



B1

ISSN: 2595-1661

ARTIGO ORIGINAL

Listas de conteúdos disponíveis em [Portal de Periódicos CAPES](https://portaldeperiodicos.capes.gov.br)

# Revista JRG de Estudos Acadêmicos

Página da revista:

<https://revistajrg.com/index.php/jrg>

ISSN: 2595-1661

Revista JRG de  
Estudos Acadêmicos

Academic development in technical high school courses in the north region of Brazil: overcoming obstacles and promoting engagement

Desenvolvimento acadêmico em cursos de ensino médio técnico na região norte do Brasil: superando obstáculos e promovendo engajamento

DOI: 10.55892/jrg.v7i13.898

ARK: 57118/JRG.v7i13.898

Recebido: 19/10/2023 | Aceito: 02/01/2024 | Publicado on-line: 08/01/2024

## Luana de Jesus Souza<sup>1</sup>

<https://orcid.org/0009-0001-7878-0612>

<http://lattes.cnpq.br/6727401013078222>

Universidade Federal do Acre, AC, Brasil

E-mail: luana.j.souzaadm@gmail.com

## Dion Alves de Oliveira<sup>2</sup>

<https://orcid.org/0000-0003-0255-7673>

<http://lattes.cnpq.br/4360706435025584>

Instituto Federal do Acre, AC, Brasil

E-mail: dion.oliveira@ifac.edu.br

## Rodrigo Duarte Soliani<sup>3</sup>

<https://orcid.org/0000-0003-3354-6838>

<http://lattes.cnpq.br/0533333224235259>

Instituto Federal do Acre, AC, Brasil

E-mail: rodrigo.soliani@ifac.edu.br

## Simone de Freitas Ferreira Alves<sup>4</sup>

<https://orcid.org/0000-0002-5756-9746>

<http://lattes.cnpq.br/0000000000000000>

Faculdade Educacional da Lapa, AC, Brasil

E-mail: simonedeff@gmail.com

## Muller Padilha Gonçalves<sup>5</sup>

<https://orcid.org/0000-0002-7460-7409>

<http://lattes.cnpq.br/6984534888323401>

Instituto Federal do Acre, AC, Brasil

E-mail: muller.goncalves@ifac.edu.br

## Leonardo Augusto Rodrigues da Silva Nora<sup>6</sup>

<https://orcid.org/0009-0004-8019-7209>

<http://lattes.cnpq.br/3096390583249629>

Instituto Federal do Acre, AC, Brasil

E-mail: leonardo.nora@ifac.edu.br

## Francisco Bezerra de Lima Júnior<sup>7</sup>

<https://orcid.org/0000-0003-3170-5145>

<http://lattes.cnpq.br/3124252504596545>

Instituto Federal do Acre, AC, Brasil

E-mail: francisco.junior@ifac.edu.br



<sup>1</sup> Graduanda em Economia.

<sup>2</sup> Graduado em Administração; MBA em Governança Pública e Gestão Administrativa; Mestre em Administração.

<sup>3</sup> Graduado em Engenharia de Produção; Mestre em Administração; Doutor em Tecnologia Ambiental.

<sup>4</sup> Graduada em História; Especialista em Gestão Escolar.

<sup>5</sup> Graduado em Administração; Especialista em Docência da Administração; Mestrando em Educação.

<sup>6</sup> Graduado em Ciências Contábeis; Especialista em Auditoria e Finanças.

<sup>7</sup> Graduado em Economia; Especialista em Gestão Pública; Mestre em Desenvolvimento Regional.



## Abstract

Continuous development in academic learning can be hindered by rigid rules, resulting in a disconnection between students and the learning process. Promoting socialization and a sense of belonging in the academic environment contributes to student satisfaction. The ability to manage emotions is crucial when facing social challenges, preventing the emergence of emotional instabilities. This article presents a literature review that addresses the teaching and learning process. Based on this review, a structured questionnaire was developed and administered to 108 students from the integrated technical courses at the Tarauacá campus of IFAC, with the purpose of collecting relevant data on their perceptions, opinions, and experiences. Through this process, the psychological consequences of these aspects and their impact on academic performance and learning were aimed to be understood. Upon analyzing the selected studies and the questionnaire results, it is evident that there are practical, cognitive, and emotional challenges that affect students' learning process. To overcome these obstacles, it is important to address issues such as social pressure, differences in learning pace, and inappropriate practices, creating a positive learning environment and adapting pedagogical approaches to students' needs. The constructive approaches proposed in the reviewed studies positively influence students' academic performance, stimulating essential skills and promoting a holistic education. However, it is necessary to rethink the structure of education to keep students motivated, considering issues such as school dropout caused by challenges like remote campus location and financial limitations.

**Keywords:** Academic development. Teaching-learning. Socialization. Emotional control. Social obstacles.

## Resumo

*O desenvolvimento contínuo no aprendizado acadêmico pode ser prejudicado quando se baseia em regras rígidas, resultando em uma desconexão entre os estudantes e o processo de aprendizagem. Promover a socialização e o pertencimento no ambiente acadêmico contribui para a satisfação dos estudantes. A habilidade de gerenciar as emoções é crucial ao enfrentar desafios sociais, impedindo o surgimento de instabilidades emocionais. Este artigo apresenta uma revisão da literatura que aborda o processo de ensino-aprendizagem. A partir dessa revisão, foi desenvolvido e aplicado um questionário estruturado a 108 estudantes dos cursos técnicos integrados do campus Tarauacá do IFAC, com o propósito de coletar dados relevantes sobre suas percepções, opiniões e experiências. Através desse processo, almejou-se compreender as consequências psicológicas desses aspectos e seu impacto no desempenho e aprendizado acadêmico. Ao analisar os estudos selecionados e os resultados do questionário, fica evidente que existem desafios práticos, cognitivos e emocionais que afetam o processo de aprendizagem dos alunos. Para superar esses obstáculos, é importante abordar questões como pressão social, diferenças no ritmo de aprendizado e práticas inadequadas, criando um ambiente de aprendizagem positivo e adaptando as práticas pedagógicas às necessidades dos alunos. As abordagens construtivas propostas nos estudos revisados influenciam positivamente o desempenho acadêmico dos estudantes, estimulando habilidades essenciais e promovendo uma formação holística. No entanto, é necessário repensar a estrutura do ensino para manter os alunos motivados, considerando a evasão escolar causada por desafios como a localização remota do campus e as limitações financeiras.*

**Palavras-chave:** Desenvolvimento acadêmico. Ensino-aprendizagem. Socialização. Controle emocional. Obstáculos sociais.

## 1. Introduction

The exclusive reliance on rigid rules for continuous development in academic learning can impede students' emotional and behavioral engagement, leading to a disconnect between them and the learning process (GARCÍA-MOYA; BROOKS; MORENO, 2020). Consequently, this often results in reduced satisfaction and academic involvement. However, by embracing an approach that emphasizes socialization, the pursuit of self-realization, and the implementation of motivational strategies, we can ignite fresh emotions and cultivate newfound interests in students (MCNEIL, 2014).

Several authors have underscored the presence of substantial hurdles in academic learning that impede social interaction and hinder the cultivation of interest in knowledge, thereby posing challenges to students' behavioral development (AGUILERA-HERMIDA, 2020; MAATUK et al., 2022; SINATRA; HEDDY; LOMBARDI, 2015). These difficulties are further amplified by the discrepancies within the learning process, considering the diverse range of individual skills and obstacles. As a result, an environment emerges that is characterized by an unresponsive bureaucracy and a stagnation of academic and sociocultural advancement (CARRINGTON, 2020).

After examining the social challenges and concerns that frequently affect the interaction between educational institutions and students, it becomes clear that high school has become a pivotal site of social inequality, resulting in educational disparities (BANERJEE, 2016). This recognition emphasizes the crucial need for comprehensive research into behavioral dynamics, motivational factors, behavioral interests, and sociocultural connections within the academic setting. According to Wang and Degol's study (2014), such research should encompass the diverse abilities, interests, and emotions of students in relation to the learning process.

When considering the perspective and observation in research on emotional behavior in learning and academic performance, it becomes evident that emotional regulation plays a vital role in addressing social issues (PANAYIOTOU; HUMPHREY; WIGELSWORTH, 2019). Expanding on this notion, it is possible to pursue advancements in teaching and student autonomy by fostering socialization and a sense of belonging, thereby amplifying satisfaction within the academic environment (PEACOCK et al., 2020).

By closely examining the prevailing behavior of students in technical high school institutions, it becomes apparent that the cultivation of positive student relationships heavily relies on motivation (DEMIR; AKMAN KARABEYOGLU, 2016). Consequently, it is essential to initiate a dialogue regarding the external influences present within the school environment, as these factors can disrupt the required psychological stability for completing academic tasks successfully. These external influences have the potential to result in grade instability and impact overall academic performance (GOUDA et al., 2016).

In the current educational landscape, the close correlation between social and emotional challenges and the learning process is undeniable (DOMITROVICH et al., 2017; JAGERS; RIVAS-DRAKE; WILLIAMS, 2019; SCHONERT-REICHL, 2017). The demands imposed by school activities often generate structural pressures that nurture fear and a sense of exclusion, resulting in a lack of interest in learning and even academic discontent (YU et al., 2018). This unfavorable dynamic gives rise to negative social labeling and emotional detachment, deeply ingrained in the educational environment, ultimately contributing to students' disengagement. These externally originated social problems undermine students' emotional well-being, leading to a decline in their inherent motivation within the school setting (ZEE; KOOMEN, 2016).



The learning development in high school is influenced by a range of factors, both positive and negative, which have an impact on students' motivation and, consequently, their academic performance. Social obstacles that students encounter outside the school environment, associated with their personal circumstances, can affect their behavior and elicit diverse reactions (PEKRUN, 2014). Unfortunately, emotions and emotional instability are often overlooked and disregarded in the process of supporting students' emotional well-being. However, it is of utmost importance to thoroughly explore and study these emotions to gain a better understanding of how to promote constructive and beneficial emotional regulation within the learning context (SHAO; PEKRUN; NICHOLSON, 2019).

In order to facilitate significant improvements in the teaching and learning process at the Tarauacá campus of the Federal Institute of Acre (IFAC), conducting a thorough investigation into the underlying causes and origins of the factors impacting it is imperative. Gaining a comprehensive understanding of these issues is essential for effectively addressing them. A fundamental aspect of enhancing the school environment involves nurturing student autonomy, fostering critical thinking, and promoting academic learning that is deeply connected to culture and individual reflection (VARELA-LOSADA et al., 2016). Establishing a supportive atmosphere where students feel valued and empowered to develop their skills and express their opinions is a crucial component of this transformative journey.

In the pursuit of improvement, diligent student monitoring plays a pivotal role. It enables the understanding and documentation of data that contribute to enhancing academic performance (HINES et al., 2020). It is crucial to steer clear of bureaucratic approaches in both the learning process and emotional aspects by embracing an approach that fosters discovery, understanding, transformation, and constructive critique. This cultivates vital skills for problem-solving and organization (GARMSTON; WELLMAN, 2016). Alongside subject knowledge, it is of utmost importance for students to gain an understanding of society, its diversities, and effective approaches to address social and emotional issues. School dropout rates have become a pressing concern due to insufficient emotional resilience and a lack of discourse on social practices that mitigate emotional destabilization, including insults and malicious behavior (GUELDNER; FEUERBORN; MERRELL, 2020). This emotional destabilization detrimentally affects both learning outcomes and individuals' social well-being.

To effectively address these challenges, it is crucial to overhaul pedagogical practices by integrating qualitative data and quantitative research surveys answered by students. This comprehensive approach will yield valuable insights into emotional behavior and the school environment. In this article, our objective was to conduct a literature review on the teaching and learning process. Based on the knowledge gained, we developed a structured questionnaire to gather data on the perceptions, opinions, and experiences of students in the integrated technical courses at the Tarauacá campus of the Federal Institute of Acre (IFAC). Through this undertaking, our aim was to comprehend the psychological consequences of these factors and their impact on academic performance and learning. Ultimately, our goal is to foster an empowering environment that encourages student autonomy, cultivates a critical societal perspective, and promotes emotional regulation.

## 2. Theoretical Framework

### 2.1 Encouraging student engagement and development

Drawing from Papert's (2008) constructionist approach, it highlights the significance of stimulating students to actively construct knowledge through interaction and exchange with their peers. This approach nurtures the creation, development, learning, and sharing of knowledge, facilitating a critical introduction to the learning process and the democratization of knowledge. At the culmination of each marking period or semester, students are given the opportunity to express their perceptions and opinions, thereby contributing to the construction of more socially connected and collaborative knowledge systems (HAMID et al., 2015).

According to Da Silva, Kalhil, and Nicot (2015), learning should be viewed as an active process, where students are encouraged to assign and develop projects, rather than simply sitting and passively listening to the teacher's instructions. This approach promotes hands-on engagement in the learning process, fostering the development of self-concept, active participation, critical thinking, and motivation within the academic setting. It allows for the establishment of social and conceptual connections in performance, highlighting the importance of personal recognition and value (JANSEN; SCHERER; SCHROEDERS, 2015).

The behavioral approach, relying on external motivation, has the potential to diminish student engagement (DO CARMO; ALBANEZ, 2016). To tackle this challenge, it is crucial to implement strategies that foster active and constructive student participation, presenting challenges that can be acknowledged and appreciated (DRUMOND et al., 2023). A more social school environment, one that promotes the integration of art, culture, and sports in a functional and innovative manner, can prove to be an effective technique for enhancing students' satisfaction, interest, and learning (ALMEIDA, 2012).

Fontes and Duarte (2019) highlight that lack of interest and low commitment to studies are often linked to instrumental motivation, where students primarily aim to avoid failure (DONNISON; PENN-EDWARDS, 2012). However, this approach, focused solely on avoiding failure, falls short and leads to dissatisfaction with established expectations and goals. To overcome this situation, it is necessary to redefine this perspective and promote concrete actions of self-value and self-appreciation (DINKMEYER; CARLSON; MICHEL, 2016).

The insufficient systematic development of social issues and academic interest is linked to a motivation that solely revolves around accumulating knowledge, disregarding understanding and connecting with prior knowledge (FONTES; DUARTE, 2019). Consequently, the focus on true learning becomes obscured, impeding the development of critical skills and autonomous competence. It is imperative to restructure teaching standards in order to foster greater satisfaction and achieve higher levels of knowledge through the strategic integration of academic theories and practices (LOURENÇO; PAIVA, 2015).

Donnison and Penn-Edwards (2012) highlight that a significant number of students adopt a superficial approach, solely focusing on meeting the minimum academic requirements to progress to the next year. This mindset diminishes the value of authentic learning, leading them to have a distorted perception of satisfactory work, even when it falls below the expected standards (BIGGS; TANG, 2011). The lack of interest and academic dissatisfaction stemming from this approach underscores the importance of offering additional incentives, such as implementing projects that foster students' self-worth and recognition.



Based on the study conducted by Wingate (2007), it is evident that verbal stimulation alone is insufficient to enhance students' performance and foster a deeper level of learning. This suggests that lectures and verbally conveyed concepts have limited impact on students' learning process and academic achievement (CHEN; WU, 2015). Therefore, it is crucial to prioritize hands-on practice and the application of concepts, aiming to foster the individual's competence in acquiring knowledge (RIBEIRO et al., 2023).

Wingate (2007) proposes a division of the learning process into two fundamental areas: understanding the processes of learning and developing autonomy as a student, and understanding the discipline's knowledge and acquiring competence in constructing that knowledge. Both areas are crucial for the development of deeper and more critical learning, enabling the student to go beyond theory and explore constructive practice as a means of solidifying knowledge. In this sense, the student is able to formulate their own perspectives and viewpoints, enhancing their capacity for critical analysis and contributing to a more plausible and comprehensive understanding of the subject under study.

Azer, Guerrero, and Walsh (2013) delve into the concept of superficial learning as a process characterized by limited prior knowledge that is confined to routine facts, prioritizing the fulfillment of minimum requirements instead of actively engaging in learning and developing academic skills. This approach demonstrates a devaluation of the course or assigned tasks, leading to studies conducted without clear strategies or defined purposes. As a consequence, this results in low interest and academic dissatisfaction among both students and those involved.

Entwistle and Ramsden (2015) emphasize the characteristics of an inadequate approach, characterized by a lack of understanding and purpose, along with an overreliance on superficial learning and fear of failure. These elements are recognized as detrimental to the educational process. Cooper (2018) shares this perspective and suggests that a comprehensive education necessitates striking a balance between mere survival and the pursuit of more significant achievements. Overcoming an apathetic approach is essential, prioritizing a more engaged and committed stance toward learning and personal growth.

Promoting and fostering activities that stimulate argumentation and enhance cognitive skills should be implemented for a wide range of students, grounded in the practice of robust learning (CHEN; HAND; NORTON-MEIER, 2017). As highlighted by Lu, Pang, and Shadiev (2021), memorization strategies can be employed to deepen and cultivate understanding. Therefore, students can embrace new technologies as an approach that integrates both deep and surface aspects of learning.

According to Vega, Moore, and Miranda (2015), the educational system is frequently seen as punitive and discriminatory, failing to provide sufficient support for students to navigate their own learning process and understand their abilities and limitations. This negative perception is often associated with low self-confidence and prevalent psychological fears, leading students to label themselves as incompetent and believe that they cannot achieve academic success. The gradual development of this negative mindset leads to an escalation in dissatisfaction and a diminishing of interest in academic pursuits (ECCLESTONE; HAYES, 2019).

The autonomy of students is crucial for their educational development and is cultivated through opportunities for active participation in the classroom (ZHAO; WATTERSTON, 2021). When students feel a sense of belonging, respect, and support within the class, they become more motivated and engaged in the learning process. Furthermore, encouraging students to ask questions and develop a critical mindset is



essential for deepening their understanding and fostering independent knowledge construction (KEYES, 2019).

However, if students do not feel at ease with their surroundings and the individuals around them, their doubts and inquiries may be hindered by the fear of judgment or ridicule (EDMONDSON, 2018). This can cultivate an atmosphere of insecurity and deter active student engagement within the classroom. Consequently, it is crucial to establish an environment of respect and support, where students feel comfortable expressing their doubts and opinions without the apprehension of negative criticism (KUTSYURUBA; KLINGER; HUSSAIN, 2015).

### 3. Methodology

This study utilizes a mixed methods approach, combining qualitative and quantitative elements to conduct a comprehensive analysis of the teaching-learning subject. To begin, an extensive literature review was conducted, examining pertinent studies and research in the field. This review facilitated the identification of current and relevant knowledge, as well as areas that necessitate further investigation. Drawing on these insights, a structured questionnaire was developed to gather quantitative data on participants' perceptions, opinions, and experiences.

The literature review plays a critical role in research by providing a robust knowledge base on the study topic (PING; SCHELLINGS; BEIJAARD, 2018). In this study, a comprehensive review was conducted, analyzing scientific articles, books, and other relevant sources to gain a deeper understanding of the teaching-learning process context. During the literature review, it is essential to establish clear criteria for inclusion and exclusion to select the most pertinent studies. These criteria ensure the quality and appropriateness of the selected studies (LEFEBVRE et al., 2019).

In this study, we chose not to impose restrictions on the publication period of the studies included in the review to ensure the inclusion of relevant research and cover the accumulated knowledge over time on the subject matter. We considered studies published in both Portuguese and English languages to encompass a wide range of information sources. The Web of Science (WoS), Scopus, and Scielo databases were utilized for this research. WoS and Scopus are widely recognized academic publication sources. The integration of Scielo into WoS in 2014 expanded the research scope by incorporating studies from Latin America and the Caribbean, enhancing the available content (PRANCKUTÉ, 2021). We only considered studies that were fully accessible, ensuring that all the content was available for thorough and accurate analysis.

Based on the findings of the literature review, knowledge gaps and unresolved questions related to the challenges that can impact students' performance in school tasks were identified. To gather data on these challenges, a meticulously crafted questionnaire was developed. The questionnaire employed a combination of closed-ended questions and one open-ended question. The closed-ended questions facilitated the collection of quantitative data, providing an overview and enabling statistical analysis of the findings. Conversely, the open-ended question allowed participants to share their opinions and experiences in greater detail, yielding valuable qualitative insights. This integrated methodological approach fostered a more comprehensive and insightful understanding of the challenges faced by students.

The study was conducted with students enrolled in four integrated technical courses (Administration, Agriculture, Finance, and Forestry) at the Tarauacá campus of the Federal Institute of Acre (IFAC). These courses are designed for students who want to combine high school subjects with vocational learning. The online



questionnaire was distributed through the messaging app WhatsApp groups dedicated to each course, as part of the data collection process.

The primary objective of the study was to identify the challenges that can affect students' performance in their school tasks. It is important to emphasize that participation in the research was voluntary and restricted to integrated students, resulting in a participation rate of 45% (108 students) out of a total of 240 students.

Understanding the challenges encountered by students allows for the identification of areas that need improvement and the implementation of targeted measures to provide the necessary support. These specific approaches and interventions have the potential to enhance student performance, foster more effective learning, and strengthen the overall educational environment.

#### 4. Results and Discussion

Upon analyzing the 62 studies included in the review, it is evident that a range of practical, cognitive, and emotional challenges significantly influence students' performance and learning difficulties. Factors such as social pressure, variations in learning pace, and ineffective instructional practices detrimentally impact students' motivation and academic achievement. It is imperative to tackle these challenges head-on and foster a positive learning environment that nurtures students' holistic development. Within this framework, the recognition of diverse learning styles and the implementation of appropriate pedagogical approaches play a pivotal role in enhancing the consolidation of the learning process.

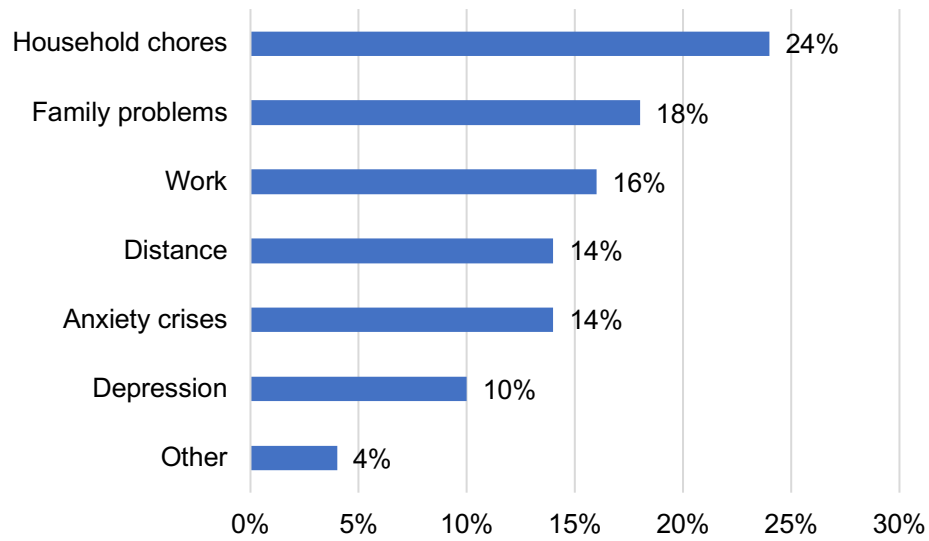
Recognizing the significance of students' mental well-being is crucial as chronic stress and emotional distress negatively impact academic performance. Adapting pedagogical practices to cater to individual needs while considering neurocognitive diversity is necessary (MINKOS; GELBAR, 2021). This approach fosters student engagement, reduces dropout rates, and cultivates an inclusive learning environment. Educators should remain attentive to emotional, social, and cognitive challenges, valuing the importance of emotional intelligence and embracing inclusive pedagogical strategies. By doing so, we contribute to students' academic achievement and holistic development, equipping them with the confidence and resilience needed to navigate the challenges of adulthood (GUELDNER; FEUERBORN; MERRELL, 2020).

The questionnaire was applied to 108 students enrolled in the integrated technical courses at the Federal Institute of Acre (IFAC), Tarauacá campus. The conducted research has revealed that these students encounter internal and individual challenges influenced by external factors related to the educational institution. The questionnaires were designed to verify and support these arguments. The data analysis, as depicted in Figure 1, reveals the presence of various obstacles faced by students, including family issues, household chores, anxiety crises, work-related stress, among others. These obstacles significantly impact students' performance in completing their academic tasks, leading to difficulties in meeting the institution's required responsibilities.





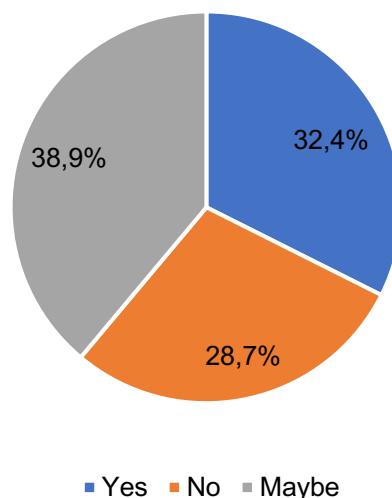
**Figure 1: Main obstacles affecting academic performance**



Source: Authors (2023).

Considering that the state of Acre ranks among the 12 states with the lowest per capita income in the country, according to data from IBGE (2019), it is plausible to infer that students' financial situations can directly impact the dynamics of public schools located in less urbanized municipalities. The distance between the educational institution and students' residences can create additional costs, particularly due to transportation expenses. To address this issue, the institution provides financial aid scholarships to low-income students, but for some students, these measures may not be sufficient. Figure 2 will now be presented, illustrating the results of the students' responses to the question "In your opinion, do your financial conditions influence your academic performance?".

**Figure 2: Students' perception of the impact of financial conditions on academic performance**

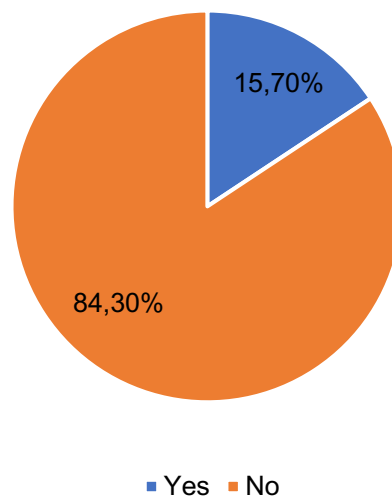


Source: Authors (2023).

Social insecurity has a detrimental impact on students' performance and confidence, underscoring the significance of promoting inclusive educational approaches that prioritize diversity, foster active participation, and encourage critical reflection (FLECHA, 2015). By addressing inequalities, cultivating knowledge, and fostering an enriching environment for everyone, we establish the groundwork for meaningful learning (DARLING-HAMMOND; COOK-HARVEY, 2018).

IFAC, Tarauacá campus, offers a conducive environment for students to actively participate in extension and research projects, providing an excellent opportunity for their academic development. These activities serve as a practical complement to theoretical learning, enabling students to apply the knowledge they have acquired in the classroom. Figure 3 visually represents the responses to the question "Do you participate in any extension, research, and/or teaching projects?" and illustrates the results obtained.

**Figure 3:** Percentage of student participation in extension and research activities



Source: Authors (2023).

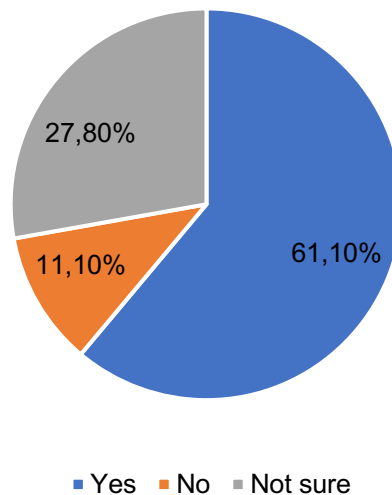
Considering the data obtained, it is evident that student involvement in extension and research activities at IFAC's Tarauacá campus is significantly limited. Figure 3 highlights that a substantial majority, comprising 84.3% of students (91 individuals), do not participate in any projects. Conversely, only a small fraction, accounting for 15.7% of students (17 individuals), engage in extension and research initiatives.

These figures underscore a low student uptake of these opportunities, emphasizing the necessity for incentives and actions to foster greater student engagement in these enriching activities. Participating in extension, research, and/or teaching activities provides students with valuable opportunities for practical application of knowledge, fosters the development of critical thinking and problem-solving skills, enhances academic and professional growth, and contributes to a deeper understanding of real-world issues (ALSALEH, 2020).

Cultural and artistic activities play an essential role in students' education, offering a broader and more enriching learning experience. Besides providing aesthetic and creative encounters, these activities help students develop cognitive, emotional, and social skills. They encourage individual expression, creativity, communication, and an appreciation for diverse art forms and cultures (SHIH, 2019).

Figure 4 displays the outcomes of the responses to the question "In your opinion, do cultural and artistic activities influence (or would influence) your learning?".

**Figure 4:** Students' perception of the influence of cultural and artistic activities on their learning

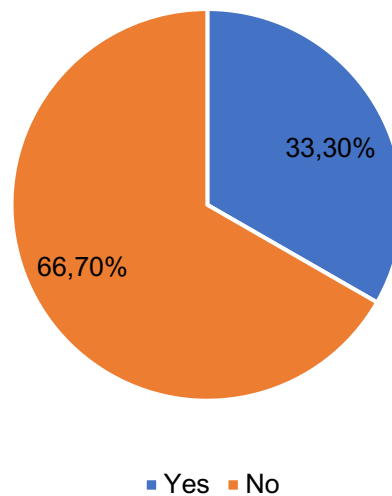


Source: Authors (2023).

Based on the results presented in Figure 4, we can conclude that a significant majority of students recognize the benefits of cultural and artistic activities in enhancing their academic performance. This highlights the importance of incorporating these activities into the educational environment, providing students with an enriching and stimulating experience. However, it is also important to consider the 27.8% of students who are unsure about the influence of these activities, suggesting the need for further reflection on how they are implemented. Furthermore, the 11.1% of students who did not perceive significant contributions underscore the importance of evaluating the effectiveness and relevance of these activities in meeting students' needs and expectations.

School dropout poses a significant challenge as it interrupts students' educational journey. Various factors, including financial difficulties, lack of motivation, family issues, and academic obstacles, can influence the decision to discontinue studies (HERBAUT, 2021). Understanding the underlying causes of this phenomenon is crucial for developing effective preventive and support strategies for students. Figure 5 presents the results of the question "Have you ever considered dropping out of your studies at IFAC?" and offers valuable insights into students' perceptions of this issue.

**Figure 5:** Evaluation of the tendency to drop out of studies at IFAC, Tarauacá campus



Source: Authors (2023).

It is worth noting that the vast majority of students do not intend to drop out of their courses; however, more than one-third of students have considered this possibility at some point. Table 1, presented below, provides some justifications provided by these students in the open-ended field of the questionnaire, which reflect the thoughts of a considerable number of students. Although there are various responses, these justifications are representative of the concerns shared by many students.

**Table 1:** Students' reflections on the possibility of dropping out of their courses

"I don't have a specific reason. Maybe it's the lack of interest I'm experiencing, the inability to concentrate, family problems, and responsibilities at home. All of these factors combined make it difficult and have made me lose interest in everything, especially in my studies. Automatically, the idea of leaving IFAC comes to mind, even though it may not be the solution to my situation."
"A few weeks ago, I started working. I found myself lacking time to complete my activities since I would often arrive home late in the evening, leaving me with little time to rest. Unfortunately, only a few teachers understood my situation."
"The layout of Sigaa [Academic System] appears to have been designed a long time ago, it doesn't function properly on smartphones, and it is not intuitive at all. This greatly hinders my academic life!"
"These are real facts [regarding the central objective of the research], and I believe I'm not the only one who suffers from these financial issues."
"There are various reasons for considering dropping out, such as the distance, as the school is located far from the city; having to financially support my family; being unable to cope with the pressure of academic responsibilities, and so on."
"The IFAC is a social disappointment that they call a school. While it does teach everything properly, its teaching methods are outdated and no longer effective as they should be."
"During the time I contemplated quitting, I was dealing with depression."

Source: Authors (2023).

As depicted in Table 1, this situation is influenced by a range of adverse factors, both within the school environment and in the broader social context. It is essential to deeply reflect on these issues and actively pursue effective solutions in order to decrease dropout rates. Providing the necessary emotional support to students in

federal educational institutions is of paramount importance. By doing so, we can empower students to fully engage in their academic journey, fulfill their roles within the academic community, and promote their holistic development.

The neglect of education by students, influenced by various factors such as domestic issues, lack of familial support, and the necessity to work, can result in an increase in the school dropout rate, thereby compromising the academic and professional development of students. According to Samuel and Burger (2020), effectively addressing this issue necessitates the reinforcement of emotional and psychosocial support programs, providing personalized counseling and assistance to address individual and family challenges. Furthermore, active family involvement and the implementation of financial support initiatives are crucial in alleviating the adverse impacts of these difficulties, fostering student commitment to education and empowering them to seek solutions to their needs (TOVAR, 2015).

Academic education becomes more enriched when students have the opportunity to engage in a social environment and participate in cultural activities. This active involvement plays a vital role in increasing student satisfaction and enhancing learning outcomes (SMYTH, 2016). It is crucial to foster active student participation through collaborative activities, enabling them to learn not only from teachers but also from their peers. Collaborative work, such as pair activities, facilitates interaction and knowledge exchange, thereby making the educational process more enriching (TOMLINSON, 2014). Additionally, it is important to continuously adapt these practices to incorporate new technologies, aiming to further enhance student learning and satisfaction.

Research by Santos, Almeida, and Zanotello (2018) highlights the significant influence of information and communication technologies (ICT) on the school environment. However, it is evident that students face various challenges in utilizing these technologies, particularly those from disadvantaged backgrounds. These students often lack access to the essential resources and infrastructure required for effective use of information technology. Limited internet access, outdated devices, and financial constraints further widen the digital divide, impeding their ability to fully engage in online activities, access educational resources, and develop crucial digital literacy skills.

In their regular class routines, the distance between the campus and the city center (approximately 5 km) can also pose a significant obstacle, as students may encounter unfavorable or hostile situations on certain occasions. The combination of this distance and the use of technology can present additional challenges, particularly for students facing financial limitations. While financial aid aims to ensure students' attendance, it may not always adequately address their individual needs. Implementing an exclusive transportation system for students at the Federal Institute of Acre would be a viable solution, providing greater accessibility and helping to overcome these difficulties.

Cases of students who face the challenge of balancing work and studies were also identified, as evidenced by the previously presented data, and this situation remains a reality for some students. It is important to emphasize that the accumulation of content and school tasks is widely acknowledged among students. According to a study by Duraku (2021), this excessive workload can lead to mental instability issues, affecting both working and non-working students.

After conducting a thorough examination of the chosen studies and carefully analyzing the outcomes of the questionnaire, it is apparent that students encounter diverse practical, cognitive, and emotional hurdles that significantly influence their



learning journey. To overcome these obstacles, it is essential to address issues such as social pressure, differences in learning pace, and ineffective teaching practices, aiming to create a positive learning environment that fosters students' holistic development.

The recognition of diverse learning styles and the implementation of varied pedagogical approaches are crucial in this context. Moreover, acknowledging the significance of students' mental well-being and tailoring pedagogical practices to their individual needs while promoting inclusive educational approaches are paramount. By taking these steps, we can contribute to students' academic success, decrease dropout rates, and equip them with the confidence and essential skills needed to navigate the challenges of adulthood.

## 5. Conclusion

Upon examining the data and observations regarding students' behavior, it becomes apparent that the approaches put forth by authors, which delve into behavioral resilience and its motivational effects, exert a positive impact. These aspects play a significant role in fostering satisfactory academic performance, an enriching learning process, and increased student satisfaction. Furthermore, this constructive approach stimulates the development of vital skills such as critical thinking, autonomy, socialization, effective learning, and the consolidation of acquired knowledge, ultimately leading to a holistic and comprehensive education.

However, it is essential to contemplate these aspects and engage in a reflection regarding the formalized teaching model and its connection with the present generations, who exhibit greater autonomy and experience satisfaction and dissatisfaction more readily. It is imperative to reassess the educational structure and pursue approaches that foster students' motivation and align with their individual needs and interests. Integrating theory and practice, as well as exploring social and cultural issues, is paramount for fostering meaningful learning experiences.

Among the challenges encountered by students, both internal and external factors contribute to school dropout, including the distant location of the campus, inadequate transportation, and the absence of a fully functional cafeteria. Furthermore, limited financial resources make it difficult for some students to access proper meals throughout the month. In order to tackle these difficulties, it is crucial to explore potential solutions, such as implementing dedicated transportation services for students to enhance safety and campus accessibility. Additionally, improving infrastructure, including the cafeteria and Wi-Fi connectivity, is essential to establish a conducive learning environment.

The present study was conducted in a single campus of IFAC, emphasizing integrated technical education. However, it is essential to expand the scope of research by including a larger number of students and exploring diverse perspectives. This broader approach will provide a more comprehensive understanding of the challenges students face and contribute to the identification of more effective solutions. Therefore, future research should consider expanding the sample to include students from different courses and include those attending evening shifts to obtain a more representative and comprehensive view of the difficulties students encounter in the educational context.

## References

- AGUILERA-HERMIDA, A. P. College students' use and acceptance of emergency online learning due to COVID-19. **International Journal of Educational Research Open**, 1(100011), 100011, 2020. <https://doi.org/10.1016/j.ijedro.2020.100011>
- ALMEIDA, M. I. **Formação do professor do Ensino Superior**. São Paulo: Cortez, 2012.
- ALSALEH, N. J. Teaching critical thinking skills: Literature review. **The Turkish Online Journal of Educational Technology**, 19(1), 21–39, 2020.
- AZER, S. A.; GUERRERO, A. P. S.; WALSH, A. Enhancing learning approaches: practical tips for students and teachers. **Medical Teacher**, 35(6), 433–443, 2013. <https://doi.org/10.3109/0142159X.2013.775413>
- BANERJEE, P. A. A systematic review of factors linked to poor academic performance of disadvantaged students in science and maths in schools. **Cogent Education**, 3(1), 1178441, 2016. <https://doi.org/10.1080/2331186x.2016.1178441>
- BIGGS, J.; TANG, C. **Teaching for quality learning at university**. (4rd ed.). McGraw-Hill Education (UK), 2011.
- CARRINGTON, V. **Rethinking Middle Years: Early adolescents, schooling and digital culture**. London, Routledge, 2020. <https://doi.org/10.4324/9781003117179>
- CHEN, C. M.; WU, C. H. Effects of different video lecture types on sustained attention, emotion, cognitive load, and learning performance. **Computers & Education**, 80, 108–121, 2015. <https://doi.org/10.1016/j.compedu.2014.08.015>
- CHEN, Y. C.; HAND, B.; NORTON-MEIER, L. Teacher Roles of Questioning in Early Elementary Science Classrooms: A Framework Promoting Student Cognitive Complexities in Argumentation. **Research in Science Education**, 47, 373–405, 2017. <https://doi.org/10.1007/s11165-015-9506-6>
- COOPER, J. N. Strategic navigation: a comparative study of Black male scholar athletes' experiences at a Historically Black College/University (HBCU) and Historically White University (HWU). **International Journal of Qualitative Studies in Education**, Vol. 31, 4, 235-256, 2018. <https://doi.org/10.1080/09518398.2017.1379617>
- DA SILVA, W. A.; KALHIL, J. B.; NICOT, Y. E. Uma Análise Comparativa das Abordagens Metodológicas que Podem Sustentar a Utilização das Tecnologias no Processo de Ensino e Aprendizagem de Ciências. **REAMEC - Rede Amazônica de Educação em Ciências e Matemática**, v. 3, n. 1, p. 5-24, 2015. <https://doi.org/10.26571/2318-6674.a2015.v3.n1.p5-24.i5303>
- DARLING-HAMMOND, L.; COOK-HARVEY, C. M. **Educating the whole child: Improving school climate to support student success**. Learning Policy Institute, 2018.



DEMIR, K.; AKMAN KARABEYOGLU, Y. Factors Associated with Absenteeism in High Schools. **Eurasian Journal of Educational Research**, 16 (62), 0-0, 2016.

DINKMEYER, D.; CARLSON, J.; MICHEL, R. E. **Consultation: Creating school-based interventions**, 4th ed., New York, NY, Routledge, 2016.

DO CARMO, B. M. B.; ALBANEZ, T. Relação entre motivação dos alunos e práticas pedagógicas empreendidas na FEA-USP. **Revista Universo Contábil**, v. 12, n. 2, p. 96-116, 2016. <http://dx.doi.org/10.4270/ruc.2016296-116>

DOMITROVICH, C. E.; DURLAK, J. A.; STALEY, K. C.; WEISSBERG, R. P. Social-emotional competence: An essential factor for promoting positive adjustment and reducing risk in school children. **Child Development**, 88(2), 408–416, 2017. <https://doi.org/10.1111/cdev.12739>

DONNISON, S.; PENN-EDWARDS, S. Focusing on first year assessment: surface or deep approaches to learning? **The International Journal of the First Year in Higher Education**, Brisbane, v. 3, n. 2, p. 9-20, 2012. <https://doi.org/10.5204/intjfyhe.v3i2.127>

DRUMOND, T. D. R.; ITUASSU, C. T.; SOLIANI, R. D.; DE SOUZA OLIVEIRA, P. R.; MONTILHA, H. F. D.; DE LIMA JUNIOR, F. B. Geração Y no ambiente organizacional: convergências e dissensos na pesquisa científica brasileira. **Revista de Gestão e Secretariado**, 14(7), 11246–11267, 2023. <https://doi.org/10.7769/gesec.v14i7.2405>

DURAKU, Z. H. **Impact of the COVID-19 Pandemic on Education and Wellbeing: Implications for Practice and Lessons for the Future**. University of Prishtina “Hasan Prishtina”. Faculty of Philosophy, Department of Psychology, 2021.

ECCLESTONE, K.; HAYES, D. **The Dangerous Rise of Therapeutic Education**. 2nd Edition, London, Routledge, 2019. <https://doi.org/10.4324/9780429401039>

EDMONDSON, A. C. **The Fearless Organization: Creating Psychological Safety in the Workplace for Learning, Innovation, and Growth**. Wiley, 2018.

ENTWISTLE, N.; RAMSDEN, P. **Understanding Student Learning**. London, Routledge, 2015. <https://doi.org/10.4324/9781315718637>

FLECHA, R. **Successful Educational Actions for Inclusion and Social Cohesion in Europe**. Springer Cham, 2015.

FONTES, M. A.; DUARTE, A. M. Aprendizagem de estudantes do ensino técnico brasileiro: motivos, investimento e satisfação. **Educação e Pesquisa**, v. 45, 2019. <https://doi.org/10.1590/S1678-4634201945192610>

GARCÍA-MOYA, I.; BROOKS, F.; MORENO, C. Humanizing and conducive to learning: an adolescent students' perspective on the central attributes of positive relationships with teachers. **European Journal of Psychology of Education**, 35, 1–20, 2020. <https://doi.org/10.1007/s10212-019-00413-z>





GARMSTON, R. J.; WELLMAN, B. M. **The Adaptive School: A Sourcebook for Developing Collaborative Groups**. Rowman & Littlefield, 3rd ed., 2016.

GOUDA, S.; LUONG, M. T.; SCHMIDT, S.; BAUER, J. Students and teachers benefit from mindfulness-Based Stress Reduction in a school-embedded pilot study. **Frontiers in Psychology**, 7, 590, 2016. <https://doi.org/10.3389/fpsyg.2016.00590>

GUELDNER, B. A.; FEUERBORN, L. L.; MERRELL, K. W. **Social and emotional learning in the classroom: Promoting mental health and academic success**, 2nd ed., The Guilford Press, 2020.

HAMID, S.; WAYCOTT, J.; KURNIA, S.; CHANG, S. Understanding students' perceptions of the benefits of online social networking use for teaching and learning. **The Internet and Higher Education**, 26, 1–9, 2015. <https://doi.org/10.1016/j.iheduc.2015.02.004>

HERBAUT, E. Overcoming failure in higher education: Social inequalities and compensatory advantage in dropout patterns. **Acta Sociologica**, 64(4), 383–402, 2021. <https://doi.org/10.1177/0001699320920916>

HINES, E. M.; MOORE, J. L.; MAYES, R. D.; HARRIS, P. C.; VEGA, D.; ROBINSON, D. V.; GRAY, C. N.; JACKSON, C. E. Making Student Achievement a Priority: The Role of School Counselors in Turnaround Schools. **Urban Education**, 55(2), 216–237, 2020. <https://doi.org/10.1177/0042085916685761>

IBGE. **Pesquisa Nacional por análise de renda per capita**. Brazilian Institute of Geography and Statistics, Brasília, DF, Brazil, 2019.

JAGERS, R. J.; RIVAS-DRAKE, D.; WILLIAMS, B. Transformative social and emotional learning (SEL): Toward SEL in service of educational equity and excellence. **Educational Psychologist**, 54(3), 162–184, 2019. <https://doi.org/10.1080/00461520.2019.1623032>

JANSEN, M.; SCHERER, R.; SCHROEDERS, U. Students' self-concept and self-efficacy in the sciences: Differential relations to antecedents and educational outcomes. **Contemporary Educational Psychology**, 41, 13–24, 2015. <https://doi.org/10.1016/j.cedpsych.2014.11.002>

KEYES, T. S. A qualitative inquiry: Factors that promote classroom belonging and engagement among high school students. **School Community Journal**, 29(1), 171–200, 2019.

KUTSYURUBA, B.; KLINGER, D. A.; HUSSAIN, A. Relationships among school climate, school safety, and student achievement and well-being: a review of the literature. **Review of Education**, 3(2), 103–135, 2015. <https://doi.org/10.1002/rev3.3043>

LEFEBVRE, C.; GLANVILLE, J.; BRISCOE, S.; LITTLEWOOD, A.; MARSHALL, C.; METZENDORF, M. I.; NOEL-STORR, A.; RADER, T.; SHOKRANEH, F.; THOMAS,



J.; WIELAND, L. S. Searching for and selecting studies. In: **Cochrane Handbook for Systematic Reviews of Interventions**. Wiley, 2019.

<https://doi.org/10.1002/9781119536604.ch4>

LOURENÇO, A. A.; PAIVA, M, O, A. Abordagens à aprendizagem: a dinâmica para o sucesso acadêmico. **Revista CES Psicologia**, v. 8, n. 2, p. 47-75, 2015.

LU, K.; PANG, F.; SHADIEV, R. Understanding the mediating effect of learning approach between learning factors and higher order thinking skills in collaborative inquiry-based learning. **Educational Technology Research and Development**, 69, 2475–2492, 2021. <https://doi.org/10.1007/s11423-021-10025-4>

MAATUK, A. M.; ELBERKAWI, E. K.; ALJAWARNEH, S.; RASHAIDEH, H.; ALHARBI, H. The COVID-19 pandemic and E-learning: challenges and opportunities from the perspective of students and instructors. **Journal of Computing in Higher Education**, vol. 34, 21–38, 2022. <https://doi.org/10.1007/s12528-021-09274-2>

MCNEIL, J. D. **Contemporary Curriculum: In Thought and Action**, 8th Edition, Wiley, 2014.

MINKOS, M. L.; GELBAR, N. W. Considerations for educators in supporting student learning in the midst of COVID-19. **Psychology in the Schools**, 58(2), 416–426, 2021. <https://doi.org/10.1002/pits.22454>

PANAYIOTOU, M.; HUMPHREY, N.; WIGELSWORTH, M. An empirical basis for linking social and emotional learning to academic performance. **Contemporary Educational Psychology**, 56, 193–204, 2019. <https://doi.org/10.1016/j.cedpsych.2019.01.009>

PAPERT, S. **A Máquina das Crianças: repensando a escola na era digital**. Porto Alegre, RS: Editora Artmed, 2008.

PEACOCK, S.; COWAN, J.; IRVINE, L.; WILLIAMS, J. An Exploration Into the Importance of a Sense of Belonging for Online Learners. **International Review of Research in Open and Distributed Learning**, vol. 21, 2, 1-155, 2020. <https://doi.org/10.19173/irrodl.v20i5.4539>

PEKRUN, R. **Emotions and Learning**. International Bureau of Education, Gonnnet Imprimeur, France, 2014.

PING, C.; SCHELLINGS, G.; BEIJAARD, D. Teacher educators' professional learning: A literature review. **Teaching and Teacher Education**, Vol. 75, 93-104, 2018. <https://doi.org/10.1016/j.tate.2018.06.003>

PRANCKUTĖ, R. Web of Science (WoS) and Scopus: The Titans of Bibliographic Information in Today's Academic World. **Publications**, 9, 12, 2021. <https://doi.org/10.3390/publications9010012>

RIBEIRO, E. C.; DA SILVA, M. D. P.; PEREIRA, D. F.; DE OLIVEIRA, D. A.; SOLIANI, R. D.; NORA, L. A. R. DA S.; DA SILVA, M. E.; DE LIMA JUNIOR, F. B. A study on the managerial profiles of commissioned officers at SASDH-AC for



improved community service. **Revista de Gestão e Secretariado**, 14(5), 6858–6876, 2013. <https://doi.org/10.7769/gesec.v14i5.2085>

SAMUEL, R.; BURGER, K. Negative life events, self-efficacy, and social support: Risk and protective factors for school dropout intentions and dropout. **Journal of Educational Psychology**, 112(5), 973–986, 2020. <https://doi.org/10.1037/edu0000406>

SANTOS, V. G. dos; ALMEIDA, S. E. de; ZANOTELLO, M. A sala de aula como um ambiente equipado tecnologicamente: reflexões sobre formação docente, ensino e aprendizagem nas séries iniciais da educação básica. **Revista Brasileira de Estudos Pedagógicos**, v. 99, n. 252, p. 331-349, 2018. <https://doi.org/10.24109/2176-6681.rbep.99i252.3439>

SCHONERT-REICHL, K. A. Social and Emotional Learning and Teachers. **The Future of Children**, 27(1), 137–155, 2017.

SHAO, K.; PEKRUN, R.; NICHOLSON, L. J. Emotions in classroom language learning: What can we learn from achievement emotion research? **System**, 86(102121), 102121, 2019. <https://doi.org/10.1016/j.system.2019.102121>

SHIH, Y. H. An examination of the functions of a general education art curriculum in universities. **Policy Futures in Education**, 17(3), 306–317, 2019. <https://doi.org/10.1177/1478210318811012>

SINATRA, G. M.; HEDDY, B. C.; LOMBARDI, D. The challenges of defining and measuring student engagement in science. **Educational psychologist**, 50, 1, 1–13, 2015. <https://doi.org/10.1080/00461520.2014.1002924>

SMYTH, E. **Arts and cultural participation among children and young people: insights from the growing up in Ireland study**. The Economic and Social Research Institute, The Arts Council, Dublin, 2016.

TOMLINSON, C. A. **The Differentiated Classroom: Responding to the Needs of All Learners**, 2nd ed., ASCD, 2014.

TOVAR, E. The Role of Faculty, Counselors, and Support Programs on Latino/a Community College Students' Success and Intent to Persist. **Community College Review**, 43(1), 46–71, 2015. <https://doi.org/10.1177/0091552114553788>

VARELA-LOSADA, M.; VEGA-MARCOTE, P.; PÉREZ-RODRÍGUEZ, U.; ÁLVAREZ-LIRES, M. Going to action? A literature review on educational proposals in formal Environmental Education. **Environmental Education Research**, 22(3), 390–421, 2016. <https://doi.org/10.1080/13504622.2015.1101751>

VEGA, D.; MOORE, J. L.; MIRANDA, A. H. In Their Own Words: Perceived Barriers To Achievement By African American and Latino High School Students. **American Secondary Education**, 43(3), 36–59, 2015.

WANG, M. T.; DEGOL, J. Staying Engaged: Knowledge and Research Needs in Student Engagement. **Child Development Perspectives**, Vol. 8, 3, 137-143, 2014. <https://doi.org/10.1111/cdep.12073>



WINGATE, U. A framework for transition: Supporting “learning to learn” in higher education. **Higher Education Quarterly**, Vol. 61, 3, 391-405, 2007.

<https://doi.org/10.1111/j.1468-2273.2007.00361.x>

YU, S.; CHEN, B.; LEVESQUE-BRISTOL, C.; VANSTEENKISTE, M. Chinese Education Examined via the Lens of Self-Determination. **Educational Psychology Review**, 30, 177–214, 2018. <https://doi.org/10.1007/s10648-016-9395-x>

ZEE, M.; KOOMEN, H. M. Y. Teacher Self-Efficacy and Its Effects on Classroom Processes, Student Academic Adjustment, and Teacher Well-Being: A Synthesis of 40 Years of Research. **Review of Educational Research**, 86(4), 981–1015, 2016. <https://doi.org/10.3102/0034654315626801>

ZHAO, Y.; WATTERSTON, J. The changes we need: Education post COVID-19. **Journal of Educational Change**, 22, 3–12, 2021. <https://doi.org/10.1007/s10833-021-09417-3>