científico editado pela ANPAE**, [S. l.], v. 33, n. 1, p. 95–117, 2017. DOI: 10.21573/vol33n12017.74042. Available at: https://seer.ufrgs.br/index.php/rbpae/article/view/74042. Accessed on: Jul. 12, 2024.

DOI: http://doi.org/10.53628/emrede.v11i.1099 ISSN 2359-6082