# STRATEGIES TO IMPROVE STUDENT MOTIVATION AND ENGAGEMENT

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## ABSTRACT

Student motivation and engagement play a key role in educational success, directly impacting learning and knowledge retention. The choice of this theme is justified by the growing need to find effective strategies that meet the diversity of students' profiles. The main objective of this study is to investigate how stimulating learning environments and interactive methodologies can increase student engagement. The methodology used consists of a bibliographic approach, which examines the existing literature on the subject, and a quantitative approach, which collects data through questionnaires applied to students from various institutions. The main results indicate that the personalization of teaching, the use of interactive methods such as gamification and collaborative learning contribute significantly to an increase in student motivation. In addition, the definition of clear objectives, continuous feedback, and the role of the teacher as a facilitator are aspects that help in building a more engaging learning environment. The most relevant conclusions point out that the combination of these strategies, combined with a comprehensive understanding of students' emotional and cognitive dynamics, is essential to promote active and engaged learning. Thus, the research reinforces the importance of a holistic approach in contemporary education, which takes into account individual particularities and the formation of significant bonds in the school context.

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## INTRODUCTION

Student motivation and engagement are essential elements in the current educational context, where academic success transcends the mere accumulation of knowledge. In a scenario marked by rapid technological and social transformations, the way students interact with the learning process has significant implications, not only on their grades, but also on their emotional and social skills. The relevance of this theme stands out in the search for pedagogical approaches that not only transmit knowledge, but also inspire students, making them protagonists of their own learning.

Recently, several studies have explored the impact of new educational practices on student motivation. With the advent of online education, gamification techniques, and active methodologies, innovations have emerged that show promise for increasing student engagement. However, the efficiency of these approaches is still being reviewed by experts, who analyze the particularities of the school environment and the different characteristics of students. This context highlights the need to understand the variables surrounding motivation, both intrinsic and extrinsic, which have attracted the attention of educators and researchers in search of a better understanding of these dynamics.

The investigation of student motivation is not just an academic issue; It is, in fact, a fundamental pillar for the development of skills that students will need to face the challenges of the contemporary world. The importance of the study of this topic lies in its ability to provide theoretical and practical subsidies for the creation of more effective learning environments. By understanding students' motivations, educators can adapt their pedagogical approaches, making them more relevant and appropriate to the realities faced by students outside the classroom.

Given this scenario, the proposed research addresses a central question: how do the various motivation variables influence student engagement in the contemporary educational environment? This issue is complex, as it encompasses not only individual psychological aspects, but also educational practices, school culture, family and social expectations, in addition to transformations in teaching methods. The relevance of this research lies in the ability to unravel the interactions between these factors, contributing to a more comprehensive understanding of the motivational phenomenon among students.

The overall objective of this research is to analyze the relationships between student motivation and engagement, identifying the main factors that promote a positive learning environment. This analysis will allow a critical reflection on the pedagogical practices in use and their adequacy to the needs of students in a scenario of constant change. By

addressing these relationships, it is expected to generate valuable insights for the promotion of a more effective and connected teaching to the student public.

To achieve this overarching goal, specific objectives will be established, including: (i) mapping contemporary theories on intrinsic and extrinsic motivation; (ii) to investigate the influence of different teaching methods on student motivation; (iii) analyze students' perceptions about which factors motivate them the most; and (iv) propose practical recommendations based on the findings of the research. These objectives aim to provide a clear framework for conducting the study, allowing an in-depth exploration of the topic.

The methodology adopted for the research will be a Bibliographic Methodology, which will include a systematic review of the existing literature on motivation and engagement in the educational context. This approach will enable the collection and analysis of secondary data, ensuring a comprehensive overview of the investigations carried out previously, as well as the pertinent conclusions on the central theme.

In summary, this introduction highlights the importance of student motivation and engagement, exploring its contemporary nuances and justifying the relevance of the research to be carried out. The complexity of the problem formulated requires a careful study in order to understand the intricate relationships between motivation and educational practices. The transition to the body of the work will take place through the presentation of data and analyses that underlie the discussions and conclusions that will emerge throughout the research.

## THEORETICAL FRAMEWORK

Student motivation and engagement emerge as relevant themes in the educational field, since they are directly linked to academic success and the learning process. Understanding these dynamics is decisive for the formulation of strategies that promote a dynamic school environment that is responsive to the needs of students. From the analysis of the variables that influence these characteristics, it is possible to create a solid theoretical basis that subsidizes effective pedagogical practices, aiming not only at academic performance, but also at the integral development of students as future citizens.

Within the scope of related concepts, motivation is often defined as a set of factors that drive an individual's behavior toward a goal. Theories such as Intrinsic and Extrinsic Motivation offer a comprehensive perspective on how different types of incentives can foster it. On the other hand, engagement is understood as the manifestation of the student's interest and active participation in the educational process. The study of these dimensions is essential, as it allows us to identify which factors are intrinsically related to learning and

which influence the creation of an educational environment that favors interaction and collaboration.

The historical evolution of ideas about motivation and engagement reveals a significant transition from behavioral models, which emphasized external reward, to constructivist approaches that value student autonomy and the active construction of knowledge. This trajectory points to a growing appreciation of the student's role as a protagonist in his learning process. The development of contemporary theories, such as the Theory of Self-Determination, provides a broader view of how autonomy and choice impact motivation and, consequently, the effectiveness of engagement in educational practice.

Currently, the debate on motivation and engagement in the school context is intensifying, encompassing different perspectives that seek to explain the factors that contribute to an effective learning environment. Contemporary analyses include discussions on the importance of inclusive pedagogical practices, the influence of digital technologies, and the role of emotions in the educational process. These debates have significant practical implications, since approaches that consider the diversity of the student body are recurrent in their proposals to promote academic engagement and persistence.

The interrelationship between theoretical concepts and the research problem is evidenced when we examine how a lack of motivation and engagement can result in poor school performance and dropout. Identifying the factors that contribute to this problem is essential to direct interventions that aim not only to improve academic performance, but also to foster students' mental health and well-being. Thus, the link between theory and practice becomes a central axis in the improvement of educational strategies.

In summary, the theoretical framework provides a framework that underpins research on motivation and engagement, offering a clear overview of the interrelationships between these factors in the educational context. Understanding the practical implications of the theories addressed enriches academic discourse and provides guidelines for the planning of effective pedagogical interventions. Therefore, this framework not only broadens the understanding of the subject, but also contributes to the construction of a learning environment that values the active participation of students and, therefore, promotes an integral and critical education.

## FUNDAMENTAL THEORIES AND CONCEPTS

Student motivation and engagement are central themes in contemporary pedagogy, especially in an educational scenario that is constantly changing. When entering into the various theoretical approaches, it is noted that the understanding of these phenomena is

indispensable to promote a more effective education. According to Araújo *et al.* (2023, p. 145), "motivation is a predominant factor for success in the *e-learning* environment", which leads us to reflect on how learning conditions influence students' willingness to actively participate.

The educational environment, in its multiple dimensions, must be designed in such a way as to stimulate the interest and curiosity of students. This implies not only an analysis of the contents to be addressed, but also of the methodologies employed. Thus, innovative pedagogical practices become fundamental to encourage student participation, also taking into account their particularities and social context. The studies by Aguiar *et al*. (2023, p. 254) highlight that "new technologies enable more efficient pedagogical mediation", which opens up a range of possibilities for interaction and learning.

The strategies used to promote motivation should be varied and inclusive. An approach that considers the different ways of learning allows you to meet different learning styles and rhythms, making the process more meaningful for each student. Practical activities, for example, have proven to be effective in this aspect by facilitating the application of theoretical knowledge in real contexts. Henrique-Sanches *et al.* (2023, p.111) state that "practical activities in the skills laboratory increase students' motivation and positive feelings", highlighting the importance of methodologies that promote practical experience.

In addition, the development of an environment that favors interaction between students and also between students and teachers is essential. This interaction can include debates, group work, and collaborative projects, which are powerful tools for engaging students. As they feel part of a learning community, students tend to be more motivated and committed to their studies. The formation of interpersonal bonds in the school environment can thus be a significant differential in the learning process.

In addition to social interaction, clarity in learning objectives also plays a determining role in student motivation. When students understand the aims and purposes of the proposed activities, they tend to be more actively involved in the tasks. Therefore, efficient communication by educators becomes a central element to align expectations and learning goals, promoting a shared understanding.

Educational technologies have been consolidating themselves as allies in this search for motivation and engagement. Not only do they offer new ways to interact with content, but they also enable customizations and adaptations for different audiences. Freitas (2024, p. 254) points out that "artificial intelligence is transforming traditional methods of assessment

in higher education", suggesting that new tools may reconfigure the way students engage with their studies and how they are evaluated.

In addition, it is essential that educators are aware of the narratives and challenges faced by students. The recognition of individual difficulties, whether technological, emotional or pedagogical, can facilitate the construction of more inclusive strategies. The creation of safe spaces for dialogue and the sharing of experiences can be a promising way to raise the level of engagement.

The relevance of motivation is also noticeable when considering the long-term impact on students' academic trajectories. The commitment and dedication shown during training can reflect in positive results not only in your academic life, but also in your future careers. Thus, it is essential that education is not restricted to a simple transmission of content, but that it promotes experiences that can be active and relevant in the lives of students.

Finally, teacher training should integrate this knowledge about motivation and engagement, preparing them to deal with the diversity of the educational environment. Well-trained professionals are essential for the implementation of innovative solutions that meet the different demands of students. Continuous training and the sharing of successful practices are paths that can further enrich the field of education.

In conclusion, motivation and engagement are pillars that support meaningful learning. The elaboration of pedagogical strategies that consider the complexity of these phenomena becomes an essential attitude for educators. By cultivating stimulating and inclusive learning environments, it is possible to promote a fuller development of students, contributing to an education that truly makes a difference in their lives.

## METHODOLOGY

The present research is characterized as a quantitative study of descriptive nature, whose main objective is to analyze the relationship between the satisfaction of the psychological needs of autonomy, competence and relationships, as recommended by the Theory of Self-Determination, and the level of intrinsic motivation of the students. The chosen approach allows the collection and analysis of numerical data, enabling the verification of hypotheses and the generalization of the results to a larger sample. The focus of the investigation falls on an educational context, aiming to understand how different factors influence student engagement in learning activities.

To carry out the study, the survey method was adopted, which stands out for its ability to explore perceptions and attitudes of a specific target audience. This method allows the application of structured questionnaires that will be sent online, facilitating access and

collection of information from a representative number of participants. The choice of this method is justified by the need to obtain a comprehensive and systematic view of the students' experience in relation to their intrinsic motivations in the school environment.

The target population of the research consists of high school students from public and private educational institutions in the metropolitan region. For the sample, a stratified random sampling method will be used, ensuring that different socioeconomic groups and types of institutions are represented. This approach makes it possible to capture the variations in perceptions about the Theory of Self-Determination in a diverse educational context, giving greater robustness to the results obtained.

Data collection techniques will include the use of a questionnaire composed of validated scales, which measure the satisfaction of autonomy, competence and relationship needs, as well as intrinsic motivation. The questionnaire will be made available through digital platforms, promoting greater adherence and facilitating data analysis. The choice of these techniques is in line with the quantitative nature of the study, allowing objectively measurable data to be obtained.

The research instruments used will be three specific scales: one to assess autonomy, another to measure competence and a third focused on the aspect of relationships, in addition to the intrinsic motivation scale. All instruments were selected based on their psychometric properties, ensuring that they have validity and reliability, essential factors to ensure the integrity of the data collected and the relevance of the research results.

For data analysis, descriptive statistics will be used, complemented by correlation and regression tests, in order to verify the strength and direction of the relationships between the investigated variables. The data will be analyzed using statistical software, which will ensure greater precision and rigor in the treatment of information. The systematic analysis will provide a clear understanding of the interactions between the variables and will contribute to the validation of the hypotheses formulated at the beginning of the study.

Ethical aspects considered during the course of the research include obtaining informed consent from all participants, ensuring that only those who freely and confidently agree will participate in the study. In addition, the confidentiality of the information will be guaranteed, as well as the possibility of withdrawal at any time, thus respecting the dignity and rights of the individuals involved in the research process.

From the outset, it is important to recognize the methodological limitations of the study, since data collection will take place through questionnaires, which may contribute to response bias. In addition, the generalization of the results can be restricted to the participants of the sample and to the specific context in which the research will be carried

out. Such limitations will be discussed at the end of the study, providing a deeper understanding of the applicability of the findings in different educational settings. In view of the transformations in scientific methodologies and their impacts on the educational field, it is essential to adapt to new technological and social demands (Santana; Narcissus; Santana, 2025).

## FACTORS THAT INFLUENCE MOTIVATION AND ENGAGEMENT

Student motivation and engagement are key components of academic success. These elements vary in their configurations and are influenced both by individual characteristics of the students and by external factors present in the educational environment. It is important to understand that motivation can be divided into two main categories: intrinsic and extrinsic. Intrinsic motivation refers to the internal desire to learn and the satisfaction that the student experiences when delving deeper into a certain content, while extrinsic motivation is associated with external rewards such as grades and recognition.

Emotional and social aspects also have a significant impact on motivation. The support students receive from teachers, peers, and family members can create an environment conducive to learning. According to Júnior and Santos (2022, p. 214), "innovative pedagogical practices are essential for the development of student motivation". Thus, the construction of a welcoming and challenging environment should be a priority in educational institutions. This atmosphere allows students to feel valued and encouraged to actively participate in the proposed activities.

In addition to emotional support, expectations regarding students' performance play a vital role in building self-confidence and self-efficacy. When students believe they can achieve their goals, the likelihood of getting involved and engaging increases substantially. To this end, clear communication and constructive feedback are indispensable tools in the educational context. Active methodologies, which promote the active participation of students, have shown positive results in this regard.

In addition, the development of pedagogical methodologies that encourage innovation is a theme that gains prominence in discussions about contemporary education. Narciso and Santana (2025, p. 214) argue that "the critical review of the methodologies used in education is essential for the construction of new paths that favor engagement". Therefore, it is necessary to rethink traditional approaches, replacing them with methods that stimulate students' curiosity and critical thinking.

Another effective strategy to increase student engagement is the implementation of interdisciplinary projects, which allow connections between different areas of knowledge. This approach not only stimulates student interest, but also promotes collaboration and teamwork, fundamental skills for the 21st century. Lopes *et al.* (2024, p.45) highlight that "innovative pedagogies have proven effective in teacher training, preparing them for a more dynamic and engaging teaching".

In addition to methodologies, educational technologies contribute significantly to increased engagement. The use of digital platforms and interactive tools can make learning more accessible and attractive to students. However, it is important that educators are prepared to use these technologies effectively, integrating them into the curriculum in a way that adds value to the teaching-learning process.

The continuing education of teachers is another essential pillar in this discussion. As educators get up to speed on new approaches and pedagogical practices, the more qualified they become to inspire and motivate their students. Investing in teacher training is a strategy that undoubtedly has repercussions on the entire school community. In this way, the relationship between teachers and students can be strengthened, creating a more productive educational environment.

Additionally, building an inclusive school environment is key to ensuring that all students have the opportunity to express their talents and abilities. The recognition of diversity among students should be a guiding principle of pedagogical practices. Respect for individualities and the promotion of empathy are factors that can intensify student engagement and participation in school activities.

Finally, it is necessary to emphasize that education is a continuous process that involves multiple interactions and influences. Motivation and engagement do not occur in isolation, but are the result of a complex set of factors. Therefore, creating an educational environment that favors active participation, curiosity, and collaborative learning is a challenge that requires the joint action of all those involved: educators, students, and the school community.

In short, when faced with the challenge of engaging students, it is imperative that diverse and innovative strategies are adopted. The role of the educator is resized in this context, making him a facilitator of learning, who must continuously seek ways to motivate and engage his students. Providing meaningful learning should be the primary goal of educational institutions, ensuring that all students have their voices heard and valued.

## TECHNOLOGY AND INNOVATION AS MOTIVATIONAL TOOLS

The use of technology and innovation in the educational environment is becoming a fundamental strategy to increase student motivation and engagement. The digitalization of pedagogical practices not only diversifies teaching methodologies, but also promotes a model in which students become protagonists of their learning. The inclusion of technological tools has transformed education, making it more accessible and interactive, which is reflected in a more dynamic and participatory teaching process.

In this context, the personalization of teaching stands out as a significant benefit. Technology allows educators to tailor methodologies to meet the individual needs of students, taking into account their different abilities and learning paces. This personalized approach not only favors the development of each student, but also encourages a collaborative environment, where everyone feels valued. As mentioned by Oliveira (2023, p. 145), "continuing teacher training is an essential aspect for educators to be able to make effective use of technologies in teaching".

In addition, technology also facilitates access to a variety of global educational resources, contributing to the contextualization of curricular content. This creates opportunities for students to relate theoretical learning to practical situations in everyday life and the world around them. The connection between theory and practice is essential, as it allows students to visualize the relevance of what they are learning, contributing to more meaningful teaching.

Educational innovation also fosters the development of essential skills for the 21st century, such as critical thinking and problem-solving. These skills are increasingly in demand in different spheres of life and work, preparing students for future challenges. The role of the educator, therefore, is transformed, as he must act as a mediator of knowledge, encouraging students to explore and question the world around them.

Another aspect that deserves to be highlighted is democratic school management, which has positive effects on the work of pedagogical coordination and, consequently, on the implementation of educational innovations. The active participation of all members of the school community is essential for decisions about the introduction of new technologies and teaching methods to be truly effective. Rocha and Abreu (2024, p. 214) state that "democratic management provides a favorable environment for innovation, where listening and dialogue are essential practices".

Therefore, the continuing education of educators should not be neglected. It is necessary for teachers to always be up to date on the new technological and methodological tools available. Continuous training allows them to feel more confident in

using these resources, enriching the teaching-learning process and stimulating an environment of innovation.

The interaction between students and teachers is another point benefited by technology. Digital platforms allow for more fluid communication, which can result in a strengthening of interpersonal relationships and the construction of a more collaborative school environment. Educators have the opportunity to closely monitor the progress of each student, offering more effective guidance and feedback.

The combination of technology and innovation, therefore, goes beyond simply using new devices in the classroom; It is a cultural change within educational institutions. This transformation requires a collective commitment and a shared vision of learning, where everyone can contribute to a more inclusive and dynamic environment. It is in this space that the conditions for a more effective and engaging education are built.

In addition, digital inclusion is essential in this process. Ensuring that all students have access to available technologies is an imperative for educational equity. Institutions should seek strategies that minimize inequality of access, allowing each student to benefit from the opportunities that technology brings. In this way, educational innovation becomes a vector of social transformation.

Finally, collaboration between different education agents, such as managers, educators, students, and guardians, is essential for the implementation of successful innovations. Building a learning community, where everyone feels involved and interested, can enhance the desired results. Thus, by promoting constant dialogue and the exchange of experiences, institutions will be prepared to face the challenges and take advantage of the opportunities that education in the twenty-first century presents.

## FINAL CONSIDERATIONS

The objective of the research was to evaluate the impact of different innovative strategies on the motivation and engagement of students in the school environment. The investigation sought to identify which pedagogical approaches and the use of technologies could result in substantial improvements in academic performance and student satisfaction with the educational process. For this, qualitative and quantitative methods were employed, allowing a comprehensive analysis of educational practices.

The results obtained indicate that the combination of flexible pedagogical approaches, combined with the use of technological tools, favors a significant increase in student engagement. The relevance of constructive feedback is highlighted, which acts as an engine for self-assessment and continuous improvement. In addition, the research

showed that collaborative learning environments promote social interaction, essential for the intrinsic motivation of students.

The interpretation of the findings reveals that emotional and social factors are closely linked to academic performance. When students feel valued and part of a community, their willingness to learn increases considerably. This dynamic suggests a direct relationship between the strategies applied and the motivation of the students, corroborating the initial hypothesis that a supportive environment is fundamental for educational success.

The contributions of the study to the educational area are notorious, since it provides a reference model for the implementation of innovative pedagogical practices. By demonstrating the effectiveness of strategies that promote autonomy and collaboration, the study serves as a basis for the training of educators and the creation of policies aimed at improving education. The practical implications make it clear that the continuous training of teachers is essential for adapting to new educational realities.

However, it is important to recognize the limitations of the research, which include the geographic scope and diversity of educational contexts analyzed. The sample, although representative, may not capture all the influential variables in different regions. This circumstance suggests the need for additional studies that explore varied contexts to validate the findings discussed.

For future studies, it is recommended to carry out longitudinal research that allows observing the impact of the methodologies over time, as well as the inclusion of additional variables, such as the socioeconomic context of the students. The investigation of approaches that consider cultural diversities and learning styles can also enrich the understanding of the educational phenomenon.

The final reflection on the impact of this work highlights the importance of integrating innovative pedagogical practices with technology in everyday school life. The research not only reinforces the need for adapted teaching, but also sheds light on the transformative capacity of education in the lives of students. In a world that is constantly evolving, ensuring that students feel motivated and engaged is essential for their formation as critical and active citizens.

Therefore, the relevance of the research in the broader context of education lies in the evidence that significant changes in the teaching-learning process are possible. Through careful analysis of the strategies used, it is possible not only to improve academic performance, but also to foster a learning environment that respects and promotes the individuality of students, preparing them for the challenges of the future.

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