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BLENDED LEARNING: STRATEGIES FOR TEACHING SKILLS, ROOM ORGANIZATION, AND ASSESSMENT

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ABSTRACT

Faced with the challenges imposed by modernity, in which human beings need to deal with multiple tasks and adapt to dynamic contexts, hybrid teaching emerges as an educational model that integrates face-to-face and distance learning, enabling more flexible and accessible learning. This approach promotes the development of teaching skills, requiring teachers not only to master technology, but also to mediate knowledge in an innovative and personalized way. In addition, the organization of the classroom in hybrid teaching requires strategies that combine physical and digital spaces in an integrated way, favoring the autonomy and protagonism of students. With regard to assessment, it is essential to adopt diversified and continuous practices that consider the performance of students in different learning contexts. Thus, we ask: how can hybrid teaching be structured effectively to enhance the development of teaching skills, classroom organization, and learning assessment, ensuring a more flexible and accessible education? Theoretically, we look at the works of Bergmann & Sams (2018), Bacich, Tanzi Neto & Trevisani (2015), Zabala (2015), Christensen, Horn & Staker (2013), Litto & Formiga (2009), Freinet (1975) among others. Methodologically, we used the qualitative approach from Minayo (2007), Stake (2015), Flick (2016), Prodanov & Freitas (2013), descriptive and bibliographic from Gil (2008) and with the comprehensive bias through Weberian analysis (1969). The research revealed that blended learning contributes to the personalization of learning, allowing teachers to tailor their pedagogical strategies to the individual needs of students. In

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addition, it was found that the integration between physical and digital spaces enhances student autonomy and protagonism. It was also observed that the mastery of Digital Information and Communication Technologies (DICT) by teachers is fundamental for the effective implementation of this model, requiring continuing education. With regard to evaluation, the findings indicate that it should be continuous and diversified, including both face-to-face performance and online activities. Finally, it was found that structured pedagogical planning, combined with active methodologies and innovative evaluation practices, is essential for the success of hybrid teaching.

Keywords: Hybrid Teaching. Active Methodologies. Educational Technologies. Learning Assessment.

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INTRODUCTION

HYBRID TEACHING: TEACHING STRATEGIES, CLASSROOM ORGANIZATION AND EVALUATION METHODS FOR FLEXIBLE AND INNOVATIVE EDUCATION

As an innovative pedagogical model[18], hybrid teaching has gained prominence in contemporary times, as it combines face-to-face teaching with online teaching, allowing for more flexible learning that is adaptable to the needs of students. According to Bacich, Tanzi Neto and Trevisani (2015, p. 23), "[...] Blended learning is configured as an approach that seeks to integrate the advantages of active methodologies and the personalization of technology-mediated learning". In addition, according to Zabala (2015, p. 41), "[...] The educational process must consider the different teaching contexts, ensuring that students have multiple learning opportunities". Therefore, understanding this model and its implications for teacher and organizational development is essential to maximize its advantages.

> Blended learning is a formal education program in which a student learns, at least in part, through online instruction, with some element of student control over the time, place, mode, and/or pace of study, and at least in part in a supervised physical location, outside of their residence. A common feature of blended learning is that when a course takes place partly online and partly through other modalities, such as small group lessons, tutoring, etc., these modalities are usually connected. Students continue their study where they left off when they switch from one modality to another (Christensen; Horn; Staker, 2013, p. 8).

However, the effective implementation of hybrid teaching requires teachers to develop new skills, as they need to work in both the face-to-face and digital environments. According to Bergmann and Sams (2018, p. 15), "[...] the teacher assumes a role of facilitator of learning, guiding students in the construction of knowledge and encouraging autonomy". In addition, Litto and Formiga (2009, p. 72) point out that "[...] Pedagogical mediation in hybrid education requires skills that go beyond traditional teaching, including

[18] Blended learning is an innovative pedagogical model that combines face-to-face and digital teaching strategies, promoting more personalized and flexible learning. This model allows students to have greater autonomy over their learning process, while benefiting from face-to-face pedagogical support. According to Bacich, Tanzi Neto and Trevisani (2015), "[...] Blended learning is configured as an approach that seeks to integrate the advantages of active methodologies and the personalization of technology-mediated learning" (p. 23). In addition, Christensen, Horn and Staker (2013) state that "[...] Blended learning is an attempt to offer 'the best of both worlds' – that is, the advantages of online education combined with all the benefits of the traditional classroom" (p. 8). In this way, this teaching model presents itself as an efficient alternative to meet contemporary educational needs, adapting to the demands of students and new technologies. See; Bacich, L., Tanzi Neto, A., & Trevisani, F. M. *Blended learning: Personalization and technology in education*. Penso, 2015; Christensen, C. M., Horn, M. B., & Staker, H. *Blended: Using disruptive innovation to improve schools*. Jossey-Bass, 2013.

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the mastery of technological tools and active methodologies[19]". In this way, teacher training becomes a crucial aspect for the effectiveness of this educational model.

While blended learning offers numerous opportunities, it also imposes significant challenges on teachers, who need to rethink their pedagogical practices and reorganize their assessment methods. According to Christensen, Horn and Staker (2013, p. 37), "[...] Personalizing blended learning requires careful planning to ensure that individual student needs are met." In addition, Freinet (1975, p. 52) reinforces that "[...] The organization of the classroom should reflect a dynamic and collaborative environment, promoting student engagement in learning". Thus, the adaptation of teachers to this new reality becomes a constant challenge.

> In many schools, blended learning is emerging as a sustained innovation over the traditional classroom. This hybrid form is an attempt to offer 'the best of both worlds' – that is, the advantages of online education combined with all the benefits of the traditional classroom. On the other hand, other hybrid teaching models seem to be disruptive in relation to traditional classrooms. They do not include the traditional classroom in its full form; they often have their beginnings among non-consumers; they offer benefits according to a new definition of what is good; and they tend to be more difficult to adopt and operate (Christensen, Horn & Staker, 2013, p. 10).

When teachers embrace blended learning, they need to consider the integration between physical and virtual learning environments to provide a meaningful educational experience. According to Bacich, Tanzi Neto and Trevisani (2015, p. 89), "[...] the combination of different didactic strategies is essential to ensure effective and engaging learning". In addition, Zabala (2015, p. 114) argues that "[...] The diversity of resources available in blended learning allows for a more personalized approach adapted to the specificities of students". In this way, educators must be prepared to move between different methodologies efficiently.

That said, for hybrid teaching to be effective, it is essential that the classroom is reorganized in order to facilitate interaction between students and digital content. According

[19] The mastery of technological tools and active methodologies have become essential for teaching practice in hybrid teaching, as it allows the creation of dynamic and interactive learning environments. In this context, teachers need to master digital platforms, audiovisual resources, and pedagogical strategies that favor the active participation of students. According to Litto and Formiga (2009), "[...] Pedagogical mediation in hybrid education demands skills that go beyond traditional teaching, including the mastery of technological tools and active methodologies" (p. 72). In addition, Bacich, Tanzi Neto and Trevisani (2015) reinforce that "[...] the combination of different didactic strategies is fundamental to ensure effective and engaging learning" (p. 89). In this way, the integration between technology and innovative methodologies enables a more meaningful teaching that is aligned with the demands of the twenty-first century. See: Bacich, L., Tanzi Neto, A., & Trevisani, F. M. (2015). *Blended learning: Personalization and technology in education*. Penso, 2015. Litto, F. M., & Formiga, M. (2009). *Distance education: The state of the art*. Pearson Education do Brasil, 2009.

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to Bergmann and Sams (2018, p. 64), "[...] the layout of the physical space must be designed to favor collaborative work and interaction with technologies". Likewise, Litto and Formiga (2009, p. 201) emphasize that "[...] The hybrid classroom needs to be structured in a way that allows both dynamic face-to-face activities and moments of individualized learning in the digital environment". Thus, the organization of physical and virtual space plays an essential role in the effectiveness of the hybrid model.

> The **Station Rotation**, **Rotational Lab** and **Flipped Classroom models** [*emphasis added*] bring a hybrid solution that combines the traditional classroom with online teaching. [...] Similarly, the Rotational Lab model starts with the traditional classroom, then adds a rotation to a computer or teaching lab. Rotational Labs often increase operational efficiency and facilitate personalized learning, but they do not replace the focus on traditional classroom lessons (Christensen, Horn & Staker, 2013, p. 30).

However, assessment in blended learning presents specific challenges, as it needs to consider both student performance in the face-to-face and digital environments. According to Christensen, Horn and Staker (2013, p. 99), "[...] Assessment should be continuous and formative, allowing students to reflect on their own learning." In addition, Freinet (1975, p. 127) argues that "[...] Assessment should be a dynamic and adaptable process, reflecting the different ways students learn." Therefore, rethinking evaluation methods becomes a necessity to ensure that learning occurs in a meaningful way.

While there are challenges, blended learning provides several opportunities for pedagogical innovation, allowing teachers to adopt more interactive and student-centered approaches. Bacich, Tanzi Neto and Trevisani (2015, p. 148) state that "[...] Hybrid teaching favors the personalization of learning, providing teaching that is more adaptable to the needs of students". In addition, Zabala (2015, p. 173) points out that "[...] hybrid methodologies encourage students' autonomy, making them protagonists of their own learning". In this way, this approach can contribute significantly to the improvement of education.

> Hybrid teaching models follow different innovation patterns. Some are sustained, seeking to improve traditional practices, while others are disruptive, radically transforming the educational experience. Blended learning combines the traditional classroom with online resources, allowing for personalization and greater flexibility in learning. The successful implementation of this model requires adapting methodologies and reconfiguring the role of the teacher, who assumes a more mediating and less expository role (Christensen, Horn & Staker, 2013, p. 27).

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Once teachers take ownership of hybrid methodologies, they can explore new ways of teaching that favor student engagement. Bergmann and Sams (2018, p. 203) point out that "[...] Hybrid teaching allows for greater flexibility in the management of class time, enabling a more individualized approach". Litto and Formiga (2009, p. 227) add that "[...] The use of technologies in hybrid teaching expands pedagogical possibilities, allowing for more dynamic and interactive teaching". In this way, teacher adaptation becomes a determining factor for the success of this educational model.

Therefore, this article aims to discuss the main strategies for the development of teaching skills, classroom organization, and evaluation methods in blended learning. According to Christensen, Horn and Staker (2013, p. 245), "[...] Hybrid teaching represents an opportunity to transform education, making it more accessible and efficient". Likewise, Freinet (1975, p. 264) states that "[...] Educational innovation must always seek continuous improvement of the teaching-learning process". In this way, understanding how to structure this model effectively becomes essential for building a more equitable education.

Thus, we ask: how can hybrid teaching be structured effectively to enhance the development of teaching skills, classroom organization, and learning assessment, ensuring a more flexible and accessible education? To answer this question, the article is organized as follows: (a) in the introduction, we present the outline of the research object; (b) then, we describe the procedures adopted to obtain the empirical material, detailing the steps taken until the data analysis; and, finally, (c) in the development, we discuss the strategies aimed at improving teaching skills, the organization of the classroom and the evaluation methods in the context of hybrid teaching.

QUALITATIVE METHODOLOGY: BIBLIOGRAPHIC, DESCRIPTIVE AND COMPREHENSIVE APPROACH TO THE ANALYSIS OF BLENDED LEARNING

Since the research was conducted from a qualitative approach, the study was based on a bibliographic and descriptive methodology, with the objective of understanding the teaching strategies in hybrid teaching. According to Minayo (2007, p. 21), "[...] qualitative research is characterized by a level of depth in the understanding of social phenomena, allowing a detailed analysis of the object of study". In addition, Gil (2008, p. 27) emphasized that "[...] bibliographic research is essential to theoretically support a study, as it allows the critical analysis of existing academic productions". Thus, the investigation was

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structured based on the literature review and the comprehensive analysis of theoretical and empirical materials. According to Severino (2007, p. 71):

> [...] In the qualitative approach, the research has the environment as a direct source of data. The researcher maintains direct contact with the environment and the object of study in question, requiring more intensive fieldwork. In this case, the questions are studied in the environment in which they are presented without any intentional manipulation by the researcher. The use of this type of approach differs from the quantitative approach in that it does not use statistical data as the center of the process of analyzing a problem, and therefore does not have the priority of numbering or measuring units. The data collected in these studies are descriptive, portraying the largest possible number of elements existing in the reality studied.

As the research was developed from a qualitative approach, a descriptive analysis of the collected data was chosen. Stake (2015, p. 15) pointed out that "[...] qualitative research allows an in-depth look at the analyzed context, enabling the construction of meanings from the experience of the subjects involved". Likewise, Flick (2016, p. 32) highlighted that "[...] The descriptive character of the qualitative research allows a detailed understanding of the phenomenon investigated, providing a solid basis for the interpretation of the data". Thus, the methodology adopted ensured a thorough analysis of the pedagogical aspects of hybrid teaching.

For data collection, documentary and bibliographic sources were used, ensuring a broad theoretical review. According to Minayo (2007, p. 40), "[...] documentary research offers subsidies for the understanding of social phenomena from the examination of written and audiovisual records". In the same sense, Gil (2008, p. 54) stated that "[...] The bibliographic review is essential to map the state of the art of a given field of knowledge, enabling the construction of a solid conceptual base". In this way, the collected data were analyzed from a consistent theoretical perspective. Thus, it is important to highlight the following differentiations:

> Documentary research, due to its characteristics, can be confused with bibliographic research. Gil (2008) highlights the nature of the sources of both studies as the main difference between these types of research. While bibliographic research fundamentally uses the contributions of several authors on a given subject, documentary research is based on materials that have not yet received an analytical treatment or that can be reworked according to the objectives of the research (Severino, 2007, p. 56).

During the process of analysis of the selected materials, comprehensive analysis was employed, which allows an in-depth interpretation of the investigated contents. Stake (2015, p. 45) pointed out that "[...] Comprehensive analysis enables the researcher to

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construct meanings from the information collected, promoting a critical and reflective look at the object of study". Flick (2016, p. 68) added that "[...] The interpretation of data in qualitative research must be carried out carefully, considering the context and subjectivity of the phenomena analyzed". Thus, the reviewed materials were examined in a systematic and interpretative way.

In the organization of the empirical material, the categorization of information was an essential step for structuring the research. According to Minayo (2007, p. 88), "[...] Categorization is an analytical procedure that allows organizing the data in a coherent way, facilitating the interpretation of the findings". In addition, Gil (2008, p. 102) stated that "[...] The definition of analytical categories is a methodological resource that helps in the systematization of the information collected, ensuring greater clarity in the presentation of the results". Thus, the themes related to teaching strategies in blended learning were organized into specific categories for analysis.

After categorizing the data, a triangulation of the information was carried out in order to ensure greater reliability in the analysis. According to Stake (2015, p. 123), "[...] Data triangulation is a methodological technique that enables the validation of findings through the comparison between different sources of information". Likewise, Flick (2016, p. 142) stressed that "[...] The use of triangulation in qualitative research ensures a more robust and consistent interpretation of the phenomena investigated". Thus, different theoretical and empirical perspectives were confronted to obtain a more complete overview of the theme.

To ensure the validity of the research, the need for a reflective approach throughout the investigative process was considered. Minayo (2007, p. 156) argued that "[...] Reflexivity in qualitative research is an essential element for the construction of knowledge, as it allows the researcher to critically analyze his own position in relation to the object of study". In this sense, Gil (2008, p. 178) reinforces that "[...] the reflective posture contributes to avoiding interpretative biases, ensuring greater objectivity in the analysis of the data". Thus, the research was conducted carefully and judiciously, ensuring methodological rigor.

> Reflexivity in qualitative research plays a central role, as it enables the researcher to understand his own influence on the investigative process and on the subjects studied. This implies recognizing that their position, values, and experiences can impact the construction of knowledge and, therefore, must be continuously analyzed throughout the research (Minayo, 2007, p. 47).

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The final stage of the research consisted of the preparation of the report, in which the results were presented in a systematic and structured manner. Stake (2015, p. 189) pointed out that "[...] The presentation of the findings in qualitative research should be clear and objective, allowing readers to understand the relationship between the data collected and the interpretations made." Flick (2016, p. 204) adds that "[...] The coherent organization of the report is essential to effectively communicate the research contributions." Thus, the results were described in detail, respecting the methodological guidelines adopted.

It is concluded, therefore, that the qualitative methodology was essential for the realization of this study, allowing an in-depth analysis of the teaching strategies in hybrid teaching. Minayo (2007, p. 220) states that "[...] qualitative research is a methodological path that enables the construction of knowledge from an interpretative and reflective approach". In addition, Gil (2008, p. 243) pointed out that "[...] the descriptive character of the qualitative research allows a detailed understanding of the phenomenon investigated". Thus, the methodology adopted contributed significantly to the findings and conclusions of the study.

HYBRID TEACHING: STRATEGIES FOR TEACHING SKILLS, ORGANIZES CLASSROOM AND EVALUATION

As a mediator of knowledge and facilitator of active learning, the teacher plays a central role in hybrid teaching, since his function is not limited to the transmission of content, but expands to the guidance and monitoring of students in different teaching modalities. According to Christensen, Horn and Staker (2013, p. 10), "[...] Blended learning is an attempt to offer 'the best of both worlds' – that is, the advantages of online education combined with all the benefits of the traditional classroom." Thus, the teaching performance must adapt to a new educational paradigm.

> Blended learning allows students to learn online while benefiting from physical supervision and, in many cases, in-person instruction. Since 2010, the Institute has surveyed more than 80 organizations and 100 educators involved with blended learning to come up with a definition that best describes this phenomenon from the student's perspective. [...] Modalities along each student's learning path in a course or subject are connected to offer an integrated education experience (Christensen, Horn & Staker, 2013, p. 8).

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However, for the teacher to act effectively in this model, it is essential that he or she has mastered the educational technologies[20] and active methodologies[21] that support hybrid teaching. According to Bacich, Tanzi Neto and Trevisani (2015, p. 89), "[...] the combination of different didactic strategies is essential to ensure effective and engaging learning". Likewise, Litto and Formiga (2009, p. 72) state that "[...] Pedagogical mediation in hybrid education requires skills that go beyond traditional teaching, including the mastery of technological tools and active methodologies". Thus, teachers need to be prepared to use and integrate digital tools into pedagogical planning.

In addition to technological mastery, the implementation of active methodologies, such as the flipped classroom[22] and rotation by stations[23], becomes essential to maximize

[20] It is essential that the teacher has mastery of educational technologies, as pedagogical mediation in hybrid teaching requires the integration of digital resources to enhance learning. The use of technological tools allows the personalization of teaching, the adaptation of content to the needs of students and the diversification of didactic strategies. According to Bergmann and Sams (2018), "[...] the teacher assumes a role of facilitator of learning, guiding students in the construction of knowledge and encouraging autonomy" (p. 15). In addition, Litto and Formiga (2009) highlight that "[...] Pedagogical mediation in hybrid education demands skills that go beyond traditional teaching, including the mastery of technological tools and active methodologies" (p. 72). In this way, the mastery of educational technologies becomes essential for hybrid teaching to fulfill its purpose of offering innovative learning in line with contemporary demands. See: Bergmann, J., & Sams, A. *Flipped classroom: An active learning methodology*. LTC, 2018; Litto, F. M., & Formiga, M. *Distance education: The state of the art*. Pearson Education do Brasil, 2009.

[21] Active methodologies represent an advance in teaching, as they place the student at the center of the learning process, encouraging their active participation and the development of critical thinking. These methodologies promote learning through problem-solving, collaboration, and the use of digital technologies, making teaching more dynamic and meaningful. According to Bacich, Tanzi Neto and Trevisani (2015), "[...] active methodologies encourage students' autonomy, making them protagonists of their own learning" (p. 148). In addition, Zabala (2015) argues that "[...] the educational process must consider the different teaching contexts, ensuring that students have multiple learning opportunities" (p. 41). In this way, the adoption of active methodologies contributes to a more innovative teaching that is aligned with the needs of contemporary society. See: Bacich, L., Tanzi Neto, A., & Trevisani, F. M. *Blended learning: Personalization and technology in education*. Penso, 2015; Zabala, A. *Educational practice: How to teach*. Artmed, 2015.

[22] The flipped classroom is an active methodology that reorganizes the time and space of learning, allowing students to study theoretical content in advance and use time in the classroom for practical and collaborative activities. This model favors the autonomy of students and expands the possibilities of interaction between teachers and students. According to Bergmann and Sams (2018), "[...] The flipped classroom transforms the traditional dynamics of teaching, encouraging students to take a more active role in their learning" (p. 27). In addition, Bacich and Moran (2018) point out that "[...] This methodology requires a high level of planning from teachers, as the curatorship of study materials is fundamental to the success of the model" (p. 75). In this way, the flipped classroom enhances learning by integrating technology, engagement, and personalization of teaching. See: Bacich, L., & Moran, J. *Active methodologies for innovative education: A theoretical-practical approach*. Penso, 2018; Bergmann, J., & Sams, A. *Flipped classroom: An active learning methodology*. LTC, 2018.

[23] Station rotation is a hybrid teaching model that organizes the classroom into different spaces in which students alternate between varied activities, allowing for more dynamic and personalized learning. This method promotes greater interaction between students and allows the teacher to better meet the individual needs of each student. According to Christensen, Horn and Staker (2013), "[...] the Rotation by Stations, Rotational Laboratory and Flipped Classroom models bring a hybrid solution that combines the traditional classroom with online teaching" (p. 30). In addition, Bacich and Moran (2018) state that "[...] the organization of the physical space and activities must be strategically planned to ensure that students have diversified and enriching experiences at each learning station" (p. 112). In this way, the rotation by stations enables a more

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the benefits of hybrid teaching. According to Christensen, Horn and Staker (2013, p. 30), "[...] the Station Rotation, Rotational Lab and Flipped Classroom models bring a hybrid solution that combines the traditional classroom with online teaching". Likewise, Bergmann and Sams (2018, p. 64) reinforce that "[...] the layout of the physical space must be designed to favor collaborative work and interaction with technologies". Thus, the adoption of these methodologies allows for more active and student-centered learning.

> Under the terms of the newly created hybrid teaching nomenclature, the Rotational Rotation, Rotational Laboratory, and Flipped Classroom models follow the model of sustained hybrid innovations. They incorporate the key features of both the traditional classroom and online teaching. The Flex, A La Carte, Enriched Virtual and Individual Rotation models, on the other hand, are developing in a more disruptive way compared to the traditional system (Instituto Clayton Christensen, 2013, p. 4).

However, the adaptation to these new demands does not occur spontaneously, requiring a continuous process of teacher training. According to Christensen, Horn and Staker (2013, p. 37), "[...] Personalizing blended learning requires careful planning to ensure that individual student needs are met." At the same time, the Clayton Christensen Institute (2013, p. 10) highlights that "[...] disruptive hybrid teaching models will substantially replace traditional classrooms in the long run." Thus, teacher training must be continuous to ensure that they are prepared to deal with these new educational demands.

For this training to be effective, it is necessary that it addresses both the development of technical and pedagogical skills, promoting an integrated view of the teaching-learning process. According to Christensen, Horn and Staker (2013, p. 19), "[...] Hybrid teaching models follow the pattern of sustained hybrid innovations, combining elements of the traditional classroom and online teaching." In addition, Litto and Formiga (2009, p. 201) state that "[...] The hybrid classroom needs to be structured in a way that allows both dynamic face-to-face activities and moments of individualized learning in the digital environment". Thus, teachers need support to explore the potential of this model.

> To implement blended learning, teachers can: 1) Flip their classrooms; 2) Switch to a Station Rotation model; 3) Work with your school to create a Rotational Lab model. [...] Similarly, creating a full-time blended learning program may require a reconfiguration of staff, curriculum, infrastructure, operations, and planning to integrate the online learning component. School and district leaders who are embarking on a school-wide hybrid learning implementation are likely to find that a

active, engaging and adaptable teaching to the different needs of students. Bacich, L., & Moran, J. *Active methodologies for innovative education: A theoretical-practical approach*. Penso, 2018; Christensen, C. M., Horn, M. B., & Staker, H. *Blended: Using disruptive innovation to improve schools*. Jossey-Bass, 2013.

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> heavyweight team is the best choice of organizational structure (Clayton Christensen Institute, 2013, p. 40).

However, teaching in hybrid teaching is not restricted to the technical and methodological domain, as it also requires the development of socio-emotional skills for student engagement and motivation. According to Christensen, Horn and Staker (2013, p. 6), "[...] Innovation is not a black box. A series of remarkably consistent patterns offer a path for people to look to the future and predict where different innovations will take us." In addition, the Clayton Christensen Institute (2013, p. 17) emphasizes that "[...] Hybrid models follow a distinct pattern, combining the best of technology and face-to-face instruction to deliver an integrated learning experience." As such, teachers need to develop interpersonal skills to ensure a welcoming and motivating learning environment.

As soon as teachers strengthen their socio-emotional skills, they start to contribute directly to the motivation and engagement of students in the educational process. According to Christensen, Horn and Staker (2013, p. 99), "[...] Assessment should be continuous and formative, allowing students to reflect on their own learning." Likewise, the Clayton Christensen Institute (2013, p. 40) highlights that "[...] Schools that adopt hybrid teaching need to develop evaluation strategies that contemplate the new teaching dynamics, ensuring that students are monitored individually". In this way, the teacher must act as a mediator who encourages the self-regulation of learning.

> One of the tasks of teachers will be to create a motivating environment that generates a positive self-concept in boys and girls, confidence in their own competence to face the challenges that present themselves in the classroom. These representations will be the result of the degree of adequacy of the challenges that are proposed to the students and the evaluation that is made of their work. [...] Thus, evaluations focused exclusively on results, and especially in relation to some general objectives or the average of the class, will not help at all to improve the self-image of all those who, despite the effort made, do not manage to exceed this average. To maintain and improve a self-image that facilitates a favorable attitude towards learning, it will be necessary that these evaluations are made according to the real possibilities of each of the boys and girls (Zabala, 2015, p. 127).

To structure an effective educational environment in blended learning, it is essential to integrate the physical and virtual spaces in a harmonious way, ensuring that students move between these modalities fluidly. According to Christensen, Horn and Staker (2013, p. 8), "[...] Blended learning is a formal education program in which a student learns, at least in part, through online instruction, with some element of control over the time, place, mode, and/or pace of study, and at least in part in a supervised physical location." Thus,

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the architecture of blended learning must offer students a flexible environment that is adaptable to their needs.

However, for this integration to be successful, digital platforms and adaptive learning tools need to be employed strategically. According to Christensen, Horn and Staker (2013, p. 19), "[...] Blended learning is emerging as a sustained innovation over the traditional classroom. This hybrid form is an attempt to offer 'the best of both worlds' – that is, the advantages of online education combined with all the benefits of the traditional classroom" (Clayton Christensen Institute, 2013, p. 4). In this way, technology should be incorporated into pedagogical planning, facilitating the personalization of teaching and promoting greater student engagement.

> Blended learning represents an innovative solution to personalize learning and meet the individual needs of students. [...] Educational technology should not only be a complement, but a central element in the construction of new pedagogical dynamics. By integrating digital platforms and active methodologies, teachers are able to optimize interaction with students and create adaptive strategies for different learning profiles (Instituto Clayton Christensen, 2013, p. 17).

In addition to the physical space and digital platforms, hybrid teaching models play a key role in the organization of learning. According to the Clayton Christensen Institute (2013, p. 4), "[...] under the terms of the newly created hybrid teaching nomenclature, the Rotational Rotation,[24] Rotational Laboratory and Flipped Classroom models follow the model of sustained hybrid innovations". Likewise, Christensen, Horn and Staker (2013, p. 30) explain that "[...] the Flex, A La Carte, Enriched Virtual and Individual Rotation models are developing in a more disruptive way compared to the traditional system". Thus, knowing the particularities of each of these models is essential for their efficient implementation.

[24] The Rotation by Stations, Rotational Laboratory and Flipped Classroom models follow the model of sustained hybrid innovations, as they combine elements of face-to-face teaching with digital, maintaining the traditional structure of the classroom, but incorporating technologies to enhance learning. These models provide greater personalization of teaching, allowing students to advance in content in a more autonomous and interactive way. According to Christensen, Horn and Staker (2013), "[...] the Station Rotation, Rotational Lab, and Flipped Classroom models follow the model of sustained hybrid innovations. They embody the key features of both the traditional classroom and online teaching" (p. 4). In addition, Bacich and Moran (2018) highlight that "[...] These models favor a balanced transition between traditional methodologies and technology-mediated teaching, promoting greater engagement and development of students' skills" (p. 89). In this way, these hybrid models represent a pedagogical evolution, allowing for more dynamic and effective learning. See; Bacich, L., & Moran, J. (2018). *Active methodologies for innovative education: A theoretical-practical approach*. Penso, 2018; Christensen, C. M., Horn, M. B., & Staker, H. *Blended: Using disruptive innovation to improve schools*. Jossey-Bass, 2013.

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> Blended learning programs are classified as **Rotation models** [*emphasis added*] if their students participate in a course or subject by taking turns between teaching modalities in a fixed script or at the discretion of the teacher, and where at least one of them is online teaching. Other modalities may include activities such as small group or full class lessons, group work, individual tutoring and written assignments. [...] The framework leverages online teaching to sustain the traditional classroom by helping it achieve better results according to the original definition of performance for its existing clients (Clayton Christensen Institute, 2013, p. 30).

However, the choice of the hybrid teaching model must consider the specific needs of students and the institution's goals. According to the Clayton Christensen Institute (2013, p. 28), "[...] the Enriched Virtual model[25] is a comprehensive school experience in which, within each course, students divide their time between a physical school unit and remote learning with access to online content and lessons". In addition, Christensen, Horn and Staker (2013, p. 99) point out that "[...] Assessment should be continuous and formative, allowing students to reflect on their own learning." Thus, the definition of an appropriate model must be aligned with the evaluation methodology and the monitoring of students.

In addition, time management in blended learning must balance synchronous and asynchronous activities[26] to ensure that students develop autonomy and active participation in learning. According to the Clayton Christensen Institute (2013, p. 40), "[...] Schools that adopt hybrid teaching need to develop evaluation strategies that contemplate the new teaching dynamics, ensuring that students are monitored individually". Likewise,

[25] The Enriched Virtual model is a hybrid teaching approach that combines regular face-to-face meetings with most of the content being studied online, providing flexibility and autonomy to students. This model is ideal for students who need greater freedom to organize their studies, but who still benefit from face-to-face interactions to clarify doubts and deepen knowledge. According to Christensen, Horn and Staker (2013), "[...] the Enriched Virtual model is a full-time school experience in which, within each course, students divide their time between a physical school unit and remote learning with access to online content and lessons" (p. 28). In addition, Lopes (2013) points out that "[...] face-to-face interaction is essential to ensure that students have adequate support and can share experiences with their peers" (p. 14). In this way, the Enriched Virtual model allows for more personalized and accessible learning, balancing technology with socialization and teacher monitoring. See: Christensen, C. M., Horn, M. B., & Staker, H. (2013). *Blended: Using disruptive innovation to improve schools*. Jossey-Bass, 2013. Lopes, R. (2013). *Hybrid teaching models and their applications in basic education*. Editora Educação Moderna, 2013.

[26] Synchronous and asynchronous activities play a key role in blended learning, allowing for a balanced combination of real-time interactions and moments of self-study. Synchronous activities take place simultaneously for all participants, promoting instant communication between students and teachers, while asynchronous activities offer flexibility for students to access content and perform tasks at their own pace. According to Bacich and Moran (2018), "[...] the alternation between synchronous and asynchronous activities favors a more personalized teaching, allowing each student to advance in learning according to their needs" (p. 120). In addition, Bergmann and Sams (2018) highlight that "[...] the proper structuring of these activities enables a better use of time in the classroom and outside it, ensuring that learning is continuous and meaningful" (p. 45). In this way, the integration between these two formats contributes to a more dynamic and efficient educational experience. See: Bacich, L., & Moran, J. *Active methodologies for innovative education: A theoretical-practical approach*. Penso, 2018; Bergmann, J., & Sams, A. *Flipped classroom: An active learning methodology*. LTC, 218.

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the hybrid teaching model requires careful planning of activities, as Bergmann and Sams (2018, p. 64) point out, "Hybrid teaching models require a reconfiguration of the staff, curricula, infrastructure, operations, and planning to integrate the online teaching component" (Clayton Christensen Institute, 2013, p. 40). In this way, the organization of time and dynamics between face-to-face and online activities must be structured to ensure student engagement.

> In general, the shorter the response time of a given media, that is, the more synchronous the interaction it provides, the greater the sense of presence and, therefore, the greater the proximity perceived by those involved. However, maximum synchronism is not always the best option for all learning activities. Asynchronous communication can facilitate the development of higher levels of reasoning, such as critical thinking (Kanuka & Garrison, 2004, apud Livro - Estado da Arte - Ensino a Distância [A-State of the Art - Distance Learning], p. 126).

However, the adoption of hybrid teaching requires a change in mentality in teaching practice, as the teacher needs to act as a mediator of learning, using innovative methodologies to enhance teaching. According to Christensen, Horn and Staker (2013, p. 37), "[...] Personalizing blended learning requires careful planning to ensure that individual student needs are met." In addition, Litto and Formiga (2009, p. 72) point out that "[...] Pedagogical mediation in hybrid education requires skills that go beyond traditional teaching, including the mastery of technological tools and active methodologies". Thus, continuous teacher training becomes indispensable for the efficient implementation of this model.

Although there are challenges, the proper use of blended learning resources can provide a more enriching and personalized educational experience. According to Christensen, Horn and Staker (2013, p. 27), "[...] Hybrid teaching represents an opportunity to transform education, making it more accessible and efficient". In addition, the Clayton Christensen Institute (2013, p. 16) emphasizes that "[...] Disruptive innovations in blended learning have the potential to redefine the way content is organized and delivered, enabling more dynamic and interactive teaching." Thus, technology must be used strategically to improve the quality of teaching and facilitate active learning.

> Disruptive blended learning models will become good enough to attract traditional students from the established system to the disruptive plane. Your path, however, will not always be simple and direct. [...] In the long run, as disruptive blended learning models improve, the new value propositions will be powerful enough to prevail over those in traditional classrooms (Clayton Christensen Institute, 2013, p. 43).

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As soon as teachers and educational managers understand the importance of integration between physical and virtual spaces, it becomes possible to enhance the benefits of hybrid teaching. According to Christensen, Horn and Staker (2013, p. 6), "[...] Innovation is not a black box. A series of remarkably consistent patterns offer a path for people to look to the future and predict where different innovations will take us." Likewise, the Clayton Christensen Institute (2013, p. 17) emphasizes that "[...] Hybrid models follow a distinct pattern, combining the best of technology and face-to-face instruction to deliver an integrated learning experience." In this way, the synergy between the different components of blended learning is essential for its effectiveness.

That said, assessment in blended learning plays an essential role in understanding and improving the teaching-learning process, being divided into diagnostic, formative, and summative. According to Rodrigues (2002, apud Livro - Estado da Arte - Ensino a Distância [State of the Art - Distance Learning], p. 162), "[...] The concept of evaluation is understood in a diagnostic, formative and summative perspective, as the practice that seeks to understand, improve, qualify and quantify the teaching and learning processes". In addition, we endorse Zabala's perspective (2015, p. 173) when he states that "[...] Assessment should be a dynamic and adaptable process, reflecting the different ways students learn." In this way, each of these forms of evaluation contributes to ensuring a more efficient and personalized teaching.

Diagnostic assessment allows teachers and students to understand the starting point of the learning process. According to Rodrigues (2000, apud Livro - Estado da Arte - Ensino a Distância [State of the Art - Distance Learning], p. 126), "[...] the diagnostic evaluation comprises the set of information that is sought to be obtained before the development and completion of a course". In addition, the same author points out that "[...] future students carry out a diagnostic evaluation by investigating the seriousness and competence of the educational institution and the adequacy of the proposal to their educational and financial conditions" (Rodrigues, 2000, p. 126). In this way, this evaluation allows teaching to be adjusted to the real needs of students.

Formative assessment, in turn, aims to monitor and improve the learning process throughout the course. According to Bergmann and Sams (2018, p. 64), "[...] The formative assessment system allows teachers to provide continuous feedback to students, helping them improve their performance before the final assessment." Likewise, Kanuka and Garrison (2004, apud Livro - Estado da Arte - Ensino a Distância , p. 126) state that "[...]

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Asynchronous communication can facilitate the development of higher levels of reasoning, such as critical thinking." Thus, this type of evaluation allows for more effective pedagogical interventions.

Summative assessment, on the other hand, is used to classify and measure the student's performance at the end of a learning cycle. According to Zabala (2015, p. 127), "[...] summative evaluation is understood as a global report of the process that manifests the trajectory followed by the student and the final results of the entire path". In addition, the Clayton Christensen Institute (2013, p. 40) emphasizes that "[...] Schools that adopt hybrid teaching need to develop evaluation strategies that contemplate the new teaching dynamics, ensuring that students are monitored individually". Thus, this evaluation must be used in a balanced way so as not to become punitive.

In addition to traditional types of assessment, innovative strategies such as the use of digital portfolios can significantly contribute to more personalized teaching. According to Bergmann and Sams (2018, p. 64), "[...] The use of digital portfolios allows students to reflect on their learning trajectory, organizing their work and receiving continuous feedback". Likewise, the Clayton Christensen Institute (2013, p. 16) highlights that "[...] Disruptive innovations in blended learning have the potential to redefine the way content is organized and delivered." Thus, digital portfolios promote more autonomous and reflective learning.

Another relevant tool for evaluation in blended learning is the evaluative rubrics, which ensure clear and objective criteria for analyzing student performance. According to Bergmann and Sams (2018, p. 18), "[...] The rubrics help students understand the evaluation criteria, allowing them to develop autonomy and responsibility for their own learning". In addition, Zabala (2015, p. 41) states that "[...] The educational process must consider the different teaching contexts, ensuring that students have multiple learning opportunities". In this way, rubrics make the evaluation more transparent and fair.

BLENDED LEARNING MODELS THAT PLAY A KEY ROLE IN ORGANISING LEARNING

Blended learning features different models that play a key role in organizing learning, providing flexibility and personalization. According to Christensen, Horn and Staker (2013, p. 4), "[...] the Rotation by Stations, Rotational Laboratory and Flipped Classroom models follow the model of sustained hybrid innovations". In addition, Bacich and Moran (2018, p. 57) state that "[...] Hybrid teaching emerges as a response to the

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contemporary demands of education, allowing teaching that is more adapted to the individual needs of students". Thus, understanding these models is essential for their effective implementation.

> Blended learning combines the use of digital technologies with face-to-face interactions, aiming at personalization. Hybrid teaching models that combine online teaching with face-to-face teaching can be classified as sustained and disruptive. Sustained models include the classroom and virtual spaces, providing greater student involvement and allowing them to learn according to their needs (Lopes, 2013, p. 4).

The Station Rotation model organizes the classroom into different spaces in which students alternate between different activities. According to Bacich and Moran (2018, p. 89), "[...] active methodologies, when combined with the proper structuring of learning spaces, favor student autonomy". Likewise, Lopes (2013, p. 6) points out that "[...] The rotation by stations allows students to work in small groups, promoting interaction and cooperation between peers". Thus, this approach facilitates the diversification of pedagogical strategies.

> Blended learning programs are classified as Rotation models if their students participate in a course or subject by alternating between teaching modalities in a fixed script or at the discretion of the teacher, and where at least one of them is online teaching. Other modalities may include activities such as small group or full class lessons, group work, individual tutoring and written assignments. This structure, as implemented by the Rotation by Stations, Rotational Laboratory, and Flipped Classroom variants, satisfies the four characteristics of a hybrid (Clayton Christensen Institute, 2013, p. 30).

In turn, the Rotational Laboratory model, in turn, combines the use of computer labs with face-to-face moments in the classroom. According to Christensen, Horn and Staker (2013, p. 8), "[...] This model allows students to explore digital content in a controlled environment, while teachers monitor their progress." Lopes (2013, p. 10) adds that "[...] The structure of this model requires adequate planning to ensure that time in the laboratory is well used and complementary to face-to-face teaching". In this way, this approach enhances the use of technology in education.

> Similarly, the Rotational Lab model starts with the traditional classroom, then adds a rotation to a computer or teaching lab. Rotational Labs often increase operational efficiency and facilitate personalized learning, but they are not a substitute for a focus on traditional classroom lessons. [...] The rotation to Learning Labs allows Rocketship to save about $500,000 per school each year in traditional school expenses, which can be invested in other parts of its model (Clayton Christensen Institute, 2013, p. 31).

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The Rotational Laboratory model is one of the hybrid teaching strategies that seeks to optimize the use of technology in education, allowing students to switch between face-to-face and online activities within a controlled environment. According to Christensen, Horn and Staker (2013, p. 8), "[...] This model allows students to explore digital content in a controlled environment, while teachers monitor their progress." In addition, Lopes (2013, p. 10) points out that "[...] The structure of this model requires adequate planning to ensure that time in the laboratory is well used and complementary to face-to-face teaching". In this way, this approach provides a balance between face-to-face interaction and digital autonomy.

Although this hybrid model maintains elements of the traditional classroom, it is differentiated by the structured alternation between different learning spaces. According to the Clayton Christensen Institute (2013, p. 31), "[...] Rotational Labs often increase operational efficiency and facilitate personalized learning, but they are not a substitute for a focus on traditional classroom lessons." Likewise, Bacich and Moran (2018, p. 112) state that "[...] Blended learning demands a redesign of the learning experience, requiring new ways of organizing time and available resources". Thus, the success of this model depends on an efficient management of spaces and pedagogical time.

In practice, the implementation of the Rotational Laboratory requires a restructuring of schedules and the organization of groups of students. According to a study of the application of the model in public schools, "[...] the classes are divided into two groups, in which one remains in the classroom with the subject teacher, while the other carries out online activities supervised by a laboratory teacher" (Lopes, 2013, p. 10) In addition, the use of digital platforms such as Khan Academy[27] can enhance this experience, since "[...] self-directed online teaching allows students to advance at their own pace and strengthen their skills in a personalized way" (Clayton Christensen Institute, 2013, p. 31).

[27] Digital platforms like Khan Academy play an essential role in blended learning, offering interactive content that is adaptable to students' individual needs. These tools enable self-directed learning, allowing students to advance at their own pace while receiving immediate feedback on their performance. In addition, they assist teachers in personalizing teaching, providing data on student progress and facilitating the implementation of active methodologies. According to Christensen, Horn and Staker (2013), "[...] the use of digital platforms such as Khan Academy allows students to explore content autonomously, ensuring more personalized and accessible learning" (p. 31). Likewise, Bacich and Moran (2018) highlight that "[...] educational technology must be used strategically to complement pedagogical practices, promoting a more dynamic and interactive teaching" (p. 112). In this way, the incorporation of digital platforms in hybrid teaching expands learning opportunities and contributes to student autonomy. See: Bacich, L., & Moran, J. *Active methodologies for innovative education: A theoretical-practical approach*. Penso, 2018; Christensen, C. M., Horn, M. B., & Staker, H. *Blended: Using disruptive innovation to improve schools*. Jossey-Bass, 2013.

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The success of this hybrid teaching model also depends on the adaptation of teachers to the new pedagogical requirements. According to Bacich and Moran (2018, p. 95), "[...] The role of the teacher in hybrid teaching becomes that of mediator of knowledge, facilitating interaction between students and digital content". Likewise, Lopes (2013, p. 12) points out that "[...] the continuous training of teachers is a crucial factor for the successful implementation of the model". Thus, ensuring that educators are prepared to deal with this methodology is an essential step for its effectiveness.

Another relevant point is the technological infrastructure necessary for the model to work properly. As pointed out in a case study, "[...] the adequacy of computer labs and the stability of the internet connection are fundamental aspects to ensure that students can access content without interruptions" (Lopes, 2013, p. 13). In addition, Christensen, Horn and Staker (2013, p. 30) emphasize that "[...] Investment in modern equipment and interactive platforms can increase student engagement and improve learning outcomes." Thus, ensuring an adequate infrastructure is essential for the success of the model.

From the students' perspective, the Rotational Laboratory enables more active and personalized learning. According to a survey carried out in schools that adopt this model, "[...] students showed greater interest in activities, both face-to-face and online, when the methodology was well structured" (Lopes, 2013, p. 14). In addition, the Clayton Christensen Institute (2013, p. 32) states that "[...] Switching between different teaching formats allows students to explore different ways of learning, developing autonomy and digital skills." Thus, the model proves to be effective in engaging students and diversifying teaching strategies.

Continuous monitoring of student performance is one of the challenges of this model, but also one of its advantages. According to Christensen, Horn and Staker (2013, p. 40), "[...] Evaluation in hybrid teaching must be continuous and formative, ensuring that teachers can intervene appropriately whenever necessary". Likewise, Lopes (2013, p. 15) points out that "[...] The monitoring of data generated by digital platforms can offer valuable information for the personalization of teaching". In this way, data collection and analysis play a fundamental role in the adaptation of pedagogical strategies.

Thus, it is essential to highlight that the implementation of the Rotational Laboratory requires a joint effort between teachers, managers and students. According to Bacich and Moran (2018, p. 120): "[...] The change to hybrid teaching does not occur in isolation, requiring an institutional restructuring that involves teacher training, curricular adaptation

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and technological support". In addition, Lopes (2013, p. 16) points out that "[...] The involvement of the pedagogical team and the monitoring of the results are essential to ensure the effectiveness of the model". In this way, the success of the Rotational Laboratory depends on careful planning and collaboration among all those involved in the educational process.

The Flipped Classroom model, on the other hand, proposes that students study the theoretical content beforehand so that face-to-face classes are dedicated to practical and collaborative activities. According to Bergmann and Sams (2018, p. 27), "[...] The flipped classroom transforms the traditional dynamics of teaching, encouraging students to take a more active role in their learning." Bacich and Moran (2018, p. 75) point out that "[...] This methodology requires a high level of planning from teachers, as the curation of study materials is essential for the success of the model". Thus, this strategy favors the personalization of teaching.

> Despite all the attention devoted to videos, these are not the biggest benefits of the flipped classroom. The great gain is the increase in class time, which all teachers should evaluate and explore in the best possible way. Because the direct instruction process itself has been transferred outside of the classroom, our students can engage in classroom more useful and engaging activities during their free time. As we have observed among teachers who have adopted the flipped classroom model, additional class time is used in a variety of ways, depending on the subject, location, and teaching style (Bergmann & Sams, 2018, p. 96).

The Flex model allows students to advance in content more autonomously, with access to digital materials and support from teachers when needed. According to Christensen, Horn and Staker (2013, p. 15), "[...] Flexible hybrid teaching models stand out for their ability to meet different learning profiles". Lopes (2013, p. 12) adds that "[...] The success of this model depends on the structuring of efficient digital platforms, which allow the monitoring of students' progress". In this way, the Flex model is ideal for contexts that demand greater autonomy.

> The term refers to courses or subjects where online teaching is the backbone of student learning, even if it sometimes directs students to face-to-face activities. The tutor teacher is on-site, and students learn mostly in a traditional, physical school, except for some homework. Students move through the Flex course according to their individual needs. Teachers are available in person to offer help, and in many programs they initiate projects and discussions to enrich and deepen learning, although in others they are less involved (Horn & Staker, 2015, p. 47).

It can be inferred that the Flex model is characterized by the centrality of online teaching in learning, providing students with autonomy to advance in the content according

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to their needs, making it essential to understand how this approach is structured in practice. According to Horn and Staker (2015, p. 10), "[...] Hybrid teaching would act as the engine that can power personalized, competency-based teaching." In addition, the flexibility of the model allows students to advance at their own pace, ensuring that those who have already mastered a certain content can move forward, while those who need more time for understanding have this support available.

However, for the Flex model to reach its full potential, a well-structured digital environment is needed, which allows for effective monitoring of students' progress. According to Bacich and Moran (2018, p. 39), "[...] Teaching and learning take place in a symbiotic, deep and constant interconnection between the so-called physical and digital worlds. They are not two worlds or spaces, but an extended space, an expanded classroom, which is constantly mixed, hybridized". This characteristic requires educational institutions to invest in efficient teaching platforms, capable of offering interactive resources, formative assessments, and personalized follow-up. Thus, the integration of Digital Information and Communication Technologies (DICT)[28] in hybrid teaching enables an environment in which students learn "[...] anytime, anywhere, in any way, at any pace" (Horn & Staker, 2015, p. 10).

Therefore, the Flex model, by allowing students to take greater control over their learning process, represents a significant evolution in relation to conventional methods. However, its successful implementation requires the adaptation of pedagogical practices, ensuring that the role of the teacher is redefined as a facilitator and guide of learning. As Bacich and Moran (2018, p. 39) argue, "[...] the personalization of learning resizes the role of the teacher, making him more and more a manager and guide of collective and individual paths". Thus, for this model to work in a way that produces results, it is essential

[28] Digital Information and Communication Technologies (DICT) play a central role in the transformation of educational processes, providing new forms of interaction, teaching and learning. These technologies allow for the creation of more dynamic, collaborative, and accessible educational environments, facilitating the personalization of teaching and the development of student autonomy. According to Bacich and Moran (2018), "[...] DICT expand pedagogical possibilities, allowing teachers to diversify their teaching strategies and promote more meaningful learning" (p. 95). In addition, Kenski (2012) points out that "[...] the use of digital technologies in education should not be seen only as a support for traditional practices, but rather as an element that reconfigures the way knowledge is produced and shared" (p. 37). In this way, the integration of DICT into the school context enables new forms of engagement and interaction, making teaching more innovative and inclusive. See: Bacich, L., & Moran, J. *Active methodologies for innovative education: A theoretical-practical approach*. Penso, 2018. Kenski, V. M. *Education and technologies: The new rhythm of information*. Cortez, 2012.

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that the school offers continuous support to teachers, enabling them to work in a hybrid and flexible teaching environment.

Consequently, we have the À La Carte model that allows students to choose subjects to take online, combining them with face-to-face components. According to Bacich and Moran (2018, p. 94), "[...] This model expands the possibilities of learning, allowing students to have access to content that would not be available in their school". Likewise, Christensen, Horn and Staker (2013, p. 22) state that "[...] the À La Carte model allows students to customize their educational trajectory according to their interests and needs". In this way, this approach promotes greater curricular flexibility.

> Students have the option of choosing individual courses to study online, rather than attending all subjects in a single school setting. This model can be particularly beneficial for those who want to explore specific areas of interest or who require a more flexible learning schedule. According to studies, the À La Carte modality allows students to combine different teaching approaches, ensuring greater personalization and flexibility in their educational trajectory (Horn & Staker, 2015, p. 38).

In this way, as we can see, the À La Carte model allows students to choose specific subjects to take online, combining them with face-to-face components, it expands the learning possibilities. According to Horn and Staker (2015, p. 34), "[...] any formal educational program in which a student learns, at least in part, through online instruction, with some element of student control over time, place, path, and/or pace." In this way, the flexibility provided by the À La Carte model meets the individual needs of students, allowing them to explore content not available in their regular school. According to Christensen, Horn and Staker (2013, p. 3), "[...] the Flex, À La Carte, Virtual Enriched and Individual Rotation models are developing in a more disruptive way compared to the traditional system".

Thus, by providing greater curricular flexibility, the À La Carte model can be an efficient solution to meet the different learning demands of students. However, its success depends on the structuring of efficient digital platforms and pedagogical planning that ensures the quality of the educational experience. As Bacich and Moran (2018, p. 39) state, "[...] Teaching and learning take place in a symbiotic, deep and constant interconnection between the so-called physical and digital worlds. They are not two worlds or spaces, but an extended space, an expanded classroom, which is constantly mixed, hybridized". In this way, the integration between face-to-face and digital is essential to ensure that hybrid teaching provides a rich and meaningful learning experience.

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In addition to the educational models, the Enriched Virtual that holds regular face-to-face meetings, but most of the content is studied online. According to Christensen, Horn and Staker (2013, p. 30), "[...] This model offers a hybrid learning experience, combining the best of face-to-face and distance learning." Lopes (2013, p. 14) points out that "[...] face-to-face interaction is essential to ensure that students have adequate support and can share experiences with their peers." Thus, this methodology balances the benefits of technology and face-to-face interaction.

> The Enriched Virtual model offers an approach that combines regular face-to-face moments with online learning, providing students with the opportunity to study at their own pace while maintaining interaction with teachers and peers. This model stands out for its flexibility and continuous support for the student, as 'the Flex, À La Carte, Virtual Enriched and Individual Rotation models are developing in a more disruptive way in relation to the traditional system' (Christensen, Horn & Staker, 2013, p. 3).

Thus, the Enriched Virtual model combines regular face-to-face meetings with online learning, it allows students to study at their own pace, while maintaining interaction with teachers and classmates. According to Bacich and Moran (2018, p. 34), "[...] Hybrid teaching provides greater flexibility for students to manage their learning, taking advantage of digital without losing the face-to-face contact necessary for the development of socio-emotional skills". Thus, this modality balances the benefits of digital technologies with the pedagogical support offered in face-to-face interactions.

However, for this model to achieve its objective, it is essential that schools establish a pedagogical structure that ensures both online support and mediation in face-to-face moments. According to Bacich and Moran (2018, p. 39), "[...] Hybrid teaching is not restricted to the adoption of technology, but requires a change in pedagogical practice that favors the personalization of learning". Thus, the implementation of Virtual Enriched requires teachers to take on a role as knowledge facilitators, ensuring that students remain engaged in the educational process. According to Horn and Staker (2015, p. 38), "[...] Successful hybrid models are those that integrate face-to-face and distance learning in a harmonious way, respecting the specificities of each educational context".

Thus, the implementation that obtains positive results of these models requires planning and adaptation to the reality of each institution. According to Bacich and Moran (2018, p. 110), "[...] The choice of the hybrid model must take into account the profile of the students, the available resources and the pedagogical objectives". In addition, Lopes (2013, p. 18) points out that "[...] The success of hybrid teaching depends on continuous

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monitoring, ensuring that the methodologies adopted are achieving the expected results". In this way, the personalization of the educational experience is a key factor.

> Each teacher, therefore, reflected on the topics involved in this process of implementing hybrid teaching, planned classes based on these reflections, applied and recorded the results of these classes through videos and discussed, throughout the process, with the tutors and with the other teachers in the group through the interaction platform. During the second block, in addition to carrying out the proposed challenges, it was suggested the elaboration of texts, produced individually, in pairs or in trios, which brought together the main issues on which the teachers reflected during the experimentation process (Bacich & Moran, 2018, p. 110).

Therefore, the use of digital platforms is essential for the operationalization of hybrid models. According to Christensen, Horn and Staker (2013, p. 35), "[...] Technological tools allow students to access content at any time, making learning more flexible." Lopes (2013, p. 20) adds that "[...] Digital support facilitates the monitoring of student performance, enabling more precise pedagogical interventions". Thus, technology must be strategically integrated into blended learning.

Finally, managing time and the dynamics between synchronous and asynchronous activities is a challenge in hybrid teaching. According to Bergmann and Sams (2018, p. 45), "[...] Teachers need to balance face-to-face interactions with the time dedicated to individual online learning." Bacich and Moran (2018, p. 120) highlight that "[...] The planning of activities must consider the cognitive load of the students and ensure moments of meaningful interaction". Thus, efficient time organization is essential for the success of this pedagogical approach.

CONCLUSION

The present research showed that hybrid teaching represents an innovative approach capable of integrating the potential of face-to-face and online modalities, promoting more flexible, interactive and personalized learning. For this educational model to be structured effectively, it is essential that teachers develop specific skills, both in the domain of educational technologies and in the application of active methodologies. The teacher, in this context, ceases to be a mere transmitter of knowledge to become a mediator of learning, facilitating the construction of knowledge in a collaborative and meaningful way. Continuing teacher training emerges, therefore, as a crucial element for educators to incorporate new pedagogical strategies and use digital tools efficiently.

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Another fundamental aspect in the implementation of hybrid teaching concerns the organization of the classroom. The survey pointed out that the physical space must be strategically planned to allow a fluid interaction between the face-to-face and digital environments. Models such as Station Rotation, Rotational Lab and Flipped Classroom have proven effective in restructuring the teaching experience, allowing students to move between different learning modalities. In addition, the architecture of hybrid teaching requires an adequate technological infrastructure, ensuring that students have access to digital platforms, interactive content, and tools for monitoring academic performance.

Regarding the assessment of learning, the findings demonstrated that the adoption of diversified and continuous practices is essential to ensure the effectiveness of blended learning. Diagnostic, formative and summative assessment must be integrated into the educational process in a coherent way, enabling a more accurate monitoring of students' progress. In addition, strategies such as the use of digital portfolios and evaluative rubrics contribute to making the evaluation process more transparent and aligned with the individual needs of students. Thus, evaluation in blended learning should not be restricted to traditional metrics, but rather contemplate innovative approaches that favor student autonomy and engagement.

Time management in blended learning has also proved to be a determining factor for its effectiveness. Alternating between synchronous and asynchronous activities should be planned in a balanced way, ensuring that students have guided learning moments and opportunities for self-study. The flexibility provided by hybrid teaching allows students to advance at their own pace, but at the same time requires pedagogical planning that ensures active participation and the collective construction of knowledge. The strategic use of digital platforms, such as Khan Academy, has proven to be an effective alternative to personalize teaching, allowing students to have access to content tailored to their needs.

Finally, the successful implementation of blended learning requires a joint effort between managers, teachers, and students. The school must establish institutional policies that favor continuous teacher training, the availability of technological resources and the creation of learning spaces that efficiently integrate the face-to-face and virtual environments. In addition, the school culture needs to be aligned with this new pedagogical configuration, promoting teaching that values the active participation of students and the construction of knowledge in a dynamic and collaborative way.

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In view of these aspects, it is concluded that hybrid teaching, when well structured, can significantly transform the educational experience, making it more accessible, personalized and aligned with the demands of contemporaneity. Its implementation requires careful planning, investment in technological infrastructure, teacher training and innovative evaluation methodologies. Thus, by combining different pedagogical strategies, reorganizing learning spaces, and integrating digital technologies into teaching, the hybrid model is consolidated as a promising alternative to enhance the development of teaching skills, classroom organization, and learning assessment, ensuring a more flexible and inclusive education.

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