



FLIPPED CLASSROOM AND COLLABORATIVE WORK AS AN INCLUSIVE STRATEGY IN HIGHER EDUCATION

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ABSTRACT

Objective: The aim of this research is to evaluate the implementation of the flipped classroom and collaborative work in university marketing students, in terms of academic performance, the development of cross-curricular competencies, student satisfaction and motivation, and the effective use of information and communication technologies in the learning process.

Theoretical Framework: The main concepts and academic literature that underpin the research are presented, providing a solid foundation for understanding the context of the study.

Method: The methodology adopted for this research is quantitative in nature, with a cross-sectional design, and exploratory and descriptive scope. Data collection was conducted using a questionnaire composed of five dimensions, in order to cover all aspects inherent to the mixed inclusive strategy that combines the flipped classroom and collaborative work in the university classroom.

Results and Discussion: The results suggest that the flipped classroom and collaborative work have a generally positive impact on higher education, in line with much of the current scientific literature. However, it is also evident that careful consideration of implementation and context is necessary to maximize their effectiveness. Variations in outcomes, depending on factors such as discipline, course design, and the digital skills of the participants, are crucial aspects that must be considered. These findings underline the importance of a balanced and adaptive approach in the application of innovative methodologies in higher education.

Originality/Value: This study stands out for its rigorous exploration of how the integration of the flipped classroom and collaborative work in higher education enhances soft skills and academic performance, contrasting with traditional methodologies. It underscores the relevance of adapting educational strategies to maximize the effectiveness of ICT in a contemporary and diversified learning context. Its value lies in providing empirical evidence that supports the implementation of these innovative methodologies, promoting more inclusive and effective learning environments.

Keywords: Flipped Classroom, Collaborative Work, Soft Skills, ICT, Students, Higher Education.

SALA DE AULA INVERTIDA E TRABALHO COLABORATIVO COMO ESTRATÉGIA INCLUSIVA NO ENSINO SUPERIOR

RESUMO

Objetivo: O objetivo desta pesquisa é avaliar a implementação da sala de aula invertida e do trabalho colaborativo em estudantes universitários de Marketing, em termos de desempenho acadêmico, desenvolvimento de competências transversais, satisfação e motivação estudantil, e o uso efetivo das tecnologias da informação e comunicação no processo de aprendizagem.

Referencial Teórico: São apresentados os principais conceitos e a literatura acadêmica que sustentam a pesquisa, fornecendo uma base sólida para entender o contexto da investigação.

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Método: A metodologia adotada para esta pesquisa é de natureza quantitativa, com um design transversal, e alcance exploratório e descritivo. A coleta de dados foi realizada por meio de um questionário composto por cinco dimensões, com o objetivo de cobrir todos os aspectos inerentes à estratégia inclusiva mista que combina a sala de aula invertida e o trabalho colaborativo na sala de aula universitária.

Resultados e Discussão: Os resultados sugerem que a sala de aula invertida e o trabalho colaborativo têm um impacto geral positivo no ensino superior, alinhado com grande parte da literatura científica atual. No entanto, também é evidente a necessidade de considerar cuidadosamente a implementação e o contexto para maximizar sua eficácia. As variações nos resultados, dependendo de fatores como a disciplina, o design do curso e as habilidades digitais dos participantes, são aspectos cruciais que devem ser considerados. Esses achados sublinham a importância de uma abordagem equilibrada e adaptativa na aplicação de metodologias inovadoras no ensino superior.

Originalidade/Valor: Este estudo destaca-se pela sua exploração rigorosa de como a integração da sala de aula invertida e do trabalho colaborativo no ensino superior melhora as habilidades sociais e o desempenho acadêmico, contrastando com metodologias tradicionais. Destaca a relevância de adaptar as estratégias educativas para maximizar a eficácia das TIC em um contexto de aprendizagem contemporâneo e diversificado. Seu valor reside em oferecer evidência empírica que apoia a implementação dessas metodologias inovadoras, promovendo ambientes de aprendizagem mais inclusivos e eficazes.

Palavras-chave: Sala de Aula Invertida, Trabalho Colaborativo, Habilidades Sociais, TIC, Estudantes, Ensino Superior.

AULA INVERTIDA Y TRABAJO COLABORATIVO COMO ESTRATEGIA INCLUSIVA EN EDUCACIÓN SUPERIOR

RESUMEN

Objetivo: El objetivo de la presente investigación es evaluar la implementación del aula invertida y el trabajo colaborativo en los docentes universitarios de Marketing, en términos del rendimiento académico, el desarrollo de competencias transversales, la satisfacción y motivación estudiantil, y el uso efectivo de las tecnologías de la información y la comunicación en el proceso de aprendizaje.

Marco Teórico: Se presentan los principales conceptos y la literatura académica que sustentan la investigación, proporcionando una base sólida para comprender el contexto de la investigación.

Método: La metodología adoptada para esta investigación es de naturaleza cuantitativa, con un diseño transversal, y alcance exploratorio y descriptivo. La recolección de datos se realizó mediante un cuestionario compuesto por cinco dimensiones, con el fin de abarcar todos los aspectos inherentes a la estrategia inclusiva mixta que combina el aula invertida y el trabajo colaborativo en el aula universitaria.

Resultados y Discusión: Los resultados sugieren que el aula invertida y el trabajo colaborativo tienen un impacto positivo general en la educación superior, en línea con gran parte de la literatura científica actual. Sin embargo, también es evidente la necesidad de considerar, cuidadosamente, la implementación y el contexto para maximizar su eficacia. Las variaciones en los resultados, dependiendo de factores como la disciplina, el diseño del curso y las habilidades digitales de los participantes, son aspectos cruciales que deben tenerse en cuenta. Estos hallazgos subrayan la importancia de un enfoque equilibrado y adaptativo en la aplicación de metodologías innovadoras en la educación superior.

Originalidad/Valor: Este estudio destaca por su exploración rigurosa de cómo la integración de la sala de aula invertida y el trabajo colaborativo en la educación superior mejora las habilidades blandas y el rendimiento académico, contrastando con metodologías tradicionales. Subraya la relevancia de adaptar las estrategias educativas para maximizar la eficacia de las TIC en un contexto de aprendizaje contemporáneo y diversificado. Su valor radica en ofrecer evidencia empírica que respalda la implementación de estas metodologías innovadoras, promoviendo entornos de aprendizaje más inclusivos y efectivos.

Palabras clave: Aula Invertida, Trabajo Colaborativo, Habilidades Blandas, TIC, Estudiantes, Educación Superior.



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1 INTRODUCTION

In the contemporary educational landscape, characterized by rapid technological advancement and constant sociocultural changes, higher education faces the challenge of adapting and evolving to meet the needs of a digitally native and diverse generation. In this context, the blended educational strategy combining the flipped classroom and collaborative work emerges as an innovative response to the need for a more interactive, participatory, and student-centered pedagogical approach.

The flipped classroom, a pedagogical strategy that inverts the traditional teaching model, moves direct instruction outside of the classroom, and uses class time for practical activities and deepening understanding. This allows students to access course content in advance, optimizing classroom time for discussions, practical applications, and a deeper focus on acquired knowledge. On the other hand, collaborative work, rooted in Vygotsky's theory of social constructivism (1995), emphasizes the importance of interaction and cooperation among students to achieve common goals. This mode promotes the development of critical skills such as critical thinking, problem-solving, and effective communication, which are fundamental not only in the academic field but also in the professional sphere.

The integration of the flipped classroom with collaborative work in the university teaching-learning process represents a powerful synergy, translating into a more enriching and dynamic educational environment. Students, by acquiring basic knowledge prior to class, are better prepared to engage in collaborative activities, which facilitates a deeper understanding of the topics discussed and promotes interpersonal and teamwork skills, increasingly valued in the workplace.

The aim of this research is to evaluate the implementation of the flipped classroom and collaborative work in university marketing students in terms of academic performance, development of cross-curricular competencies, student satisfaction and motivation, and effective use of information and communication technologies (ICT) in the learning process. Through a comprehensive review of the literature and an analysis of empirical data, this study seeks to provide a comprehensive understanding of how the flipped classroom and collaborative



work can redefine the higher education paradigm, aligning with global trends that aim to prepare students for the challenges and opportunities of the future.

2 THEORETICAL FRAMEWORK

Contemporary higher education faces unprecedented challenges, driving the search for teaching methods that not only convey knowledge but also develop critical skills and foster collaboration. Recent research underscores the need to rethink traditional pedagogical strategies in favor of more dynamic and participatory approaches (González-Gómez et al., 2020). In this context, the landscape is being transformed by the integration of innovative methodologies that meet the challenges of the 21st century. Among these, the flipped classroom and collaborative work have stood out for their ability to enhance learning and student engagement, whose strategic combination is redefining teaching in higher education institutions.

Recent research highlights that the teaching-learning model based on the flipped classroom and collaborative work applied in the university classroom context presents multiple benefits, such as increased engagement in learning, higher intrinsic motivation, greater student satisfaction, as well as increased interaction and feedback with teachers and classmates (Fang et al., 2022; Prieto et al., 2021; Hussain et al., 2020; Zheng et al., 2020; Solier et al., 2022; Cabi, 2018; Martínez-Jiménez and Ruiz-Jiménez, 2020).

The flipped classroom, a model that inverts the traditional teaching approach by moving direct instruction outside the classroom and focusing class time on practical activities, allows students to access course content before class, using classroom time to discuss, apply, and deepen the acquired knowledge. By moving information transmission out of the classroom, students engage in more active and student-centered learning during classes. This approach, originated and popularized by Bergmann and Sams (2012), has proven effective in increasing engagement and improving academic performance (Abeysekera and Dawson, 2015; Låg and Sæle, 2019).

On the other hand, collaborative work, grounded in Vygotsky's theory of social constructivism (1995), promotes the development of essential skills such as critical thinking, problem-solving, and effective communication. Defined by interaction and cooperation among students to achieve common goals, it has proven to be fundamental for the development of social and professional skills. Recent research has found that collaborative learning not only enriches the educational experience but also improves academic performance and interpersonal skills.



In the university teaching-learning process, the integration of the flipped classroom with collaborative work represents a powerful synergy that translates into a more enriching and dynamic educational environment. Students, having already acquired basic knowledge before class, are better prepared to engage in collaborative activities in the classroom. This not only facilitates a deeper understanding of the topics discussed but also promotes interpersonal and teamwork skills, increasingly valued in the professional world. The fusion of the flipped classroom and collaborative work also meets the needs of a diverse and technologically savvy student population. Today's students, digital natives, benefit from an educational approach that effectively integrates technology and promotes interactivity and collaboration (Zheng, et al., 2020; Gilboy et al., 2015).

Collaborative learning not only improves academic performance but also prepares students for the collaborative and globalized work environment, playing a crucial role in the development of soft skills such as communication, teamwork, and problem-solving, key skills for success in today's job market (Tomás-Miquel et al., 2016; Almajed et al., 2016; García-Morales et al., 2021). Regarding the impact of the flipped classroom on the development of soft skills, Moffett (2015) inferred that it promotes more active and collaborative learning, which is fundamental for the development of these essential skills.

Abeysekera and Dawson (2015) argue that the flipped classroom enhances student motivation and engagement, noting that pre-class preparation allowed for deeper learning during face-to-face sessions. The study by Schultz and Schultz (2017) examined how the flipped classroom can increase students' intrinsic motivation by providing a more active and student-centered learning environment. This study found that students in flipped classrooms report greater satisfaction and engagement with their learning. Solier et al. (2022) argue that the mixed model of flipped classroom and collaborative work can increase students' intrinsic motivation, indicating that students feel more motivated and engaged when they can actively collaborate with their peers, as well as more effective learning.

The study by Arráez et al. (2018) focused on a meticulous assessment of student satisfaction levels regarding the adoption of the flipped classroom methodology in a university setting. Their findings revealed a significant preference for this educational mode over conventional teaching practices, highlighting not only a higher degree of acceptance but also a notable advance in the uptake and understanding of the imparted knowledge.

Research on the application of flipped classroom strategies confirms that it is an effective approach that reports positive results in university students, such as improved academic performance, a significant improvement in students' understanding and ability to



apply knowledge, motivation and commitment to learning, self-efficacy, social interaction, and self-directed learning skills. In light of their findings, they suggest that this teaching strategy is key to promoting 21st-century learning skills and developing competencies in technological and information literacy (He, 2020; Cevikbas and Kaiser, 2020; Thai et al., 2017; Zainuddin et al., 2019a; Zainuddin et al., 2019b).

On the other hand, research conducted by González-Gómez et al. (2020) delves into the positive influence that active educational methodologies have in the field of higher education. They argue that these practices facilitate the fostering of student autonomy, the development of sharp critical thinking, and the acquisition of essential digital skills. In particular, focusing on the flipped classroom, they identify that its implementation enhances fundamental aspects such as collaborative and cooperative work, individual responsibility in the training process, more active participation, and a constructive critical stance. They conclude that, to achieve optimal effectiveness in the application of these methodologies, the active and joint involvement of all educational agents, including both teachers and students, is crucial. Moreover, they emphasize the importance of not eliminating traditional lectures, but rather integrating active methodologies as a vital complement to enrich and optimize the overall educational process.

In the era of digitalization, the role of technologies in education is undeniable. Studies like those of Means and Neisler (2020) highlight how digital technologies facilitate the strategy of merging the flipped classroom and collaborative work, offering opportunities for more enriching and varied learning experiences. They also highlight the role of technological tools, in that the effective use of technologies such as online platforms and collaboration tools significantly enriches the flipped classroom experience, facilitating both access to course material and interaction between students and teachers.

3 METHODOLOGY

The methodology employed is quantitative in nature, cross-sectional, and has exploratory and descriptive scope. The sample consisted of 93 university marketing students, selected through non-probabilistic convenience sampling. The selection criterion applied was that the student had no previous experiences with the flipped classroom methodology in other courses of their university curriculum. The study strictly adhered to ethical research principles, including informed consent, confidentiality, and respect for the autonomy of the participants. Before participating, all students were informed about the purpose of the study, the voluntary nature of their participation, and the confidential treatment of the collected data. Informed



consent was obtained from all participants before their inclusion in the study. The study was conducted during the period from February to June 2023.

For data collection, an ad hoc questionnaire was used, composed of 40 items related to the five studied blocks: academic performance, acquired cross-curricular competencies, satisfaction and motivation, use of ICT, and comparison with the traditional teaching method. The treatment and analysis of the collected data were analyzed using SPSS statistical software Version 29.

4 RESULTS AND DISCUSSIONS

Regarding the academic performance block, 85% of the students indicated that their understanding of course topics significantly improved with this method. Collaborative work, according to 80% of the respondents, played a crucial role in enriching their learning experience. Students valued the opportunity to discuss and debate ideas in a group setting, which allowed them to explore different perspectives and deepen their understanding of the topics. Additionally, 78% of the students reported an improvement in their ability to tackle and solve complex problems, suggesting that the collaborative learning approach helps to develop essential critical thinking skills. The feedback received during collaborative sessions was positively rated by 82% of the students. The significant improvement in the understanding and retention of course topics, with 85% of the students reporting a positive impact due to the flipped classroom. These results align with research by Prieto et al. (2021), Buhl-Wiggers et al. (2023), Fang et al. (2022), Låg et al. (2019), Lage et al. (2000), Thai et al. (2017), and Bredow et al. (2021).

However, it is important to contrast our findings with the research by Jensen et al. (2015), which warns about the variability of flipped classroom outcomes depending on the implementation and context. Also, it is crucial to consider the observations by Michael (2006), who noted that success in developing critical thinking and problem-solving skills largely depends on the course design and facilitation. Abeysekera and Dawson (2015) caution about the importance of considering the cognitive load associated with the flipped classroom. This warning is key since, although students perceive an improvement in their understanding, cognitive overload could counteract these benefits and affect long-term performance. Likewise, it is important to contemplate the appreciation by Buhl-Wiggers et al. (2023) that the implementation of innovative educational models may face cultural and adaptation challenges.



Cevikbas and Kaiser (2020) investigated the flipped classroom as a reformist approach in teaching mathematics, concluding that it can improve students' academic performance. These findings are in line with our results, where the flipped classroom proved beneficial in enhancing student understanding. The similarity in results suggests that the flipped classroom can be effective in different academic disciplines, not only in sciences or mathematics but also across a broader spectrum of study areas. Similarly, Zainuddin et al. (2019b) contrasted that the flipped classroom model is applicable to different academic disciplines, suggesting that its successful implementation requires specific adjustments that consider the particularities of each discipline.

Regarding the acquired cross-curricular competencies, 84% of the students reported having developed better communication skills, 73% of the respondents indicated they had experienced a strengthening in their critical thinking ability, and 90% of the students noted improvements in their ability to work in teams. Improvement in self-management and time organization was reported by 75% of the students, 80% perceived a stimulus in their creativity and innovation, attributing this to the less structured and more exploratory nature of collaborative learning. These findings align with the research by O'Flaherty and Phillips (2015), which highlighted how the flipped classroom can enhance interpersonal and collaborative skills. Johnson et al. (2014) emphasized the theory of social interdependence and cooperative learning, which aligns with our findings of an improvement in communication and teamwork skills. This parallel suggests that the flipped classroom, by fostering a collaborative learning environment, can be an effective means to develop critical interpersonal skills in students. Likewise, the results obtained reflect the observations of Strayer (2012) about the improvement of cooperation in the flipped classroom. This suggests that the structure of the flipped classroom, which promotes interaction and teamwork, is fundamental for the development of cross-curricular competencies.

Blau and Shamir-Inbal (2017) discuss the role of co-creation and co-regulation in the redesigned flipped classroom. Our results on the improvement of cross-curricular competencies can be seen in the context of their research, which suggests that co-creation of knowledge in a flipped classroom environment can significantly enhance students' collaborative skills.

However, it is important to consider the study by Bishop and Verleger (2013), which pointed out the need for longitudinal research to fully understand the impact of the flipped classroom on the development of cross-curricular skills. The findings of Strelan et al. (2020) warn that the impact on the development of cross-curricular skills may vary depending on group dynamics and the nature of collaborative work. Additionally, research by Kirschner et al. (2009)



suggests that collaborative learning is not always effective and can be counterproductive if not properly structured and guided.

In terms of satisfaction and motivation, 78% expressed an increase in their motivation to learn under the flipped classroom approach, with students valuing the increased interaction and practical learning that collaborative work provides. 83% of the students expressed a preference for classes that integrate collaborative work compared to traditional lecture-based classes. The overall satisfaction with the educational experience provided by the flipped classroom was reported by 85% of respondents. 80% of the students indicated feeling more engaged with their educational process. Additionally, 90% of the students stated they would recommend the flipped classroom and collaborative work method to other students, demonstrating the positive perception and confidence in the effectiveness of this approach.

These results are consistent with the findings of Hwang and Lai (2017), Schultz and Schultz (2017), Prieto et al. (2021), and Fang et al. (2022), which reported higher satisfaction and motivation among students participating in classes with active methodologies. O'Flaherty and Phillips (2015) support our results, suggesting that the flipped classroom, by engaging students more actively and allowing more autonomous learning, can lead to greater satisfaction and motivation in learning.

However, it is important to consider the challenges pointed out by Kuh et al. (2008), who indicated that the increased workload and pre-class preparation in the flipped classroom can negatively affect the motivation of some students, making it crucial to take into account individual differences in learning styles.

Agarwal and Kaushik (2020) explored student perceptions of online learning during the COVID-19 pandemic, highlighting significant challenges in terms of satisfaction and motivation. Although our study focused on the flipped classroom, the comparison is relevant, as both contexts require greater student autonomy. Our findings, which indicate high satisfaction and motivation among students in the flipped classroom, offer an interesting counterpoint, suggesting that when online or remote learning is structured effectively, as in the flipped classroom model, it can lead to greater student satisfaction and motivation.

Regarding the use of ICT, 87% of the students stated that the technological tools used in the flipped classroom had enhanced their learning experience. 74% of the students felt comfortable using ICT to collaborate and learn, indicating a successful adaptation to digital tools. Online platforms, which facilitated interaction and teamwork, were positively valued by 79% of the respondents. 87% of the students considered that the use of technology in the flipped classroom had helped them better access learning resources, implying greater autonomy and



efficiency in managing their educational process. Additionally, 85% found that ICT had made their learning process more interactive and engaging, a crucial aspect for maintaining motivation and interest in the topics addressed.

92% of the students in our study positively valued the use of ICT in the flipped classroom. This high degree of acceptance finds support in the existing literature, such as the study by Hung (2015), which highlights how ICT can facilitate active and collaborative learning. The effectiveness of ICT in enhancing interactivity and access to learning resources, as observed in our study, aligns with the conclusions of Means et al. (2010), who noted the potential of digital technologies to improve student performance and engagement. However, it is vital to consider the challenges in the implementation of ICT identified by Margaryan et al. (2011), who warn about the gap in digital skills and the need for adequate training for both students and educators. The studies cited above align with the results obtained, inferring that the effective use of ICT enriches the flipped classroom experience, facilitating both access to course material and interaction between students and teachers. In the same vein, Jeong et al. (2020) argue that the flipped classroom model, by requiring students to interact with digital resources and online platforms, fosters the development of critical digital skills.

Basilaia and Kvavadze (2020) examined the transition to online education during the COVID-19 pandemic in Georgia, highlighting how the effective use of ICT can facilitate educational continuity in times of crisis. Although our study focused on the flipped classroom, both share a critical dependency on ICT. Our findings, which show a positive valuation of ICT use in the flipped classroom, corroborate Basilaia and Kvavadze's idea that ICT, when used appropriately, are crucial tools in the educational process.

Aşıksoy and Özdamlı (2016) adapted the flipped classroom to the ARCS motivation model (attention, relevance, confidence, and satisfaction), observing improvements in student motivation and performance. This innovative approach highlights how the strategic use of ICT, combined with motivation theories, can enrich the learning experience in the flipped classroom. Our results, indicating a high degree of satisfaction with the use of ICT, reflect this observation, and suggest that careful integration of ICT can be a key factor in the success of the flipped classroom.

Comparative items between the flipped classroom, collaborative work, and the traditional university teaching method revealed that 81% of the students felt that the flipped classroom and collaborative work facilitated a better understanding of topics compared to the traditional method. 77% of respondents considered group work within the flipped classroom to be more effective for their learning than traditional lectures. Additionally, 79% of students



indicated that their participation in the classroom was greater in the flipped classroom and collaborative work model than in the traditional method, demonstrating greater involvement and commitment to the learning process.

Regarding feedback, 82% of students opined that the feedback received in the flipped classroom and during collaborative work was more useful for their academic development. 85% of respondents expressed that the flipped classroom and collaborative work fostered the development of critical skills and problem-solving more than the traditional method. 80% of students reported that the flipped classroom and collaborative work had better helped to develop their communication and teamwork skills compared to the traditional method.

The preference for the use of information and communication technologies in the flipped classroom and collaborative work was expressed by 88% of the students, compared to traditional teaching.

Finally, 90% of students reported being more motivated and committed to their learning in a flipped classroom and collaborative work environment than in a traditional teaching environment.

The results obtained highlighted a preference for the flipped classroom and collaborative work over traditional methods. This finding is consistent with the study by Freeman et al. (2014), which demonstrated that active learning techniques, such as the flipped classroom, are more effective than traditional lectures in improving academic performance. They also align with the results of Strayer (2012), suggesting that the flipped classroom can foster greater orientation towards cooperative work and innovation. Highlighting the study by Ardan et al. (2020), which offers a perspective on how non-traditional teaching methods, like the flipped classroom, can help mitigate stress and anxiety by fostering a more flexible and adaptive learning environment compared to traditional teaching methods.

Blau and Shamir-Inbal (2017) examined a redesigned flipped classroom model that emphasized co-creation and co-regulation, which can be compared with our observation that students prefer the flipped classroom and collaborative work. Their focus on co-creation and co-regulation in the flipped classroom supports the idea that these methods can be more effective than traditional methods in promoting more active and participatory learning. However, it is crucial to consider the limitations pointed out by Wieman (2014), who suggests that the benefits of active learning depend largely on how these strategies are implemented in the classroom.

Therefore, the results suggest that the flipped classroom and collaborative work have an overall positive impact on higher education, in line with much of the current scientific literature.



However, it is also evident that careful consideration of implementation and context is necessary to maximize their effectiveness. Variations in outcomes, depending on factors such as discipline, course design, and the digital skills of participants, are crucial aspects that must be considered. These findings underscore the importance of a balanced and adaptive approach in applying innovative methodologies in higher education.

5 CONCLUSION

The integration of the flipped classroom and collaborative work in higher education offers a promising methodology, supported by empirical evidence, that improves academic performance, cross-curricular competencies, student satisfaction, and motivation, while leveraging the advantages of ICT. This approach not only challenges the traditional classroom structure but also prepares students for more autonomous and adaptive learning. It is essential to recognize that the effectiveness of these methodologies can be influenced by multiple factors, including specific implementation, student characteristics, and the conditions of the learning environment. Therefore, careful and thoughtful implementation is recommended, considering the needs and particularities of each educational context.

Cross-curricular competencies are fundamental in fostering skills such as effective communication, teamwork, time management, and conflict resolution. These competencies are essential not only in the academic sphere but also in professional and personal realms. The ability of students to collaborate effectively, communicate clearly, and solve problems creatively are skills that will serve them throughout their lives.

Therefore, this dual methodology aligns with global trends in higher education, which aim to prepare students in technical knowledge and also in soft skills essential for their professional and personal success. Today's students, immersed in a digital world, benefit from an educational approach that effectively integrates technology and promotes interactivity and collaboration. It also prepares students for a collaborative and globalized work environment, playing a crucial role in the development of soft skills essential for success in today's job market. The adoption of these innovative strategies is a step towards creating more inclusive, interactive, and effective learning environments, preparing students for the challenges and opportunities of the future.



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