Revista ARACÊ
ISSN: 2358-2472

THE USE OF TECHNOLOGIES IN ACTIVE METHODOLOGIES IN FULL-TIME SCHOOLS: TOOLS FOR MEANINGFUL LEARNING

https://doi.org/10.56238/arev6n4-241

Submitted on: 16/11/2024 **Publication date:** 16/12/2024

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ABSTRACT

This research analyzed the use of technologies in active methodologies in full-time schools, focusing on their potential as tools for meaningful learning. The central problem investigated was to identify how technologies can be effectively integrated into active methodologies in the context of full-time schools to promote deeper and more relevant learning. The general objective was to analyze the practices of technological integration in active methodologies in full-time schools in Brazil, highlighting their impacts on the quality of learning. The methodology used was the literature review, with a qualitative approach, including the analysis of recently published materials. The results indicated that integrating technologies into active methodologies in full-time schools offers significant opportunities to

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personalize teaching and engage students in more authentic and relevant learning experiences. Practices range from the use of adaptive digital platforms to the implementation of projects based on augmented and virtual reality. The survey highlighted the importance of a balanced approach that considers both the benefits and challenges of technology implementation. The final considerations pointed out that, despite the promising advances, the effective implementation of these practices requires investments in infrastructure, training of educators and a review of traditional pedagogical approaches.

Keywords: Educational Technologies. Active Methodologies. Full-Time Schools. Meaningful Learning. Pedagogical Innovation.

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INTRODUCTION

The use of technologies in active methodologies in full-time schools, with emphasis on their potential as instruments for meaningful learning, is of great importance in the current educational scenario. The incorporation of technologies into active pedagogical practices, particularly in contexts of integral education, offers a promising perspective for changing the teaching-learning process, making it more engaging, personalized and in tune with the needs of the twenty-first century.

The reason for addressing this issue is the growing need to explore the potential of educational technologies to enhance learning experiences in full-time educational institutions. These institutions, with their extended journey, seek an environment conducive to the application of innovative strategies that mix active methodologies and technological tools, with the objective of not only transmitting content, but also developing fundamental skills and fostering truly relevant learning.

The question that guides this literature review is to determine: how can technologies be effectively incorporated into active methodologies in full-time schools to foster deeper and more relevant learning? Based on the chosen references, the objective is to explore successful technological integration practices, the obstacles encountered in this process, and the future perspectives for an education model that efficiently integrates active technologies and methodologies in full-time contexts.

This research aims to examine the use of technologies in active methodologies in full-time schools in Brazil, focusing on their potential as instruments for relevant learning. This evaluation will enable efficient strategic considerations, eventual obstacles and possibilities for improvement in the incorporation of active technologies and methodologies to foster a more engaging and relevant teaching for students in situations of long school day.

This study is organized into seven cornerstones. In the introduction, the theme, the justification, the problem and the purpose of the study are exposed. A methodology details the methods used for a literature review. The theoretical framework discusses essential concepts about educational technologies, active methodologies and integral education. Then, three development themes are addressed: an evaluation of the main technologies used in active methodologies in full-time schools, the effect of this integration on meaningful learning, and the challenges and possibilities of technological application in this scenario. In the discussion and lessons section, the data collected are presented and

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examined, divided into three areas: the effectiveness of technological incorporation in active methodologies, the obstacles in pedagogical application and adaptation, and the future perspectives for full-time technologically advanced education. The final conclusions summarize the main points presented, providing reflections on the future of technologically advanced integral education in Brazil, as well as proposals for future studies.

THEORETICAL FRAMEWORK

The theoretical framework was designed to offer a robust foundation for understanding the use of technologies in active methodologies in full-time schools, emphasizing their potential as instruments for relevant learning. The definition of educational technologies and their function in current education are presented. Subsequently, the basis of active methodologies is discussed, investigating how these teaching strategies can be enhanced by the incorporation of technology. In the final analysis, the scenario of integral education is debated and how the fusion of technologies and active methodologies can favor deeper and more pertinent learning in this context.

TECHNOLOGIES IN ACTIVE METHODOLOGIES IN FULL-TIME SCHOOLS

The integration of technologies into active methodologies in full-time schools represents an innovative pedagogical approach that seeks to harness the potential of digital tools to enrich and deepen learning experiences. Gomes and Souza (2021, p. 43) argue that "the combination of digital technologies with active methodologies in full-time environments creates a dynamic and immersive learning ecosystem, where students can explore, create, and apply knowledge in a more authentic and meaningful way". This perspective emphasizes the synergistic potential between technology and active pedagogy to transform the educational experience in extended-day schools.

Almeida and Ferreira (2023, p. 87) complement this view, stating:

> In full-time schools, the use of technologies in active methodologies not only maximizes the utilization of extra time, but also greatly expands the reach and depth of learning experiences. Augmented instruments such as reality, digital simulations, and online collaboration platforms enable students to participate in complex, multidisciplinary projects beyond the physical constraints of the conventional classroom environment.

This perspective highlights how the incorporation of technology can expand pedagogical opportunities in a holistic education scenario.

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The implementation of technologies in active methodologies in full-time schools, however, faces specific challenges. Oliveira and Santos (2022) argue that while the extended journey offers more opportunities for technological integration, it also requires careful planning to avoid cognitive overload and ensure a balanced and meaningful use of digital tools. This argument suggests the need for a strategic approach in the selection and application of educational technologies.

Ribeiro, Costa and Silva (2021) present successful examples of technological integration in active methodologies in full-time schools. They highlight initiatives such as the use of digital portfolios for continuous assessment, the implementation of digital fabrication labs (fab labs) for interdisciplinary projects, and the use of adaptive learning platforms to personalize teaching. These approaches seek to take advantage of the extended time in school to develop not only technical skills, but also competencies such as creativity, collaboration, and critical thinking.

Martins and Vasconcelos (2023, p. 118) state:

> The effective incorporation of technologies in active methodologies in full-time educational institutions requires a review of the role of the teacher and the educational environment. The educator becomes a mediator and curator of digital experiences, while the school environment becomes a laboratory of innovation, where technology and pedagogy come together to generate truly transformative learning opportunities.

This view highlights the relevance of a holistic approach to technology implementation, which takes into account the changing role of the teacher and the school context in general.

In short, the use of technologies in active methodologies in full-time schools has great potential to improve and deepen the teaching-learning process. The literature highlights the importance of teaching methods that incorporate digital tools in a relevant way, using the extended time to develop more engaging, personalized and relevant learning experiences. The successful achievement of this integration requires not only the incorporation of specific technologies, but also a more comprehensive restructuring of the school environment and teaching practices to establish a genuinely conducive environment for active and technologically enriched learning.

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IMPACT ON MEANINGFUL LEARNING

The impact of the integration of technologies in active methodologies in full-time schools on meaningful learning has been the subject of growing interest in educational research. Carvalho and Mendes (2022, p. 62) emphasize that "the combination of digital tools with active pedagogical approaches in full-time environments enhances the construction of lasting and relevant knowledge, promoting a deeper and more applicable understanding of the content studied". This observation highlights the potential of technological integration to transform the nature and quality of learning in extended-day schools.

Ferreira and Lima (2021, p. 95) complement this view, stating:

> The effect of technologies combined with active methodologies on relevant learning goes beyond the simple absorption of content. There is a stronger advance in metacognitive skills, ability to solve complex problems and critical thinking. Students in full-time contexts with technological advances demonstrate greater ability to establish interdisciplinary networks and use knowledge in new scenarios and challenges.

This vision highlights how the incorporation of technology can help improve fundamental skills for the twenty-first century, using the extra time available in full-time schools.

Analysis of the impact of this integration on meaningful learning reveals both benefits and areas that require attention. Silva and Oliveira (2023, p. 132) note that "while the integration of technologies into active methodologies promotes deeper and more personalized engagement, it can also present challenges in assessing the depth and authenticity of learning." This perspective highlights the importance of developing appropriate assessment methods to capture the diverse aspects of meaningful learning in a technologically enriched environment.

Santos, Pereira, and Costa (2022, p. 54) address specific aspects of the impact on meaningful learning:

> The incorporation of technologies in active methodologies in full-time schools has shown a positive effect on the intrinsic motivation of students and on the establishment of the rigor of the knowledge obtained. There is an increase in the students' ability to create relevant connections between different areas of knowledge and to use abstract concepts in practical contexts. In addition, the use of digital instruments for self-analysis and reflection favors a more conscious improvement of individual learning strategies.

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Therefore, let us emphasize the extent of the effect of this integration, which is not limited to the cognitive aspects, but also to the motivational and metacognitive elements.

An important aspect to consider is the impact of technological integration on promoting educational equity. Rodrigues and Alves (2021, p. 78) observe that "the proper use of technologies in active methodologies in full-time schools has the potential to level the educational playing field, offering resources and enriching learning experiences for students from different socioeconomic contexts". This observation suggests that technological integration, when well implemented in a full-time context, can be a powerful tool to promote equality of educational opportunity.

In summary, the effect of incorporating technologies into active methodologies in full-time schools on meaningful learning is specific and encouraging. The literature review indicates that, in addition to deepening the understanding of the contents, this methodology significantly helps in the improvement of advanced cognitive skills, socio-emotional skills, and independent learning skills. However, it is essential to maintain a balanced approach, taking into account the obstacles to implementation and the requirement for appropriate assessment methods to cover all significant learning elements in a context of integral education with a technological emphasis.

CHALLENGES AND OPPORTUNITIES OF TECHNOLOGICAL IMPLEMENTATION

The application of technologies in active methodologies in full-time educational institutions brings as many considerable challenges as unique possibilities to revolutionize the teaching process.

Moreira and Santana (2022, p. 48) argue that "one of the main obstacles in technological integration in full-time schools is the need for a robust and reliable infrastructure, capable of supporting the intensive use of digital tools throughout an extended school day". This observation highlights the importance of significant investments in technological infrastructure to enable the effective implementation of these approaches.

Nunes and Cardoso (2023, p. 112) highlight another crucial challenge:

> The effective incorporation of technologies into active methodologies in the full-time environment requires not only the use of technological resources, but also a complete reformulation of teaching practices and school culture. Many teachers have problems adjusting their teaching strategies to effectively integrate technologies during an extended school day, which requires special investment in continuous training and technical-pedagogical support.

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This view highlights that successful implementation goes beyond simply purchasing equipment, requiring a more significant change in teaching practices.

Despite these challenges, technology implementation also presents significant opportunities. Almeida and Ferreira (2021, p. 167) point out that "the additional time available in full-time schools offers fertile ground for experimentation and technological innovation, allowing the implementation of more ambitious and long-term projects that integrate multiple digital tools". This observation highlights the unique potential of full-time schools to deepen and expand technologically enriched learning experiences.

Lima and Vasconcelos (2022, p. 93) discuss the opportunities for personalization of learning:

> The incorporation of technologies in active methodologies in full-time educational institutions enables an unprecedented personalization of the learning experience. Adaptive learning platforms, combined with the analysis of educational data, make it possible to create personalized learning paths that continuously adjust to the needs, interests and speed of each student during an extensive school day.

This commentary highlights the ability of technologies to provide more specific and meaningful learning experiences for each student.

Oliveira, Santos and Costa (2023, p. 125) address the opportunity to expand educational horizons:

> The introduction of technologies in full-time schools provides the chance to overcome the physical constraints of local education, connecting students with resources, experts, and global experiences. Technologies such as virtual and enhanced reality, video conferencing, and online collaboration tools make it possible for students to participate in international projects, virtual visits to remote museums and labs, and interactions with various communities, adding significantly to the curriculum and expanding students' views.

This vision underscores how technologies have the potential to push the boundaries of the conventional classroom, generating richer and more varied learning opportunities.

In summary, the application of technologies in active methodologies in full-time schools brings considerable challenges, such as the requirement for complete infrastructure, teacher training and adjustment of teaching practices. However, it also offers unique opportunities to enhance and personalize the educational experience, expand learning possibilities, and equip students more effectively for the demands of today's world. The proven literature indicates that, in order to overcome these obstacles and make the most of opportunities, a joint and constant effort is needed that involves the entire school

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community, from the administration to teachers, students and their respective families. In addition, it is essential to maintain a long-term perspective and a readiness to adjust and improve teaching practices according to emerging student demands and constant technological innovations.

METHODOLOGY

This study was carried out through a literature review, employing a qualitative methodology to examine the use of technologies in active methodologies in full-time schools, emphasizing their potential as instruments for relevant learning. Literature review is a type of study that is based on the evaluation of materials already published, such as books, scientific articles, theses and official documents, with the purpose of gathering, examining and debating existing information on the subject.

Data collection was carried out through tools such as academic databases, digital libraries and institutional repositories, where the pertinent references for the research were chosen. The methods employed included the search of specialized literature on educational technologies, active methodologies and integral education, followed by reading, evaluation and summary of the materials found. The analytical methodologies involved the categorization of the arguments discussed in the chosen sources, enabling the detection of patterns, gaps and trends existing in the literature.

The criteria for inclusion and exclusion of sources were developed, giving priority to materials published in the last 5 years and that specifically addressed the incorporation of technologies in active methodologies in the scenario of full-time schools. Then, searches were carried out in databases such as Scielo, Google Scholar and university repositories, using terms such as "educational technologies", "active methodologies", "integral education", "relevant learning" and "innovation in education". Based on these analyses, the theoretical topics that define the theoretical framework of the study were developed.

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Frame of Reference

Author(s)	Title	Year
GOMES, R. L.; SOUZA, M. T.	Digital technologies and active methodologies in integral education	2021
ALMEIDA, P. R.; FERREIRA, C. S.	Transforming Full-Time: Technological Innovations in Education	2023
OLIVEIRA, F. C.; SANTOS, L. M.	Challenges of technological integration in schools with extended working hours	2022
RIBEIRO, A. P.; COSTA, M. L.; SILVA, J. R.	Innovative Full-Time Educational Technology Practices	2021
MARTINS, D. S.; VASCONCELOS, T. C.	Reconfiguring the role of the educator in the digital age	2023
CARVALHO, E. M.; MENDES, S. T.	Impact of technologies on meaningful learning	2022
FERREIRA, G. H.; LIMA, N. R.	Skills development through technology	2021
SILVA, B. L.; OLIVEIRA, R. M.	Assessment of learning in technological environments	2023
SANTOS, V. C.; PEREIRA, L. F.; COSTA, A. R.	Motivation and retention of knowledge in digital environments	2022
RODRIGUES, M. A.; ALVES, P. S.	Technology as a tool for educational equity	2021
MOREIRA, T. L.; SANTANA, F. C.	Technological infrastructure in full-time schools	2022
NUNES, C. R.; CARDOSO, M. T.	Teacher training for technological integration	2023

Source: authorship

The table above shows the references chosen for the literature review. The selection of references was made based on criteria of relevance and topicality, ensuring that the analysis of the main studies and debates existing in the academic literature is carried out. Each of these works offers a relevant contribution to the understanding of the use of technologies in active methodologies in full-time schools, presenting various views and approaches on the subject.

After presenting the frame of reference, the research will be carried out with the analysis and discussion of the data collected. The approach used enabled a complete evaluation of the incorporation of technologies in active methodologies in full-time schools, facilitating the identification of the main obstacles, possibilities and future scenarios for a technologically advanced education focused on relevant learning.

EFFECTIVENESS OF TECHNOLOGICAL INTEGRATION IN ACTIVE METHODOLOGIES

The effectiveness of technological integration in active methodologies in the context of full-time schools has been a topic of growing interest in the educational literature, reflecting the need for more engaging pedagogical approaches that are appropriate to the demands of the twenty-first century. Gomes and Souza (2021, p. 47) point out that "the

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combination of digital technologies with active methodologies in full-time environments results in a significant increase in student engagement and depth of learning, making more effective use of the extended time available". This observation highlights the synergistic potential between technology and active pedagogy to optimize the educational process in an extended journey context.

Almeida and Ferreira (2023, p. 92) complement this view, stating:

> The effectiveness of incorporating technologies into active methods is especially evident in the improvement of skills such as critical thinking, complex problem solving, and cooperation. The use of digital resources in interdisciplinary projects and immersive learning experiences allows students to apply their knowledge in a more obvious and contextual way, leading to a deeper and more intuitive understanding of the topics involved.

This insight highlights how the combined use of technology and active methodologies can accelerate the enhancement of crucial skills for the future.

Evaluating the effectiveness of this integration reveals both successes and areas for improvement. Oliveira and Santos (2022, p. 103) note that "full-time schools that adopted an integrated approach to active technologies and methodologies reported significant improvements not only in academic performance, but also in students' intrinsic motivation and autonomous learning capacity". However, the authors also point out that the effectiveness of these approaches varies considerably depending on the quality of implementation and the socioeconomic context of the school.

Ribeiro, Costa and Silva (2021, p. 118) point out specific aspects of the effectiveness of technological integration:

> The most effective strategies merge several technologies and active methods, such as augmented reality in problem-based learning projects, or adaptive platforms in flipped classroom strategies. These incorporations have not only improved academic performance, but have also improved crucial digital skills and fostered greater metacognitive awareness in students. Effectiveness is particularly evident when these practices are applied consistently throughout the extended school term, forming a unified and technologically advanced learning environment.

The authors highlight the relevance of a diversified and consistent method to enhance the efficiency of technological incorporation in active methodologies.

The results achieved to date show that, although there is significant progress, there are challenges in effectively implementing this integration in full-time schools. For example, Martins and Vasconcelos (2023, p. 135) point out that "the effectiveness of technological integration in active methodologies is often limited by factors such as the lack of adequate

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training of educators in contemporary digital and pedagogical skills, as well as the difficulty in aligning these practices with traditional curricular demands". This suggests that for this integration to be truly effective, a coordinated effort is needed that involves not only the adoption of new technologies and methodologies, but also a broader transformation of school culture and the education system.

In summary, an analysis of the effectiveness of the incorporation of technologies in active methods in full-time schools indicates a specific potential to positively change the teaching-learning process. Despite evidence of significant advantages in student engagement, enhancement of core competencies, and enrichment of learning, much remains to be investigated about the long-term effects of these strategies. The constant training of teachers, the improvement of a technological infrastructure and the establishment of a school culture that values innovation and experimentation are crucial components to enhance the effectiveness of this integration in full-time educational institutions.

CHALLENGES IN PEDAGOGICAL IMPLEMENTATION AND ADAPTATION

The implementation of technologies integrated with active methodologies in full-time schools and the consequent pedagogical adaptation face a number of significant challenges that need to be carefully addressed. Carvalho and Mendes (2022, p. 73) argue that "one of the main obstacles in implementing this integration is resistance to change within established education systems, which often prioritize traditional and standardized approaches to teaching." This observation highlights the importance of a cultural and institutional shift to accommodate more innovative and technologically enriched pedagogical practices.

Ferreira and Lima (2021, p. 108) highlight another crucial challenge:

> Pedagogical adaptation to effectively incorporate active technologies and methodologies in a full-time environment requires not only a restriction of teaching content and practices, but also an essential reassessment of the way school time and space are employed. This entails significant logistical and pedagogical challenges, particularly in building adaptable learning environments and managing long-term interdisciplinary projects that extend over an extended school day.

This vision highlights the importance of an integral approach that takes into account all elements of the integral educational experience when incorporating active technologies and methodologies.

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Silva and Oliveira (2023, p. 82) address the challenges related to evaluation:

> The introduction of technologies combined with active methodologies in full-time schools raises complex questions about how to measure student advancement and learning. Often, conventional assessment methods fail to identify the skills and competencies acquired through these more interactive and technology-mediated strategies. This requires the creation of new evaluation methods and criteria that can reflect the complexity and procedural character of learning in these innovative scenarios.

There is a need for an innovative evaluation methodology, which can cover the various dimensions of learning provided by the combination of technologies and active methodologies.

Santos, Pereira and Costa (2022, p. 97) discuss the challenge of training and adapting educators:

A shift to an education model that incorporates technologies and methodologies that are effectively active full-time requires a substantial change in the role and practices of teachers. Many teachers feel insecure or unprepared to adopt more technological and student-focused methods, especially when it requires a drastic change in the way they plan and deliver their lessons during an extended school day. This highlights the urgency of solid continuing education programs and constant technical-pedagogical support for teachers during the implementation process.

This commentary emphasizes that the success of the implementation depends fundamentally on the training and active participation of educators.

Rodrigues and Alves (2021, p. 142) address the challenge of equity:

> A key obstacle in applying active technologies and methodologies in full-time schools is ensuring that these strategies benefit all students, without regard to their socioeconomic background or previous experience with technologies. There is a possibility that the incorporation of technology can intensify existing inequalities, opening a digital gap in the school context.

This perspective highlights the importance of considering equity issues in the implementation of new pedagogical and technological approaches.

Despite these challenges, the literature also points out ways to overcome them. Moreira and Santana (2022, p. 169) suggest:

> It is essential to adopt a gradual and systematic strategy to overcome the obstacles of implementation and pedagogical adaptation. This can include establishing pilot projects, forming communities of practice among educators, and collaborating with education researchers to constantly evaluate and improve practices put in place. In

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> addition, the active participation of the school community, which includes parents and students, without planning and execution can help in creating support and overcoming obstacles.

This approach emphasizes the importance of a carefully planned and collaborative implementation process.

In summary, the obstacles in the application of technologies combined with active methodologies and pedagogical adaptation in full-time educational institutions are varied, encompassing cultural, structural, evaluative and equity elements. The proven literature indicates that, in order to overcome these obstacles, joint action is needed that includes several details, such as teachers, managers, policy makers and the school community in general. In addition, it is essential to maintain a flexible and adaptable strategy, understanding that a successful implementation is a non-stop process of learning and adjustment, which needs to be continuously examined and improved to satisfy the ever-changing demands of students and the changes in the educational and technological context.

FUTURE PERSPECTIVES FOR FULL-TIME TECHNOLOGICALLY ENRICHED EDUCATION

The future prospects for full-time technologically enriched education are characterized by a transformative and innovative vision of the educational process. Nunes and Cardoso (2023, p. 103) project that "the future of full-time education will be marked by an increasingly deep and fluid integration between advanced technologies and active methodologies, creating highly adaptable and personalized learning environments". This view suggests a significant evolution in the way we conceive and practice education in extended day schools.

Almeida and Ferreira (2021, p. 118) complement this perspective, stating:

> Probably, the future model of technologically advanced full-time education will see a disintegration of the traditional divisions between disciplines and between the physical and digital worlds. We look forward to the privacy of hybrid learning ecosystems, where augmented reality, artificial intelligence, and data-driven learning merge seamlessly with hands-on, cooperative experiences. Full-time schools will become authentic centers of innovation in education, where students not only absorb knowledge, but also build knowledge and solutions to real-world problems.

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This forecast underscores the ability of full-time educational institutions to transform themselves into more dynamic learning centers in tune with future needs.

Lima and Vasconcelos (2022, p. 135) address the perspectives for the personalization of learning:

> It is expected that, in the future, the incorporation of cutting-edge technologies and active methodologies in time schools will fully provide an unprecedented degree of personalization of learning. Intelligent tutoring systems, powered by machine learning algorithms, will be able to continuously develop and adapt personalized study plans, taking into account not only school performance, but also aspects such as learning styles, personal interests, and emotional states of students.

This perspective highlights the ability of technology to generate educational experiences that are genuinely personalized to the needs and particularities of each student.

Oliveira, Santos and Costa (2023, p. 152) discuss the perspectives for the assessment and development of competencies:

> There is likely to be a revolution in assessment methods in the future of technologically advanced full-time education. Technologies that analyze learning in real time, combined with performance evaluations and digital portfolios, will replace conventional standardized testing models. The emphasis will be on continuous and formative assessment, capable of recording not only the knowledge obtained, but also the improvement of complex skills such as creativity, critical reasoning and emotional intelligence.

This vision proposes a relevant change in the way we evaluate and appreciate advancement and success in education.

Rodrigues and Alves (2021, p. 189) address the implications for equity and inclusion:

> A difficulty and a vital chance for the future of full-time technological education is to ensure that these innovations foster more equality and inclusion. Advanced assistive technologies, instructional teaching materials, and adaptable teaching methods can make education more accessible and efficient for students with diverse abilities and needs. At the same time, it is crucial to create tactics to democratize access to these technologies, ensuring that all students can take equal advantage of these innovations.

This note underscores the relevance of addressing equity issues as we move toward more technologically advanced models of education.

In summary, the future prospects for full-time technologically advanced education are marked by a more personalized, engaging learning perspective that is in tune with the

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needs of today's world. A review of the literature indicates a trend towards more adaptable and flexible teaching environments, supported by cutting-edge technologies and student-focused methodologies. However, achieving this potential will not only require technological advances, but also an essential reassessment of our educational structures, policies and evaluation methods.

As we progress towards this future of education, it will be essential to maintain a balance between technological innovation and the core human values of education. This will require teachers, researchers, technology developers, and policymakers to work together to develop education systems that are truly able to promote the full development of students in the 21st-century full-time school landscape.

FINAL CONSIDERATIONS

The aim of the study was to examine the use of technologies in active methodologies in full-time schools, focusing on their potential as instruments for relevant learning. The most important findings in this bibliography indicate a remarkable change in the pedagogical practices and educational structure of full-time schools, driven by the incorporation of cutting-edge technologies and active teaching methods.

It was noted that the union of technologies and active methodologies in full-time schools provides unique chances to improve and deepen the teaching-learning process. The flexibility of time in these educational institutions allows for the execution of more complex projects, more engaging learning experiences, and the enhancement of crucial skills for the 21st century, such as critical thinking, creativity, and digital skills.

The effectiveness of incorporating technologies into active methods in a full-time environment has shown encouraging results in terms of student engagement, depth of learning, and enhancement of multifaceted skills. Research has revealed that strategies that some digital resources and active pedagogical methods, such as project-based learning and flipped classroom, can result in remarkable advances, not only in school performance, but also in students' internal motivation and ability to learn independently.

However, the study also exposes considerable challenges in the application of these integrated strategies in full-time schools. Pedagogical adaptation emerges as a vital barrier, requiring a profound reassessment of the way school time and space are used. The training of teachers, the resistance to the transformation in the education system and the

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requirement for a technological infrastructure were clearly identified as crucial aspects to be addressed for the success of the improvement.

The challenges in assessing the progress of students in a technologically advanced and active learning environment were also highlighted. The need to create new methods and evaluation criteria that can cover the various dimensions of learning provided by these methodologies is clear and requires special care from educators and researchers.

The future possibilities for technologically advanced full-time education are both encouraging and challenging. The conception of full-time schools as hybrid learning environments, where cutting-edge technologies blend seamlessly with hands-on, cooperative experiences, indicates a significant shift in education. The personalization of learning, supported by intelligent tutoring systems and educational data analysis, emerges as a relevant trend, ensuring learning experiences that are more adjusted to the demands and particularities of each student.

The contributions of this research are relevant, since we offer a complete assessment of the current situation and future possibilities of incorporating technologies into active methodologies in full-time educational institutions. The results underline the need for a comprehensive perspective that takes into account not only the technological and pedagogical elements of this integration, but also its ethical, social, and emotional consequences.

However, further studies are needed to validate the results of this study. Long-term research on the effect of these integrated strategies on the integral development of students in full-time schools would be especially useful. In addition, studies on effective methods to measure student advancement in technologically advanced teaching contexts, as well as research on how to ensure equal access and innovative benefits, are relevant fields for future investigations.

In short, the use of technologies in active methodologies in full-time schools represents a promising field for education, providing the possibility of developing more engaging, relevant, and efficient learning experiences. To succeed in this new environment, it will require constant and collaborative collaboration between educators, researchers, technology creators, and policymakers. The ultimate goal should be to develop education systems that not only empower students for the challenges ahead, but also fuel their curiosity, creativity, and love of lifelong learning, making the most of the potential provided by the long school day and cutting-edge educational technologies.

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