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Nicaragua

Disruptive strategies in the face-to-face and blended modality of the University of Managua, Nicaragua

Estrategias disruptivas en la modalidad presencial y semipresencial de la Universidad de Managua, Nicaragua

Estratégias disruptivas na modalidade presencial e mista da Universidade de Manágua, Nicaragua

Abstract

Introduction: higher education has transformed with the integration of in-person and blended learning modalities, necessitating innovative strategies that address student needs. **Objective:** this study aims to analyze the disruptive strategies implemented in the Methodological Guide of the University of Managua, Nicaragua, for both in-person and blended educational modalities. **Method:** a qualitative study with a descriptive approach was conducted, based on the analysis of the Methodological Guide updated in September 2024. The guidelines and recommendations for implementing both modalities were examined, considering the use of technologies, teacher-student interaction, and evaluation strategies. **Results:** the Methodological Guide promotes a socio-constructivist approach, integrating artificial intelligence, the Google Classroom platform, and the requirements of the National Education Strategy by the National Council of Universities in Nicaragua, and the National Learning Evaluation System, to enrich the teaching-learning process in both modalities. **Conclusion:** the importance of flexibility, active student participation, and continuous evaluation is highlighted. The University of Managua implements disruptive strategies aimed at achieving dynamic, student-centered learning, adapting to the demands of current education.

Keywords: higher education, disruptive strategies, educational modality, face-to-face modality, blended modality

Resumen

Introducción: la educación superior se ha transformado con la integración de modalidades presenciales y semipresenciales, exigiendo estrategias innovadoras que respondan a las necesidades de los estudiantes. **Objetivo:** analizar las estrategias disruptivas implementadas en la Guía Metodológica de la Universidad de Managua, Nicaragua para la modalidad educativa presencial y semipresencial.



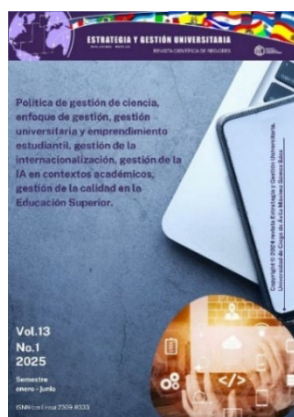
Método: se realizó un estudio cualitativo, con un enfoque descriptivo, basado en el análisis de la Guía Metodológica, actualizada en septiembre de 2024. Se examinaron las directrices y recomendaciones para la implementación de ambas modalidades, considerando el uso de tecnologías, la interacción docente-estudiante y las estrategias para la evaluación. **Resultados:** la Guía Metodológica promueve un enfoque socioconstructivista, integrando la inteligencia artificial, la plataforma Google Classroom y las exigencias de la Estrategia Nacional de Educación, del Consejo Nacional de universidades en Nicaragua y lo relacionado con el Sistema Nacional de Evaluación para los aprendizajes, para enriquecer el proceso de enseñanza-aprendizaje en ambas modalidades. **Conclusión:** se destaca la importancia de la flexibilidad, la participación activa del estudiante y la evaluación continua. La Universidad de Managua implementa estrategias disruptivas que buscan un aprendizaje dinámico y centrado en el estudiante, adaptándose a las demandas de la educación actual.

Palabras clave: educación superior, estrategias disruptivas, modalidad educativa, modalidad presencial, modalidad semipresencial

Resumo

Introdução: a educação superior tem se transformado com a integração de modalidades presenciais e semipresenciais, exigindo estratégias inovadoras que respondam às necessidades dos estudantes. **Objetivo:** este estudo visa analisar as estratégias disruptivas implementadas no Guia Metodológico da Universidade de Manágua, para as modalidades educacionais presencial e semipresencial. **Método:** foi realizado um estudo qualitativo, com abordagem descritiva, baseado na análise do Guia Metodológico atualizado em setembro de 2024. Foram examinadas as diretrizes e recomendações para a implementação de ambas as modalidades, considerando o uso de tecnologias, a interação professor-aluno e as estratégias de avaliação. **Resultados:** o Guia Metodológico promove uma abordagem socioconstructivista, integrando inteligência artificial, a plataforma Google Classroom e as exigências da Estratégia Nacional de Educação, do Conselho Nacional de Universidades na Nicarágua e do Sistema Nacional de Avaliação para as aprendizagens, para enriquecer o processo de ensino-aprendizagem em ambas as modalidades. **Conclusão:** Destaca-se a importância da flexibilidade, da participação ativa do estudante e da avaliação contínua. A Universidade de Manágua implementa estratégias disruptivas que buscam uma aprendizagem dinâmica e centrada no estudante, adaptando-se às demandas da educação atual.

Palavras-chave: ensino superior, estratégias disruptivas, modalidade educacional, modalidade presencial, modalidade semipresencial



Introduction

Current education is characterized by the integration and transformation of information and communication technologies (ICT) in university teaching and learning processes. Various authors have explored the impact of ICT on higher education (Christensen et al., 2008; Bates, 2019; Becerra Sánchez, 2020; Margiono, 2021; Morales Romero et al., 2023), highlighting the need to adapt traditional methodologies to innovation. Similarly, the role of the university professor still predominantly revolves around lecture-based instruction, responding to criteria such as didactic: content organization; pedagogical: sequence of presentation; and communicational: attention spans and student feedback (Paredes Mallea, 2020).

The teaching strategy presented is didactic, as it facilitates the students' assimilation process and motivates them, although its ultimate aim is to facilitate the learning process, acknowledging that learning is an individual construct and the institution must transition to other teaching roles that emphasize student learning activities and diversify instructional approaches. In this sense, the traditional face-to-face modality, historically the cornerstone of university education, has been complemented and, in some cases, replaced by blended and virtual modalities. This shift has generated growing interest in understanding how educational strategies, particularly disruptive ones, impact student learning and experiences in new university environments.

The blended learning modality is gaining traction in higher education institutions (Zablith, 2022; Addae and Kwapong, 2023; Lévantó et al., 2024), offering flexibility and access to digital resources. However, effective implementation requires disruptive strategies that promote active, student-centered learning (Bouchard, 2023; CNU, 2023a; Sistema Nacional de Evaluación, 2024). This study focuses on analyzing the strategies implemented by the University of Managua for both face-to-face and blended modalities, aiming to identify innovations that contribute to the improvement of the educational process, as instructed by the National Council of Universities (CNU, 2023b).

The aforementioned perspectives are consistent with the constructivist approach. This psychopedagogical perspective is a learning theory positing that individuals construct their own knowledge from prior experiences and interactions with their environment (Jiménez Gómez and Carmona Suarez, 2023; Muñoz Lira and Bruna Gaete, 2024). In more traditional approaches, learning is viewed as the simple transmission of information from educator to student. In contrast, constructivism emphasizes the importance of active student participation in the educational process (Wyatt, 2024). Students are seen as active agents who construct their understanding of the world through exploration, reflection, and collaboration with others.

Constructivism suggests that professors should act as facilitators of learning, creating an environment where students feel motivated to investigate and question. This involves using methodologies that foster critical thinking, problem-solving, and teamwork. Moreover, the constructivist approach highlights the importance of contextualizing learning, that is, placing knowledge in real-life situations that are relevant to students. This is supported by two perspectives: meaningful learning and situated teaching.

This approach promotes more meaningful learning, as students connect new concepts with their prior knowledge. Meaningful learning is a pedagogical approach focused on the connection between new knowledge and the student's previous experiences (Wirestam, 2024). This type of learning is based on the idea that for information to be effectively retained, it must be linked to existing concepts in the learner's mind. By establishing these connections, students gain understanding and can apply what they have learned in various situations. This fosters deeper, more lasting comprehension, facilitating the transfer of knowledge to different contexts.

Meaningful learning promotes intrinsic motivation, as students feel more engaged in their learning process when they can relate what they are studying to their daily lives or personal interests. Educators who implement meaningful learning strategies, such as using practical examples, collaborative projects, and group discussions, enable students to develop skills that will allow them to face future challenges with greater effectiveness and creativity (Quintero Rivera, 2024).

Situated learning is a pedagogical approach that emphasizes the importance of context in the learning process. It promotes the idea that learning is more effective when anchored in real-world situations. This approach allows students to connect theory with practice, fostering the application of knowledge in relevant contexts. By involving students in activities that reflect authentic challenges and problems, their motivation is stimulated, leading to more significant and lasting learning.

Such an approach acknowledges the diversity of experiences and backgrounds that each student brings to the classroom. By valuing these individual contexts, an inclusive learning environment is created that promotes collaboration and the exchange of ideas (Vandeyar, 2022). Educators who implement this approach often use strategies such as project-based learning, case studies, and simulations. This allows students to work in teams and develop critical skills such as problem-solving and critical thinking. Ultimately, situated learning aims to cultivate citizens capable of engaging with and contributing to the complexities of the contemporary world.

The University of Managua, in its pursuit of academic excellence, implements an Educational Model that integrates both face-to-face and blended learning modalities, recognizing the importance of adapting to the needs of students and the current technological context within the framework of a socioconstructivist approach. This model aims to achieve better learning outcomes by integrating educational materials, student assistance, and teaching resources, particularly the Google Classroom Educational Platform, along with the available active learning time (Universidad de Managua, 2024).

The Educational Model of the University of Managua promotes a comprehensive approach that evaluates academic results and the development of skills in students to ensure equity and inclusion in education. It emphasizes meaningful and contextualized learning that responds to students' needs, thereby enhancing critical reflection and innovation in teaching methodologies. This ensures that each student has the opportunity to reach their maximum potential in a quality educational environment, fostering critical, creative, and socially committed

citizens. To this end, it enhances teacher training and educational innovation to address contemporary challenges in the educational field, ensuring holistic human development for Nicaraguan communities (Sistema Nacional de Evaluación, 2024; CNU, 2023c).

The previous analysis emphasizes that lessons should be developed in accordance with the modality, focused on a dynamic and participatory learning environment that centers on the student and aims at skill development. This environment should promote critical thinking, collaboration, creativity, and problem-solving, rather than merely transmitting information passively (CNU, 2023b). The study analyzes the disruptive strategies promoted in the University's Methodological Guide to understand how the integration of technology, student participation, and assessment is being addressed in both modalities, as well as the innovative practices being implemented, thus contributing to the development of a more effective educational model adapted to the demands of the 21st century.

The University of Managua faces the challenge of adapting its teaching methods to the new generations of students and the demands of the job market, thereby creating an opportunity to evaluate the effectiveness of disruptive strategies in improving learning and the student experience. This involves digital and pedagogical transformation, contributing to the advancement of knowledge in the field of educational innovation, while referencing research from various authors (Posada Prieto, 2017; Alalwan, 2022; Flores González, 2022; Casimiro Perlaza y Torres Daza, 2023; Camarillo Hinojoza, 2024).

Methods and materials

This research involved a qualitative study with a descriptive approach, focusing on the analysis of the Methodological Guide from the University of Managua to assess the opportunities provided by disruptive strategies. This guide is oriented towards classes in the updated face-to-face and blended modalities as of September 2024. It includes information on guidelines and recommendations for the implementation of both modalities. The analysis covered sections related to methodological structure, the use of technology, teacher-student interaction, and evaluation strategies.

This aligns with the National Learning Evaluation System (SNEPA), the National Education Strategy (ENE), and the standards set by the CNU. Additionally, a content analysis was conducted to identify disruptive strategies, active student participation, flexibility in learning, and adaptation to individual needs (Chibaya, 2024). A case study approach was adopted, focusing on the University of Managua as the specific context for analyzing the implementation and impact of disruptive strategies in both face-to-face and blended modalities. The case study design allowed for an understanding of the phenomena within their natural context, considering the complexity and particularities of the institution (Almogren, 2023; Borkowski, 2024). This approach was deemed relevant as it facilitated an in-depth exploration of participants' experiences and perceptions regarding disruptive strategies.



For data collection, focus groups were employed with students from both modalities to interpret their perspectives on the learning experience with disruptive strategies. Groups of five students were formed, ensuring heterogeneity in terms of majors and years of study. Discussions were guided by questions exploring students' perceptions of: 1) the usefulness of the strategies, 2) their impact on motivation, 3) participation, and 4) learning, as well as suggestions for improving their implementation. The focus group sessions were recorded for subsequent transcription and analysis.

Results and discussion

The Methodological Guide for face-to-face and blended educational modalities was analyzed in detail and constituted the case study for the research context. The analysis reveals opportunities to deepen the integration of disruptive strategies. Several observations emerged from the methodological work carried out by the Program Coordinators, with the participation of professors and the Academic Teaching Office. These efforts are directed by the Office of the Vice-Rector for Academic Affairs for the continuous improvement of the teaching-learning process and the implementation of the Educational Model.

The guide is designed for professors to support them in developing lessons that correspond to the particularities of each educational modality (face-to-face and blended). This is aimed at implementing disruptive strategies in various activities to enhance meaningful learning. This integration is framed within the socioconstructivist approach to achieve better learning outcomes. It encompasses educational materials, student assistance, teaching resources—particularly the Google Classroom educational platform—and the available active learning time.

It is emphasized that lessons should be conducted in accordance with the modality, focusing on a meaningful, dynamic, and participative learning environment centered on the student and oriented towards skill development. Furthermore, it takes place in a context that promotes critical thinking, collaboration, creativity, and problem-solving. This is in contrast to merely transmitting information passively, favoring actions that enhance the application of disruptive strategies.

The use of artificial intelligence (AI) is enhanced by providing innovative tools that transform and enrich the teaching-learning process through disruptive strategies. It is specified how AI will be integrated into both in-person learning activities and the online platform, and how these integrations will transform the learning experience. The goal is to personalize the educational experience by adapting content and disruptive strategies to the individual needs of students. Additionally, Google Classroom facilitates learning management, optimizing interaction between teachers and students. Its implementation promotes a more dynamic and participatory learning environment, enhancing feedback and the development of critical and creative skills, thus preparing students for a constantly evolving job market. In its application the following elements are included:

- Virtual tutors for personalized assistance to students by answering questions and helping with the understanding of difficult concepts, thereby facilitating self-directed learning.
- Educational data analysis, as a tool for the analysis of student performance through their interactions on the educational platform, allowing educators to identify patterns and areas for improvement to adapt their teaching strategies.
- Personalized content tailored to each student's level of understanding and learning preferences, improving information retention.
- Automated assessment for the automatic grading of exams and other evaluative activities, providing immediate feedback to students, optimizing teachers' time, and enhancing the overall efficiency of the educational process.
- Simulations and augmented reality for the creation of immersive learning environments where students can practice skills in realistic scenarios, facilitating the practical application of theoretical concepts.
- Resource recommendations, systems that suggest complementary materials (articles, videos, exercises) based on student performance and interests, enriching their learning experience.

The analyses above align with the SNEPA (2024), promoting a comprehensive approach that evaluates academic outcomes and skill development in students. This approach aims to ensure equity and inclusion in education, facilitating meaningful and contextualized learning that meets students' needs. Furthermore, it encourages critical reflection and innovation in active teaching methodologies, ensuring that each student has the opportunity to reach their maximum potential in an educational environment that leverages disruptive strategies.

This perspective is consistent with the ENE by focusing on inclusion, equity, and the transformation of educational quality, which are recommended for the implementation of disruptive strategies. The goal is to cultivate critical, creative citizens who are committed to their communities. Furthermore, it emphasizes the need for a structured framework that enhances teacher training and educational innovation to address contemporary challenges in education. This approach aims to ensure human development for the country's communities.

The analyzed results coincide with current trends in higher education, emphasizing creativity and innovation in learning activities. These aim for a more personalized, meaningful, flexible, and student-centered learning experience (Sánchez and Reyes Rojas, 2022; CNU, 2023c). The integration of AI emerges as a promising tool to improve the efficiency and effectiveness of the teaching-learning process in applying disruptive strategies (Boyer, 2023).

The University of Managua, as outlined in its guide, is making progress in implementing digital transformation (Jiménez Becerra, 2020). However, it is important to explore other case study methods (e.g., exercise-based case, situational case, complex case, critical incident, decision case, sequential case, role-playing, among others), as this would enhance the informational aspect. The

use of questionnaires in both in-person and virtual activities is prioritized with Google Forms. Despite this, other tools such as Formative, Socrative, Plickers, Microsoft Forms, and ThatQuiz are acknowledged. For constructing mind maps and diagrams, tools like Lucidchart, Popplet, Mindomo, and others are proposed.

For infographic creation, the focus is limited to Canva and Genially, while also considering tools like Creately, Easel.ly, Infogr.am, Venngage, and Piktochart. For interaction in person or on the platform, not only is the use of IdeaBoards recommended, but also Slido, Mentimeter, Ncarpod, Pear Deck, Wooclap, and Aha Slides. In terms of creating timelines, it is suggested to explore additional tools not mentioned in the guide, such as Timeline JS, Tiki Toki, Remembre, TimeToast, and Preceden. For organizing teamwork, both in-person and virtual, the following tools are recommended as essential for learning how to learn: Trello, Asana, Slack, Ideaflip, Evernote, Symbaloo, Nozbe, Hibox, Do It Tomorrow, and Mindmeister. Essentially, students should take ownership of processes, procedures, and strategies to develop their skills.

Regarding digital transformation, the guide focuses on tools such as Google Classroom, Google Forms, and Canva. While these are useful, diversifying with other tools mentioned earlier (Formative, Socrative, Lucidchart, Trello, among others) would enhance the learning experience. Additionally, it would facilitate the implementation of more disruptive strategies. For instance, the use of gamification platforms or virtual reality could boost motivation and experiential learning.

The Methodological Guide also analyzed the syllabus structure, which made an emphasis on the detailed description of learning activities that are timely for implementing disruptive strategies. These are classified by type (debates, case analyses, educational games, and others) and by their application environment (in-person or virtual via Google Classroom). Furthermore, the importance of aligning learning activities, teaching resources, and evaluation techniques was evident. It is recommended to update activities with examples of innovative tools and strategies proposed in the previous analyses, as stated by Cassany (2021).

In the syllabus, the evaluation system emphasizes the need for a systematic and continuous process that allows for gathering data on student progress. This approach aims to motivate students through the use of disruptive strategies and the manner in which they are assessed. Various instruments, including peer assessment, self-assessment, and feedback, are employed in alignment with the SNEPA (2024). An explicit recommendation regarding the use of disruptive strategies was observed in the syllabus structure, emphasizing the establishment of a dynamic relationship among learning activities, resources/techniques, and evaluation.

Another interesting aspect of the Methodological Guide is the importance given to independent study and the detailed guidance for its implementation, which constitutes an innovative element. Although the guide mentions the development of skills, a greater specificity is needed regarding how this will be achieved through disruptive strategies. It is suggested that methodologies such as project-based learning, problem-based learning, or challenge-based learning be incorporated to promote critical thinking, creativity, and collaboration.

Moreover, while the importance of independent study is highlighted, the guide does not provide concrete examples of how this can be enhanced with disruptive strategies. Suggestions could include micro-learning platforms, open educational resources, or content curation tools that allow for more autonomous and personalized learning. Consequently, a revision of the guide is proposed to include the following disruptive strategies:

- ✓ Personalized learning with AI, implementing adaptive learning platforms to adjust content and pace to meet the individual needs of each student.
- ✓ Gamification, integrating game elements into learning activities to increase student motivation and engagement.
- ✓ Virtual and augmented reality, utilizing technologies to create immersive and practical learning experiences.
- ✓ Project-based learning, allowing students to apply their knowledge and develop skills in real-world contexts.
- ✓ Flipped classroom, inverting the traditional classroom dynamic by using in-person time for practical and collaborative activities, while virtual time is dedicated to knowledge acquisition.

Discussions in the focus group revealed that the University of Managua implements disruptive strategies in both its in-person and blended modalities, aimed at fostering active learning. However, participants also expressed a need to diversify these strategies in learning activities. The self-study guide encourages the use of diverse, current tools aligned with digital transformation, although it requires a greater variety of examples. This diversification is essential for students to appropriate knowledge, results, processes, procedures, and strategies. In this way, they can develop skills and competencies, highlighting the importance of exploring students' conceptions of learning.

It is also made explicit that the integration of AI in face-to-face lessons and the Google Classroom platform foster the creation of a more flexible, personalized learning environment tailored to the demands of higher education, although it may be expanded based on the evolution of knowledge. Collaborative work and the practice of formative assessment promote autonomy, as evidenced by students' conceptions of learning. Consequently, the University of Managua explicitly outlines some disruptive strategies in its face-to-face and blended modalities, although these need to be updated to ensure a dynamic, student-centered learning experience focused on innovation and continuous improvement in the educational process.

The Methodological Guide for both educational modalities at the University of Managua requires teachers to engage in thorough and detailed planning of their actions concerning the application of disruptive strategies in student activities. It necessitates addressing how to create a climate of active participation, clarifying the objectives of the work to students, outlining its characteristics, specifying the time allotted for its completion, detailing the steps to be followed, and establishing criteria for evaluation, grading, and feedback. In this way, disruptive strategies can be varied to enrich educational interventions and enhance student engagement.

While the Methodological Guide from the University of Managua for face-to-

face and blended modalities serves as a significant document for planning and organizing instruction, it requires revision to fully align with a framework based on disruptive strategies. Although the document acknowledges the importance of active, collaborative, and student-centered learning, its transformative potential is limited by a lack of specificity in integrating these strategies. Simply mentioning disruptive strategies is insufficient; it is crucial to move beyond rhetoric and operationalize the integration of approaches such as personalized learning. When effectively implemented, these can transform the learning experience and promote the development of essential skills for the 21st century.

The guide should extend beyond traditional tools and explore the potential of adaptive learning platforms, open educational resources, gamification tools, and immersive virtual environments. This diversification will enrich learning activities, allowing for greater personalization and flexibility. The success of this transformation will depend on teacher training, which is necessary for effectively implementing disruptive strategies. A continuous process of evaluation and feedback will enable the adjustment of pedagogical practices and ensure meaningful learning for all students.

The analysis of the scientific literature on disruptive strategies in higher education reveals a growing interest in how these methodologies can transform the teaching-learning process (Sekerci & Erdem, 2022; Palmer & Choi, 2023; Tien, 2024). This corresponds with the analyzed guide and the view that disruptive strategies effectively correspond with the principles of constructivism (Ang & Ng, 2022; Almulla, 2023; Cameron, 2023). These strategies include approaches such as project-based learning, the use of emerging technologies, and gamification (Grushow, 2022; Hartman, 2024; Sañudo Guerra, 2022), as demonstrated by the results of the current study. This pedagogical approach posits that students construct their own knowledge through meaningful experiences. This supports the proposal that disruptive strategies should not only be innovative but also relevant to the students' context (Molina Alfonso, 2000).

From a constructivist perspective, learning is conceived as an active process in which students are active participants in the creation of their knowledge (Meyer, 2023; Saether, 2024). This contrasts with traditional teaching methods, which are often more passive and instructor-centered. The literature suggests that disruptive strategies can facilitate a more dynamic and participatory learning environment (Nyika, 2022; Ngoc & Hercz, 2024), aligning with the analyses conducted. Accordingly, the guide is oriented towards students with an approach that encourages them to collaborate, discuss, and solve problems in authentic contexts.

Meaningful learning, another fundamental pillar of constructivism, refers to the connection between new knowledge and the student's prior knowledge (Kobylarek, 2024). Disruptive strategies, by focusing on relevance and practical application, enhance this connection (Amani & Fussy, 2023; Morris, 2024), corroborating the main aspects addressed in the present study. The literature highlights that learning experiences that include practical and collaborative elements help students integrate new information more effectively (Houde, 2022; Janis, 2022). Consequently, the Methodological Guide not only improves knowledge

retention but also promotes a more holistic understanding of the subjects studied.

The implementation of disruptive strategies in higher education is not without obstacles, despite their potential benefits. The literature highlights resistance to change among older professors, who may feel uncomfortable abandoning traditional methods (Martell, 2022; Doroudi, 2023). This was evidenced at the University of Managua, which hindered the implementation of disruptive strategies. Teacher training and access to technological resources are critical factors that determine the success of these strategies (Corcoran, 2024). Therefore, it is essential for the University of Managua to enhance the continuous training of professors and the necessary infrastructure to adopt these disruptive methodologies.

Finally, the analysis of scientific literature suggests that disruptive strategies have the potential to transform higher education, but their effectiveness depends on careful and reflective implementation (Badal & Vandeyar, 2023). By aligning with the principles of constructivism and meaningful learning, these strategies can create more inclusive and motivating learning environments (Keazer, 2023; Montero, 2023). Consequently, the analyzed guide is based on these principles and proposes collaboration between professors and students to cultivate an educational ecosystem that values innovation and relevance in learning.

Conclusions

The Methodological Guide for the face-to-face and blended modalities at the University of Managua is a significant document. It facilitates the planning, organization, and communication of content, objectives, and learning activities. These are fundamentally based on disruptive strategies, teaching resources, and evaluation techniques and criteria for a course, with a formative emphasis that systematically requires feedback.

This guide serves as a clear and structured resource for educators. It establishes expectations and the anticipated learning outcomes. It emphasizes that current lessons move away from traditional teaching methods and focus on fostering an active, collaborative, and student-centered learning environment. Essential skills for the 21st century are promoted, and there is a need to update digital tools in light of advancing knowledge.

The integration of disruptive strategies would transform the Methodological Guide of the University of Managua, shifting from a mere description of modalities to a concrete proposal for active, personalized, and student-centered learning. This would enable the University of Managua to align with current trends in higher education and prepare its students for the challenges of the 21st century. Additionally, diversifying tools and incorporating AI would enrich the learning experience and promote the development of essential skills. The implementation of disruptive strategies will require adequate teacher training and continuous evaluation to ensure effectiveness.

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