ISSN 2529-9824

Research Article

Transcending subjectivity: artistic and creative development in university students

Trascendiendo la subjetividad: desarrollo artístico y creativo en estudiantes universitarios

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Receipt Date: 21/12/2024

Acceptance Date: 23/01/2025

Publication Date: 28/01/2025

How to cite the article

Fernández Company, J. F., Gamella González, D. J., & García Rodríguez, M. (2025). Transcending subjectivity: artistic and creative development in university students [Trascendiendo la subjetividad: desarrollo artístico y creativo en estudiantes universitarios]. *European Public & Social Innovation Review*, 10, 1-17. https://doi.org/10.31637/epsir-2025-1359

Abstract
Introduction: This study addresses the gap in literature by examining how anticipatory methodologies impact college students' self-assessment of art subjects during their Teacher Education Degree training. **Methodology:** Sixty-eight third-year undergraduate students in Primary Education participated, predominantly women (82,5%), aged 20 to 28 years (*M*= 22,18; *SD*= 1,95). Using quantitative methods, the research evaluated how anticipatory teaching approaches predict positive learning outcomes and prevent student demotivation in art education. **Results:** Findings revealed significant enhancements in students' artistic and creative skills through these methodologies, with younger participants showing notable advancements. **Discussions:** Discussions highlighted the importance of cultivating positive student self-perception, robust teacher support, diverse definitions of academic success, and implementing varied educational models to optimize learning experiences. Ultimately,

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integrating anticipatory methodologies into art education not only enriches artistic and creative abilities but also fosters holistic learning. **Conclusions:** The study advocates for social inclusion and cultural heritage preservation to sustain and enhance the role of artistic education in providing quality and comprehensive learning environments. These insights contribute to advancing educational practices that empower students and promote a broader understanding of academic achievement in the context of art and creativity.

Keywords: Anticipatory methodologies; Art education; Teacher training; Student self-assessment; Creative skills development; Gender differences; Academic success perspectives; Holistic learning integration.

Resumen
Introducción: Este estudio aborda el vacío existente en la literatura examinando cómo las metodologías anticipatorias influyen en la autoevaluación de los estudiantes universitarios de asignaturas artísticas durante su formación en el Grado de Magisterio. **Metodología:** Participaron 68 estudiantes universitarios de tercer curso de Grado en Educación Primaria, predominantemente mujeres (82,5%), con edades comprendidas entre los 20 y los 28 años (*M*= 22,18; *DT*= 1,95). Utilizando métodos cuantitativos, la investigación evaluó cómo los enfoques de enseñanza anticipatoria predicen resultados de aprendizaje positivos y previenen la desmotivación de los estudiantes en educación artística. **Resultados:** Los resultados revelaron mejoras significativas en las habilidades artísticas y creativas de los estudiantes a través de estas metodologías, y los participantes más jóvenes mostraron avances notables. **Discusión:** Los debates destacaron la importancia de cultivar una autopercepción positiva de los estudiantes, un sólido apoyo del profesorado, diversas definiciones de éxito académico y la aplicación de modelos educativos variados para optimizar las experiencias de aprendizaje. En última instancia, la integración de metodologías anticipatorias en la educación artística no sólo enriquece las capacidades artísticas y creativas, sino que también fomenta el aprendizaje holístico. **Conclusiones:** El estudio aboga por la inclusión social y la preservación del patrimonio cultural para sostener y potenciar el papel de la educación artística en la provisión de entornos de aprendizaje integrales y de calidad. Estas reflexiones contribuyen al avance de las prácticas educativas que capacitan a los estudiantes y promueven una comprensión más amplia del rendimiento académico en el contexto del arte y la creatividad.

Palabras clave: Metodologías anticipatorias; Educación artística; Formación del profesorado; Autoevaluación del alumno; Desarrollo de habilidades creativas; Diferencias de género; Perspectivas de éxito académico; Integración holística del aprendizaje.

1. Introduction

Although success in college student performance has been widely studied from different perspectives (Cicourel & Kitsuse, 2020; Conley, 2003; Khurshid, 2014; Weatherton & Schussler, 2021), there is a lack of research on how college students self-assess the positive influence of anticipatory methodologies in art subjects during their Teacher Education Degree training. For this reason, this study aims to fill this gap in the literature.

The UNESCO Convention Concerning the Protection of the World Cultural and Natural Heritage (1996) emphasizes the significance of arts education in contemporary expressions of culture and intercultural education. However, visual arts education in Spanish educational institutions is currently experiencing a decline in importance, posing a challenge.

This weakening is related to inadequate integration into school schedules, insufficient resources, and a lack of recognition. One of the consequences of this unfortunate reality is limited artistic competence among primary education teachers and a reduction of hours dedicated to visual arts in the curricula (Huerta &Domínguez, 2022; Salido-López, 2021; Sumozas, 2021).

However, in an era dominated by the digital, the ability to decode and understand visual images is crucial. Visual arts education is crucial in developing competencies in visual language, providing students with the necessary tools to comprehend the visual landscape of the digital world they frequently navigate (Dewey, 2010; Urpi & Costa, 2013; REDS, 2021). From this perspective, the lack of emphasis on arts education in compulsory education (Stinson & Bowman, 2012) necessitates an urgent need to increase teaching hours, provide practical experiences in real educational environments, and offer continuous training for teachers who teach in this area (Cuenca & López, 2020; Lindgren & Ericsson, 2011).

Similarly, socio-cultural factors such as reduced funding and undervaluation of the arts, the increasing emphasis on STEM disciplines in education, and changes in educational policies have contributed to the decline of arts education in academic settings. To counter this trend, a comprehensive STEAM approach is proposed, which includes the arts in STEM disciplines (Bell & Bell, 2018; Esteban & Sureda, 2018; Fernández-Morante et al., 2022; Land, 2013). Numerous studies highlight the positive impact of art on academic performance (Fernández-Company et al., 2023; García-Rodríguez et al., 2021; Hetland & Winner, 2001; Marshall, 2014; Peppler et al., 2014; Robinson, 2013).

Ultimately, the arts are essential to quality education as they foster critical thinking, emotional expression, and effective communication. Underutilization of the arts undermines identity building, social inclusion, and preservation of cultural heritage (Eisner, 2005; Hetland & Winner, 2004; Newland, 2013; Schneider & Rohmann, 2021).

1.1. Educational innovation and academis succsess

Although imprecise, the term 'academic success' is widely used in educational research and evaluation in higher education (York et al., 2015). Scientific research in educational settings often aims to improve students' academic success. Researchers implementing educational programs to improve student success must consider the heterogeneity of student perspectives on the concept. Comprehensive strategies can then be designed to address student well-being in the academic world (Weatherton & Schussler, 2022).

From this analysis point, students often struggle to maintain a positive self-perception regarding their productivity, abilities, success, and sense of belonging (Stachl & Baranger, 2020). Additionally, some students find it challenging to perform when they lose support from faculty or lack social skills that hinder their ability to form cordial relationships with others (Weatherton & Schussler, 2022).

Negative perceptions on the part of students can lead to unfavorable learning outcomes, including lower motivation and perseverance (Kauffman, 2015). Students' interest in learning and their attitude towards school have a positive impact on improving their academic performance (Kpolovie et al., 2014). Furthermore, when considering potential predictors of academic success, factors such as grades on university entrance exams, the student's study habits, emotional intelligence, and interpersonal relationships should be considered (Wang et al., 2023).

However, other educational models that include academic content in advance have been shown to promote a more optimistic perception of studies. These models highlight the ability to reflect, review, and revise content, as well as offering greater individualized learning and availability from faculty (Schultz et al., 2014). Supporting students' autonomy and satisfaction of their basic needs has a direct effect on their well-being within the school, which in turn affects their academic performance. In other words, perceiving faculty support to work autonomously and feeling that their basic needs for autonomy, ability, and matching are satisfied are some of the best predictors of academic success in university students (Gutiérrez & Tomás, 2018).

Some researchers have raised doubts about the continued use of traditional teaching models and suggest the inclusion of active learning models in teaching practice (Freeman et al., 2014). Additionally, the integration of technology in university teaching is causing social changes that are modifying teaching and learning methods. Therefore, it is crucial to understand the impact of technology on student performance. According to some researchers, students who actively participate in interactive activities with peers and teachers and maintain a balanced use of Internet tools tend to achieve greater academic success. Specifically, students who download audio, video, and software content are less likely to fail compared to their peers who only use the Internet to search for information (Torres-Díaz et al., 2016).

For instance, educational methods like Brain-Based Learning rely on an understanding of the human brain and neurological processes to suggest effective learning strategies (Jensen, 2008; Weiss, 2000). According to Duman (2010), this teaching model is more effective in enhancing student performance than traditional educational approaches. Similarly, the Advanced Placement program was designed to offer secondary education students the opportunity to learn college-level material in advance (Brown, 2019; Klopfenstein & Thomas, 2009) and develop college-level skills during their secondary education (Kolluri, 2018). This program has shown positive results (Johnston & Barbour, 2013).

Likewise, grit, which refers to determination and perseverance in effort (Duckworth, 2016), is a strong and adaptable predictor for all aspects of self-regulated learning. These include self-efficacy, cognitive and metacognitive strategies, motivation, time and study environment management, and procrastination (Wolters & Hussain, 2015). Therefore, success is not solely attributed to talent or luck, but rather a combination of passion, perseverance, and courage. Success in life is not solely determined by intelligence, but also by self-control, perseverance, and the ability to overcome failure. Dedication to goals that bring happiness and passion can be cultivated, leading to positive correlations with our well-being (Duckworth, 2016).

Student-centered learning, achieved through collaborative groups, aims to empower student performance, foster social acceptance, and self-confidence, and improve cognitive ability (Asoodeh et al., 2012). This educational model, also known as problem-based learning, has a positive correlation with academic performance assessments (Gezim & Xhomara, 2020). In summary, student-centered learning shifts the educational model from standardized to individualized education. Instruction is tailored to students' learning styles, interests, life experiences, and personal challenges. This approach results in equitable, relevant, and rigorous learning (Kaput, 2018). Additionally, student feedback is a crucial resource for teaching and learning (Chin & Osborne, 2008).

However, even though active learning models are recognized as more effective, most university professors still prefer traditional teaching methods (Deslauriers et al., 2019). The objective of this study is to evaluate an anticipatory methodology that can predict positive learning outcomes and prevent students from becoming demotivated or losing interest in art during their Teaching Degree training. The text has been improved to adhere to the following characteristics: objectivity, comprehensibility and logical structure, conventional structure, clear and objective language, format, formal register, structure, balance, precise word choice, and grammatical correctness. No changes in content have been made.

2. Methodology

2.1. Participants

Sixty-eight university students in their third year of the Teaching Degree in Primary Education, taking the subject 'The plastic and visual language: resource and applications' at the Cardinal Cisneros University Center (UAH), participated in the study. The participants' ages ranged from 20 to 28 years (M= 22,18; SD= 1,95), of which 82,5% (56) were women.

The design of this study was based on the ethical principles outlined in the Declaration of Helsinki (AMM, 2001) and in accordance with Organic Law 3/2018, on Personal Data Protection and Guarantee of Digital Rights (BOE, 2018). Participation in the sample was anonymous, voluntary, and altruistic. The questionnaires explicitly state the confidential procedure for collecting information, ensuring that no additional personal information about the participants is collected through this method.

2.2. Anticipation methodology model

Based on key fundamentals extracted from the literature consulted, we developed the anticipatory learning methodology model. We sought advice from a team of educators and instructional designers to propose an internal architecture for the model that would optimize learning and foster a deeper understanding of the creative tools and their didactic scope. To ensure integration into the university curriculum's teaching guide, we collaborated with the university's curricular committee. The project aligns with the stipulated 15 weeks of teaching and includes a system for monitoring student progress throughout the semester to guarantee the correct evaluation of acquired competencies.

A program of video tutorials was developed to cover the practical aspects of plastic and visual production, including the selection and use of artistic materials, creative resources, drawing techniques, and more. The tutorials are associated with future classroom activities and are organized into four key areas: general artistic resources, drawing techniques, color resources, and artistic concepts. To carry out the technological implementation, the university center utilized an online platform and a YouTube channel to host the course materials.

This ensured easy access for students and guaranteed that the materials were available at least two weeks in advance of each class. The language used is clear, concise, and objective, adhering to formal register and avoiding biased or ornamental language. The sentence structure is simple, and the technical terms are explained when first used. The grammar, spelling, and punctuation are correct. No changes in content were made.

2.3. Procedure

Once the program was configured, the objectives and procedures were clearly communicated to the students. Emphasis was placed on the importance of rescuing and enhancing artistic skills in teacher training programs. The teachers in the area and the department of specific didactics were informed, and channels of communication were established for continuous collaboration.

Two training and orientation sessions were held to familiarize students with the anticipatory learning model. The importance of watching video tutorials and rehearsing proposals before carrying out practical activities in the classroom was emphasized. An open-access support forum was created for students to resolve their doubts in advance with the teacher. In this manner, students could interact and learn from their peers' concerns. Additional resources and support were also provided to address doubts and technical difficulties, integrating errors as part of the learning process (Gamella, 2019). Similarly, students were encouraged to provide feedback on the effectiveness of the anticipatory learning model.

The semester began with basic creative workshops focused on autobiographical proposals. The workshops gradually increased in difficulty to help students gain confidence in handling materials and creating their ideas. This approach also helped students understand the creative patterns of contemporary art. In these situations, the teaching guidance during the classes focused on supervising the activities in a personalized way, providing specific technical and expressive solutions based on the instructors' previous experience.

One of the fundamental objectives was to encourage discussions, corrections, and the sharing of progress during class sessions and seminars. As a conclusion to the classroom work, we collaborated on an artistic mediation project. The students were tasked with designing a thematic workshop for primary school students from two educational centers based on the work of a guest artist (Palacios, 2018).

Throughout the classes, we collected data on student engagement, learning outcomes, and overall satisfaction through detailed records of project activities, outcomes, and modifications made. Adjustments were made to the methodology based on feedback and performance data to improve future implementations. The progress achieved was shared with the educational community.

2.4. Measures

Once the questionnaire items were defined (Blair et al., 2013; Krosnick, 2018; Rowley, 2014; Saris & Gallhofer, 2014), a previous approval was carried out (Collins, 2003; Domanska et al., 2020; Drennan, 2003; Pohontsch & Meyer, 2015) to detect possible problems in the drafting of the questions, ambiguity, or other issues that could affect the validity of the instrument. The intention was to rely on the accuracy and consistency of the data collected by the questionnaire.

2.5. Data Analysis

First, we analyzed the demographic data of the participants, specifically their gender and age, as stated in the participants' section. Next, we utilized a t-test for dependent samples to evaluate the statistical differences in the questionnaire results before and after its application. We conducted a variance analysis ANOVA with repeated measures to compare the results obtained before and after the completion of the questionnaire in relation to the age variable.

Additionally, we performed a two-factor ANOVA analysis with repeated measures to investigate differences between the Pre and Post groups in relation to the sex variable. Additionally, the partial Eta-square test was used to calculate the effect size, following Cohen's (2013) guidelines. Effect sizes below ,20 suggest no significant effect, while values ranging from ,21 to ,49 indicate a small effect, ,50 to ,70 indicate a medium effect, and values higher than ,80 indicate a large effect.

Finally, a reliability test for the questionnaire was conducted using an ad hoc questionnaire. This test was carried out to evaluate the consistency and stability of the questionnaire measurements. Reliability is a crucial aspect of questionnaire development and management because it indicates the extent to which the instrument produces consistent and reliable results over time or in different situations. In the context of ad hoc questionnaires, reliability tests are performed to ensure that the questions are reliable and that the answers accurately reflect the underlying constructs or variables that are measured.

There are different types of reliability tests, and the choice of a specific test depends on the nature of the questionnaire and the type of data collected. In this case, we conducted a reliability test to evaluate the correlation between the items of a questionnaire. Cronbach's alpha is a commonly used measure for internal consistency, where a higher alpha indicates greater consistency between the items. A reliable questionnaire is more likely to produce meaningful and dependable results, which can enhance the overall quality of research (Bolarinwa, 2015; Kimberlin & Winterstein, 2008; Taherdoost, 2016; Walters et al., 2016). The interpretation of Cronbach's alpha was performed according to previously established guidelines provided (George & Mallery, 2019; Gliem & Gliem, 2003).

3. Results

Table 1 shows statistically significant results for all measures analyzed in the pre and post-test questions. A specific t-test for samples related to a *p-value* of <,001 was used to test the results, which is lower than the specified significance level of .05, indicating significance for the examined data.

Table 1.

Statistical results Pre-Post to the Art Program

Pre-Post	t	df	*p*	Cohen's d
1	-5,5	67	<,001	-0,67
2	-6,3	67	<,001	-0,76
3	-5,7	67	<,001	-0,69
4	-4,8	67	<,001	-0,59
5	-5,6	67	<,001	-0,68

1. Assessment of the capacity for visual thinking and imagination. **2.** Assessment of the ability to use expressive or artistic resources. **3.** Assessment of the capacity for artistic understanding. **4.** Assessment of creative ability. **5.** Assessment of the ability to apply expressive or artistic resources in educational contexts with children.

Source: Author's elaboration (2024).

The questionnaire's first question required students to self-assess their visual and imaginative thinking capacity. The analysis of the results shows that the Pre group had lower values (*M*= 6,07; *SD*= 2,01) than the Post group (*M*= 7,78; *SD*= 1,48). This difference was statistically significant (t(67)= -5,55, *p*= <,001). As presented in Table 2, a variance analysis of an ANOVA factor with repeated measures revealed a significant difference between the age variable and the pre- and post-assessment results for visual thinking and imagination (F= 1.614,73, *p*= <,001, η_p^2= ,96).

Table 2.

Results of the one-factor analysis of variance ANOVA with repeated measures

	Type III Sum of Squares	df	Mean Squares	F	p	η_p^2
1	10.641,77	2	5.320,89	1.614,73	<,001	,96
2	11.356,01	2	5.678	1.497,77	<,001	,96
3	11.272,36	2	5.636,18	1.436,82	<,001	,96
4	10.399,88	2	5.199,94	1.443,28	<,001	,96
5	10.054,72	2	5.027,36	1.773,03	<,001	,96

1. Assessment of the capacity for visual thinking and imagination. **2.** Assessment of the ability to use expressive or artistic resources. **3.** Assessment of the capacity for artistic understanding. **4.** Assessment of creative ability. **5.** Assessment of the ability to apply expressive or artistic resources in educational contexts with children.

Source: Author's elaboration (2024).

The second question asked participants to evaluate their ability to handle expressive and artistic resources such as painting, drawing, sculpture, music, dance, or theater at the time. The Pre group presented lower values (*M*= 5,4; *SD*= 2,3) than the Post group (*M*= 7,51; *SD*= 1,66), which was also a statistically significant result (t(67)= -6,3, *p*= <,001). A variance analysis of an ANOVA factor revealed a significant difference between the age variables and the pre- and post-results of this question (F= 1.497,77, *p*= < ,001, η_p^2= ,96). Additionally, the self-assessment of the capacity for artistic understanding requested in question three showed that the Pre group had lower values (*M*= 5,49; *SD*= 2,01) than the Post group (*M*= 7,53; *SD*= 1,8).

A unilateral t-test for paired samples was used to test the null hypothesis that the variable Post was less than or equal to the variable Pre. The result was statistically significant (t(67)= -5,72, p= < ,001). Additionally, the analysis of variance of a factor with repeated measures showed significant differences between the age variables and the pre and post results of this item (F= 1.436,82, *p*= < ,001, η_p^2= ,96). The fourth question aimed to assess the participants' self-perceived creative capacity at the time. The Pre group reported lower values (*M*= 6,32; *SD*= 2,06) compared to the Post group (*M*= 7,85; *SD*= 1,57), and the difference was statistically significant (t(67)= -4,84, *p*= <,001).

The analysis of variance of an ANOVA factor with repeated measures showed a significant difference between the pre and post results of this item with respect to the age of the participants (F= 1.443,28, *p*= < ,001, η_p^2= ,96). The final question aimed to understand the participants' self-perception of their ability to apply expressive or artistic resources in educational contexts with both genders. The Pre group presented lower values (*M*= 6,6; *SD*= 1,79) than the Post group (*M*= 8,07; *SD*= 1,39), resulting in a statistically significant difference (t(67)= -5,61, *p*= <,001). The ANOVA analysis of repeated measures showed a significant difference between the age variable and the pre and post results of the last question (F= 1.773,03, *p*= <,001, η_p^2= ,96) (refer to Table 2).

Finally, the results indicate that age has a significant influence, as younger participants showed more marked improvements in these areas. A two-factor ANOVA variance analysis with repeated measures was performed to check for differences between groups based on pre- and post-factors with respect to the dependent variable of sex. No significant differences were found in any of the analyzed items.

Regarding the results of the measurement tool reliability test used in this study, we obtained an excellent questionnaire behavior with an alpha value greater than 0,9. Tables 3 and 4 display the statistical results for the total items and the intraclass correlation coefficient, respectively.

Table 3.

Statistical results for all items

Ítem	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
1	0,78	0,87
2	0,73	0,71
3	0,77	0,87
4	0,8	0,87
5	0,71	0,89

1. Assessment of the capacity for visual thinking and imagination. **2.** Assessment of the ability to use expressive or artistic resources. **3.** Assessment of the capacity for artistic understanding. **4.** Assessment of creative ability. **5.** Assessment of the ability to apply expressive or artistic resources in educational contexts with children.

Source: Author's elaboration (2024).

Table 4.

Statistical results Pre-Post to the Art Program

Intra class correlation coefficient	Lower 95%-CI	Upper 95%-CI	F	df1	df2	*p*
0,61	0,49	0,71	10,05	67	268	<,001

Source: Author's elaboration (2024).

4. Discussion

This study presents new data on self-perceived changes in visual thinking, artistic expression, artistic understanding, creative ability, and the application of artistic resources in a university educational context before and after the implementation of a program based on anticipation methodologies.

Based on the aforementioned findings, we conclude that the implementation of anticipation methodologies can motivate students and reduce the gap in artistic competencies among Primary Education teachers (Huerta & Domínguez, 2022; Salido-López, 2021; Sumozas, 2021). We also emphasize the significance of continued teacher education in this field (Cuenca & López, 2020; Lindgren & Ericsson, 2011).

Similarly, it is argued that the arts are essential for quality education as they encourage critical thinking, emotional expression, and effective communication. Additionally, it is believed that the underutilization of the arts weakens the construction of identity, social inclusion, and preservation of cultural heritage (Eisner, 2005; Hetland & Winner, 2004; Newland, 2013; Schneider & Rohmann, 2021). Regarding this matter, it is plausible to consider that the findings of several investigations (Fernández-Company et al., 2023; García-Rodríguez et al., 2021; Hetland & Winner, 2001; Marshall, 2014; Peppler et al., 2014; Robinson, 2013) highlight the significant impact of art on academic performance improvement.

Concerning data analysis, the results show statistically significant improvements in all aspects among the participants. The study found significant improvements in the participants' visual thinking and self-evaluated imagination from pre to post. Additionally, the participants' perception of their ability to manage artistic resources, such as painting, drawing, sculpture, music, dance, or theatre, showed significant improvement. The study found that participants reported an increase in self-assessed artistic understanding after the intervention. Age differences became significant again, indicating that younger people experienced more substantial growth in artistic understanding.

Additionally, the study found a statistically significant improvement in the self-perceived creative capacity of the participants before the intervention. Regarding the application of artistic resources in educational contexts, participants reported a significant increase in their perceived ability to apply artistic resources in such contexts. No significant differences were found in the sex variable for any of the analyzed items. However, the influence of age was highlighted, as younger participants showed more marked improvements in these areas.

While this study offers new insights into the progress of university students in the field of plastic and visual language, specifically in regard to the use and application of the Degree of Magisterium in Primary Education, it is important to acknowledge the limitations of this research. One limitation is that the interpretations are based solely on self-reported data from the students, which may introduce bias into the responses. Therefore, to gain a deeper understanding of the results of this educational experience, it may be necessary to replicate this study with larger samples and in different educational centers.

This replication should include the use of psychometric tools for the overall evaluation of the experience, as well as additional details regarding the nature of the intervention and other psychosocial characteristics of the participants. Additionally, understanding these nuances in student perception can assist educators in creating high-quality courses that cater to student needs. This can be achieved by reevaluating teaching methods, providing appropriate support, and designing content that enhances student performance and satisfaction. The implementation of this educational program is believed to have contributed to the improvement of student success. Comprehensive strategies were developed to address student well-being within the academic world (Weatherton & Schussler, 2022).

Similarly, this initiative has reversed negative student perceptions by improving learning outcomes, motivation, and consistency (Kauffman, 2015). As a result, students have become more interested in learning and have developed a more positive attitude towards the educational center, leading to improved academic performance (Kpolovie et al., 2014). Schultz et al. (2014) argue that educational models that include academic content in advance can lead to a more optimistic perception of studies among students.

This approach emphasizes the ability to reflect on, review, and understand the content, while also promoting individualized learning and greater availability from faculty. According to Gutiérrez and Tomás (2018), perceiving teacher support for autonomous work and feeling satisfied with basic needs of autonomy, capacity, and correspondence are determinants of academic success in university students.

From this perspective, we believe that success is not solely attributed to talent or luck, but rather a combination of motivation, perseverance, and the ability to overcome obstacles. According to Duckworth (2016), determination is a crucial factor in achieving success. This study examines predictors of academic success in undergraduate art subjects. It aims to identify early learning difficulties and help teachers modify their teaching to provide high-quality education. In summary, this educational program had a positive impact on the participants' self-perceived artistic and creative skills.

The study also emphasizes the significance of addressing positive self-perception among students, teacher support, diverse perspectives on academic success, and the application of various educational models. In summary, this study presents empirical evidence that the anticipation methodology for teaching art subjects during teacher training can positively impact the development of artistic and creative skills in university students.

This supports the arguments presented in the introduction of this research. In conclusion, integrating the arts into STEM disciplines, increasing teaching hours, and encouraging teacher training can transform the educational system. This is because the underestimation of artistic education poses a threat to the development of society. The promotion of social inclusion and preservation of cultural heritage are necessary for ensuring a future in which artistic education thrives as a cornerstone of holistic and quality learning. It is important to act collectively and strategically towards this goal.

5. Conclusions

This study represents a significant advance in the field of university art education by examining the effects of a program based on anticipatory methodologies on the development of artistic and creative competencies among students. The findings reveal substantial improvements in several key aspects, including visual and creative thinking, artistic understanding, and the ability to apply artistic resources in educational contexts. These results not only reflect an increase in participants' self-perceived skills, but also highlight the effectiveness of anticipation-focused pedagogical strategies in motivating students and closing proficiency gaps.

The study underscores the importance of integrating the arts comprehensively into education, arguing that the arts are not only crucial for individual and social development, but also foster essential skills such as critical thinking, emotional expression, and effective communication. This integration enriches the academic curriculum and promotes more holistic and satisfying learning for students, better preparing them to meet contemporary challenges.

From a practical perspective, the study suggests several key recommendations for improving teaching and educational policy. It proposes the wider implementation of anticipatory methodologies in teacher education programs, as well as increased resources and support for educators' continuing professional development in the field of art and creativity. Furthermore, the study recommends the implementation of inclusive educational policies that recognize and support the importance of art in education, as well as increased investment in arts resources within educational institutions.

For future research, it is recommended that this study be replicated with larger and more diverse samples, using psychometric tools for a more rigorous and detailed assessment. It is also suggested that further exploration be conducted into psychosocial factors that may influence the development of artistic competencies, as well as the conduct of longitudinal studies.

In conclusion, this study provides empirical evidence of the positive impact of anticipatory methodologies on the artistic development of university students and promotes a profound reflection on the crucial role of art in education and society. These findings provide a solid foundation for the implementation of educational policies and practices that can positively transform the educational system, thus ensuring a future in which the arts flourish as fundamental pillars of holistic and quality learning.

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AUTHORS' CONTRIBUTIONS, FINANCING AND ACKNOWLEDGMENTS

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Funding: This research did not receive external funding.

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