Aesthetic traits in collective interdisciplinary creative processes

María Fernanda Viñas
Departamento de Didáctica de la Expresión Musical, Plástica y Corporal, Universitat Autònoma de Barcelona (España) ✉ iD

Laia Viladot
Departamento de Didáctica de la Expresión Musical, Plástica y Corporal, Universitat Autònoma de Barcelona (España) ✉ iD

Albert Casals
Departamento de Didáctica de la Expresión Musical, Plástica y Corporal, Universitat Autònoma de Barcelona (España) ✉ iD

ENG **Abstract:** The competency-based model of artistic education fosters creativity and gives students an active key role in their own learning. Aesthetic knowledge and skills are developed through challenges and creative processes based on perception, expression, imagination, sensibility, analysis, and reflection. The goal of this study was to identify and analyse the aesthetic traits and abilities displayed by students during collective interdisciplinary creative processes involving music and dance. Data was collected from 45 video recordings (each lasting approximately 50 minutes) and analysed using a custom-designed evaluation tool. The sample consisted of 100 students aged eight to twelve years old pursuing primary education at a school in Castelldefels (Barcelona). The results brought to light three main findings: a low presence of traits associated with sensibility; challenges concerning the use of symbolism during the creative process; and a notable similarity between the aesthetic traits that emerged in musical and choreographic activities. This research contributes to the field by specifying a framework of aesthetic traits and skills and thereby offering practical tools for the analysis of aesthetic expression. It identifies the key factors that support the consolidation of students' aesthetic personality during the different phases of the creative process, encouraging sensibility, creativity and artistic expressiveness. Additionally, it underscores the importance of collective interdisciplinary creative experiences in fostering these qualities. Finally, it provides music educators with valuable information when it comes to enhancing the development of artistic competence within interdisciplinary learning environments.
Keywords: artistic competence; aesthetic ability; creative process; interdisciplinarity.

1. Introduction

The subject of art education is legally instituted at a state level in Spain by Royal Decree 157/2022, which lays down the minimum requirements applicable to the primary education curriculum in accordance with Organic Law 3/2020 (LOMLOE). This decree establishes a competency-based model that advocates for experimentation, expression and artistic production as fundamental processes in children's education. Given that most educational powers have been devolved to the autonomous communities, Decree 175/2022, which regulates the primary education curriculum in Catalonia, reaffirms this approach by structuring the subject into four specific competencies aimed at the gradual development of aesthetic abilities and skills. These are as follows: 1) the design and dissemination of collaborative creative work that draws on concepts and procedures that foster the development of expressiveness, reflective thinking and the communication of ideas, feelings and sensations through joint deliberation (Shih, 2018); 2) the creation of artistic productions that combine, modify or alter artistic concepts and procedures, thus encouraging the development of creativity and heuristic thinking through experimentation and exploration; 3) the discovery of artistic proposals

from different cultures, eras and styles, so enabling the development of sensibility, contemplative thinking, aesthetic enjoyment and feeling through perception (Potash et al., 2012; González Zamar, 2024); and 4) research into and analysis of different cultural and artistic expressions within their contexts, which promotes the development of aesthetic judgment, critical thinking and cultural identity through artistic appreciation (Gamarra de Denis & Sosa de Wood, 2024).

With the acquisition of these competencies, students are able to develop aesthetic abilities and skills that make them more expressive, creative, sensitive, and critical in relation to their own and other peoples' artistic productions. Furthermore, these competencies constitute a fundamental resource for the development of competency-based learning applicable to other fields of knowledge (Beudert, 2010). In fact, much of the research carried out in the field of primary art education indicates that this subject has notable interdisciplinary potential, linking up with and being enriched by other disciplines and thus promoting a more comprehensive and contextualized approach to teaching (Burkharova & Urozhenko, 2020; González Zamar, 2024).

The consolidation of these specific competencies is promoted through aesthetic experiences based on collective creative processes that integrate different artistic languages, in this way ensuring deep functional learning (Viñas et al., 2022). These experiences foster diverse types of thinking in students, enabling them to circumvent the critical incidents that emerge during the creative process (Burnard & Hennessy, 2006; Cslovjecsek & Zulauf, 2018; Gould, 2006; Mertova & Webster, 2012; Woods, 1993). They also encourage students to take on different artistic roles (creator, performer and spectator) during the different phases of the process so that they are able to develop distinct aspects of their aesthetic personality (Araújo, 2021; De la Roche, 2021; Viñas, 2019; Bozal, 2010; Hanza, 2008). The four types of aesthetic trait associated with aesthetic abilities and skills that promote the development of artistic competence are detailed below:

1.1. Expressive traits

Expressiveness is an activity inherent to human beings and one of the main ways in which individuals divulge their inner world. However, this term may also refer to the artist's actions during a creative process, i.e. to the work that "reveals" and transcends as an expressive and aesthetic object with its own particularities (Barcia, 2004; Hospers, 1954). It can be associated with the spectators' subjective evocation of their own emotions when contemplating a work, emotions that are not necessarily the same as those of other spectators faced with the same work, or as those of the artist (D'hers & Musicco, 2015).

In any case, expressiveness draws on different artistic languages and procedures. Therefore, to express oneself artistically, it is necessary to understand concepts, know how to select and decide which metaphors and symbols are most suitable for expressing sensations, feelings and ideas, and master the use of specialised materials, techniques and technologies. It is these competencies and resources that enable individuals to explore, communicate and manifest the psychic content of their own emotional, psychological and cultural worlds (Ronderos & Mantilla, 2013).

1.2. Creative traits

Creativity can be understood as the ability to come up with innovative answers to conventional questions. For Gardner (1985), it is a complex construct most commonly expressed through a wide range of intelligences, and its central component is novelty. The teaching of creativity is based on the proper organisation of divergent and convergent thinking skills (Baker et al., 2001; Esquivias, 2004; Ronderos and Mantilla, 2013):

– Convergent thinking involves a conservative, logical, analytical and systematic disposition that enables the organization of the knowledge production process. It is associated with the ability to establish unusual relationships and associations, solve problems, propose different alternatives, develop analogical thinking, fluency, originality, etc.
– Divergent thinking involves a broad, non-conservative disposition that embraces change and risk-taking. It is mainly associated with the imagination, play and fantasy – in other words, with the sources of inspiration, the brilliance of ideas, and spontaneity.

For creativity to flourish, students need to be taught how to structure and organise their work, and how to deconstruct, disorganize and transform the same aspects. This introduces the attributes of fluency, flexibility, originality, elaboration and synthesis into their ideas and thinking, and the ability to combine ideas. (Torrance, 1987).

1.3. Traits of aesthetic sensibility

On the one hand, sensibility is the inherent ability of all living beings to perceive sensations and, on the other, to respond to subtle stimuli or excitations. This occurs by means of the senses that living beings possess and through which they perceive the chemical or physical variations that occur both internally and externally (Goleman, 2013). However, this concept is also used in other contexts that are not strictly physical, referring instead to the natural human tendency to experience emotions or feelings (Dewey, 2008).

For Vitalich Sallán (2007), aesthetic sensibility is a dimension of subjectivity susceptible to development and, according to Bruner (2004), one to which we are all exposed to from birth, thus constituting an essential dimension that, as human beings, we apply in the processes of cultural development. Likewise, in contexts such as art, the term plays a very special, critical role, as it is often used to define or describe a person's ability

to approach, understand or engage with artistic material (Pérez García et al., 2014). It is not easy to perceive subjective experiences with sensibility. For this reason, the confidence in their own sensitivity that students build up during their schooling will be strengthened to a greater or lesser degree by how their teachers foment the processes of sensitive interaction.

Finally, as proposed by Levinson (2001, cited in Carrasco-Barranco, 2007), there are two basic types of sensibility: perceptual and attitudinal. Perceptual sensibility is described as the ability to register phenomenal impressions based on perceptible non-aesthetic traits, while attitudinal sensibility is considered to be the ability to react to phenomenal impressions favourably or unfavourably, with approval or disapproval. A person's attitudinal sensibility possesses a component that is strongly shaped by culture and undergoes changes over time.

1.4. Traits of aesthetic judgement

Aesthetic judgments are "individual judgments that people make about particular objects in particular perceptual situations" (Henrich, 1992, p. 87). Kant maintained that judgment through aesthetic taste occurs when the representation is filtered through the imagination of the subject and the feelings of pleasure or pain they experience. That is to say, aesthetic judgment concerns the affects and feelings evoked by the encounter between a certain subject and a certain object, and for this reason it cannot be universal (Silenzi, 2009). However, taste involves not only feelings and imagination but also discernment (Martin Prada, 2017), because this faculty is what enables us to discover the possible flaws and faults in a work of art. Therefore, aesthetic judgment can be understood as occupying an indeterminate space lying halfway between the pure laws of understanding and the total chaotic indeterminacy of the imagination (Silenzi, 2009) – and another mental activity also comes into play: reflection. Aesthetic judgment is constructed and mediated by the individual's particular worldview, by their lifestyle and their specific way of feeling, conceiving, preserving or transforming, symbolizing, giving meaning to and valuing how they interact with themselves, with nature, and with their cultural context.

Ultimately, the artistic competencies play a crucial role in individuals' holistic development, because they encompass a series of aesthetic abilities and skills that enrich learning. However, it is often a challenge to define which aesthetic traits students activate to develop their artistic competence. This is explained by the subjectivity inherent to some aspects of aesthetics and the difficulties involved in establishing observable, quantifiable indicators. Therefore, it is not only essential to design meaningful aesthetic experiences based on collective creative processes, but also to establish appropriate indicators for systematically and accurately measuring student progress. This research is part of a doctoral thesis in which an ad hoc instrument was developed and validated for this purpose, although the article focuses on demonstrating the coordination and activation of these aesthetic traits during real creative processes in the classroom.

2. Goal

The goal of this study was to identify and analyse those facets of aesthetic abilities and skills displayed by primary school students when participating in collective interdisciplinary creative processes involving music and dance.

3. Methodology

Data about the creative process was collected through videos within the framework of an action research project. Collection and analysis was carried out from the perspective of a participant observer working as an art education teacher, specifically a music teacher. Thanks to this approach, the teacher (first author) was able to continue with her usual classroom practice while simultaneously assuming the role of researcher, without disrupting the course dynamics (Creswell & Creswell, 2018). This article presents the analysis of these videos from a descriptive-interpretive standpoint while following a mixed-methods model (qualitative and quantitative).

Context and sample

The "Mudansáticas" project was implemented in a school in Castelldefels (Barcelona) during two academic years. It was aimed at primary school students aged 8 to 12 years old (N=100) divided into four similarly sized subgroups according to their age (8 to 9, 9 to 10, 10 to 11, and 11 to 12 years old). Two learning situations were set up for this project, based on collective processes of composition that integrate music and dance alongside mathematical concepts that served as guiding threads. In the first, musical and choreographic creation was approached through the Tangram puzzle, while in the second the students explored the mathematical concepts of probability and chance through Mozart's *Musikalisches Würfelspiel K. 294d* (Dice Game). The teaching goal was to provide students with an aesthetic experience in which they could personally compose and perform their own music, then choreograph it, and finally present it on stage.

These proposals were implemented in seventeen one-hour sessions organised during the second term, between January and March. The teaching methodology was based on an active, collaborative approach where students took a central role in their learning process. Work in small groups (about five students) was combined with presentations before the whole class. Participation was encouraged through dialogue and shared decision-making. The teacher played a key role, acting as a guide and facilitator and providing support

without any interference, which fostered autonomy, reflection and the development of aesthetic and artistic skills and abilities[1].

The interdisciplinary approach to the creative process developed by the students during this research was divided into three clearly defined phases (as described in Viñas et al., 2022). During these phases, the students assumed the typical roles of a musical-artistic persona (creator, performer and spectator), which are analogous to the three roles proposed by Wolf (1991) for other artistic manifestations (author, observer and reflective researcher). The three phases and their respective roles are described below (see Figure 1):

A)   The starting phase: in which students adopted the role of creators, and characterized by an apparent fertile chaos in which each group's creative proposals were generated and developed.
B)   The developmental phase: where students adopted the role of performer, playing their compositions and dancing out their choreographies while dealing with critical incidents that they had to resolve in order to make progress.
C)   The mise-en-scène: where students, in their role as spectators, valued and reflected on their own and other students' work, showing both aesthetic pleasure and a deep integration of ideas and concepts – thanks to the interdisciplinary nature of the experience.

The course taken by this model favoured the joint creation of works. It promoted meaningful interaction with the arts, taking them from the idea to action and the mise-en-scène, and at the same time facilitating the presence of traits associated with the development of aesthetic abilities and skills.

Figure 1. Model for collective interdisciplinary creation and students' roles.
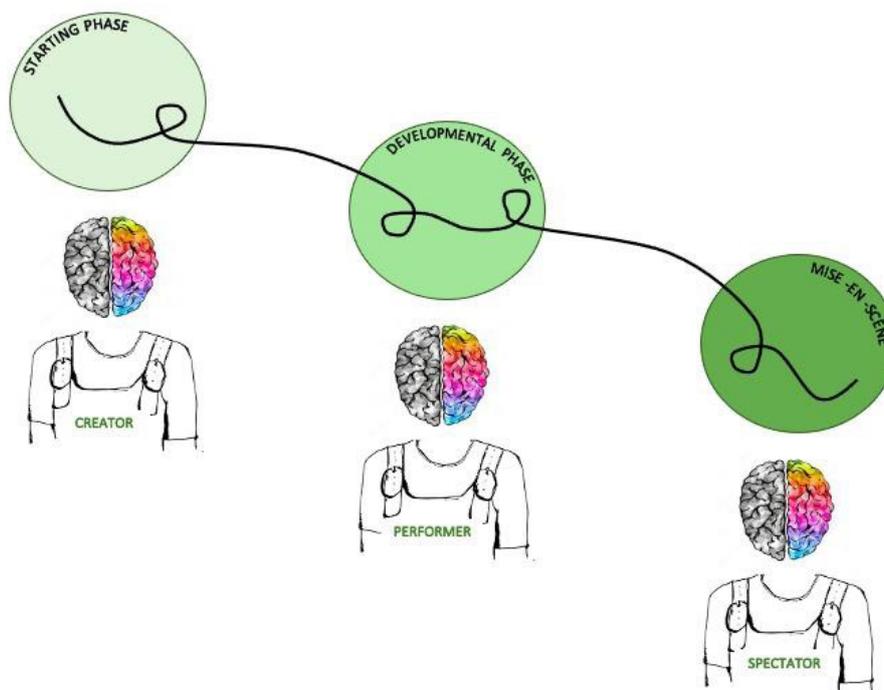

Figure prepared by the authors.

Data collection and analysis

The data was obtained by viewing the videos recorded during the creative process carried out at the school. Forty-five videos, with an average length of 50 minutes, were analysed using a tool designed specifically for this purpose according to the aesthetic characteristics of the established dimensions (Table 1). This tool was submitted for expert review to verify its reliability and subsequently checked for inter-rater agreement to confirm its internal reliability.

Table 1 details the indicators used to identify the characteristics to be analysed. These indicators are a synthesis of concepts proposed by leading authors. They were identified by means of a specific literature review carried out using Atlas.ti 25 software. For clarity, the table has been organized in accordance with the three phases of the creative process described above (starting phase, developmental phase, and mise-en-scène).

---

[1]   For a more detailed understanding of the teaching approach, see Viñas, M. F. (2019).

Table 1. Dimensions and indicators associated with aesthetic skills and abilities

DIMENSIONS	INDICATORS				
	Starting Phase		Developmental Phase		Mise-en-Scène
	MUSIC	DANCE	MUSIC	DANCE	PERFORMANCE
EXPRESSIVENESS	— Using elements of musical language associated with rhythm and melody. — Selecting symbols and metaphors to represent ideas and feelings.	— Using elements of body language associated with posture and space. — Selecting images and metaphors to represent ideas and feelings.	— Using the proper techniques when playing instruments. — Using dynamics and agogic elements in their musical compositions.	— Using performance techniques from different dance styles. — Using combinations of posture, space, energy and time.	— Reflecting on the symbolic and metaphorical meaning of the ideas presented in the works created by their classmates.
CREATIVITY	— Creating combinations of chosen sounds. — Displaying fluency, flexibility and original ideas during the process of musical composition. — Using traits associated with convergent thinking by establishing unusual relationships and associations between elements of musical language, as well as traits associated with divergent thinking drawn from spontaneous, playful musical performances.	— Creating combinations of chosen movements, postures and gestures, as well as spatial movements. — Displaying fluency, flexibility and original ideas during the choreographic process. — Using traits associated with convergent thinking by establishing unusual physical relationships and associations between the elements of body language, as well as traits associated with divergent thinking drawn from spontaneous, playful movements of the body.	— Making adjustments to their musical compositions while rehearsing them during the developmental phase, in relation to: • Rhythm • Melody • Instruments • Timbres • Agogic elements • Dynamics • Formal structure	— Making adjustments to the choreographies while rehearsing them during the developmental phase, with regard to: • Body posture (curved, straight, mixed, etc., adopted with their own bodies) • Gesture • Spatial arrangement (levels) • Spatial arrangement (figures created by the arrangement of bodies on the stage) • Spatial arrangement (formations) • Spatial arrangement (pathways) • Agogic elements (speed) • Dynamics (energy) • Choreographic structure	— Creating a work with a wide variety of ideas for music and dance. — Creating a work with varied musical and choreographic content. — -Creating a work that presents an innovative combination of musical and choreographic elements.

DIMENSIONS	INDICATORS				
	Starting Phase		**Developmental Phase**		**Mise-en-Scène**
	MUSIC	**DANCE**	**MUSIC**	**DANCE**	**PERFORMANCE**
AESTHETIC SENSIBILITY	– Incorporating aesthetic traits into their musical compositions from works belonging to their own or other cultures, as well as aesthetic traits observed in their own or other people's natural environments.	– Incorporating aesthetic traits into their choreographies from works belonging to their own or other cultures, as well as aesthetic traits observed in their own or other people's natural environments.	– During rehearsals, incorporating aesthetic traits into their musical compositions observed in their own or other people's social/cultural environments, as well as in their own or other people's natural environments.	– During the rehearsals of their choreographies, incorporating aesthetic traits observed in their own or other people's social/cultural environments, as well as in their own or other people's natural environments.	– Feeling enthusiasm (experiencing aesthetic pleasure) on contemplating a work. – Being moved by a work of art. – Recognising the aesthetic traits and elements in works. – -Giving works aesthetic meaning.
AESTHETIC JUDGMENT	– Expressing emotions evoked by the music resulting from their own work during the process of composition. – Reflecting on the ideas they wish to express when composing music.	– Expressing emotions evoked by the choreographies resulting from their own work during the process of composition. – Reflecting on the ideas they want to express when creating choreographies.	– Making aesthetic judgments while performing the musical compositions during rehearsals.	– Making aesthetic judgments while rehearsing their choreographies.	– Valuing the musical and choreographic components and aesthetic traits present in their own work. – Making aesthetic judgments about their own work. – Valuing the musical and choreographic components and aesthetic traits present in other students' work. – Making aesthetic judgments about other students' work.

Table prepared by the authors.

4. Results

The results of the analysis carried out using the video observation tool are presented below (Table 1).

4.1. Starting phase

Results concerning expressive and creative aspects and aesthetic judgment emerged in this first phase of the process. The group displayed a wide range of expressive ideas during the process of musical composition (see Figure 1), integrating both technical and expressive aspects. They highlighted the importance of recording their compositions.

> AS affirmed: "She'll be able to understand it with the score.",
> and AC replied: "Yes, that's true. People need to understand what we're playing when we play it.".

These scores included indications of musical structures and symbols such as repeat bars.

> AM commented on the length of the composition: "Look, it has to be A-B-B because it will be too short if we make it A-B-A."

They also worked with ascending and descending pentatonic scales and simple rhythmic sequences: crotchet, crotchet, two quavers, crotchet, for example. Sometimes they also used analogical notation, such as colour-based symbols associated with the chosen instruments and timbre, and to represent the sound qualities and the order of the performers, but not to express emotions.

AC: "Each symbol is a person. When we see a blue square, we'll know it's our turn."
AS added: "Each of the colours represents a different sound".

They performed spontaneous, playful musical pieces in the form of improvisations, using basic playing techniques (see Figure 1) while simultaneously experimenting with *ostinatos* that evolved through *crescendo* and *accelerando* techniques, as well as *forte* and *piano* nuances.

The groups explored aesthetic and cultural references taken from traditional songs such as "Sol solet", or from other genres such as Queen's "We Will Rock You". They also remarked that "it should be more like rock and roll", thus bringing their own sensibilities into play. They responded emotionally to the musical results of their own work during the composition process, showing displeasure with comments like "That's awful!" and "It doesn't sound bad!". These reactions formed part of a consensus-building process that ensured all the proposals were accepted by the group. They also showed signs of nervousness, laughed a lot, and expressed satisfaction as they consolidated their ideas, which reflected their commitment. Finally, they celebrated happily upon finishing their compositions, showing how they had learnt and enjoyed themselves during the tasks carried out in this phase of the creative process.

Graph 1. Results for music in the starting phase.
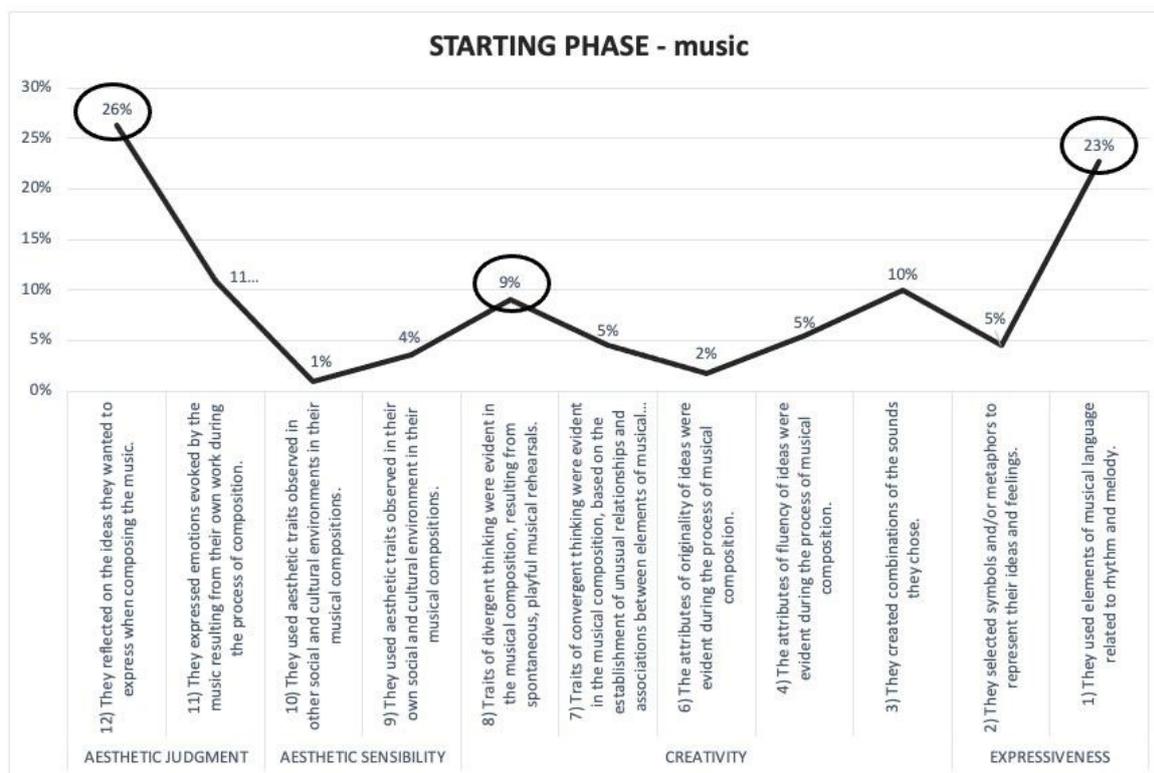
Graph by the authors.

Regarding the choreographic work, the students initially tackled it as if it were a scene from a theatre play, discussing how to incorporate narrative and expressive elements (see Graph 2). They started with literal gestures and images to create the dance, but then translated them into components of body language through the exploration of new possibilities for movement that cohesively shaped the choreographic and spatial composition.

They made use of props to enrich the visual and narrative content, as well as gestures and music. The importance of detailed planning was also highlighted and is reflected in the compositional methodology employed by all the groups: 1) they discussed what they wanted to do; 2) then they visually represented it through gestures; 3) they improvised to the music using those gestures; 4) from what emerged, they chose what they liked best; 5) they refined and stylized the movements to make them into a set choreography.

In both parts of the process (musical and choreographic), the students held deep, reflective discussions where they thought about and decided on what ideas they wanted to express in their creations. Furthermore, these ideas evolved in parallel with the development of the final product, highlighting the need to create a script or storyline that made the future mise-en-scène more coherent. This approach ensured complete integration of the physical, visual, musical and narrative components.

Graph 2. Results for dance in the starting phase.
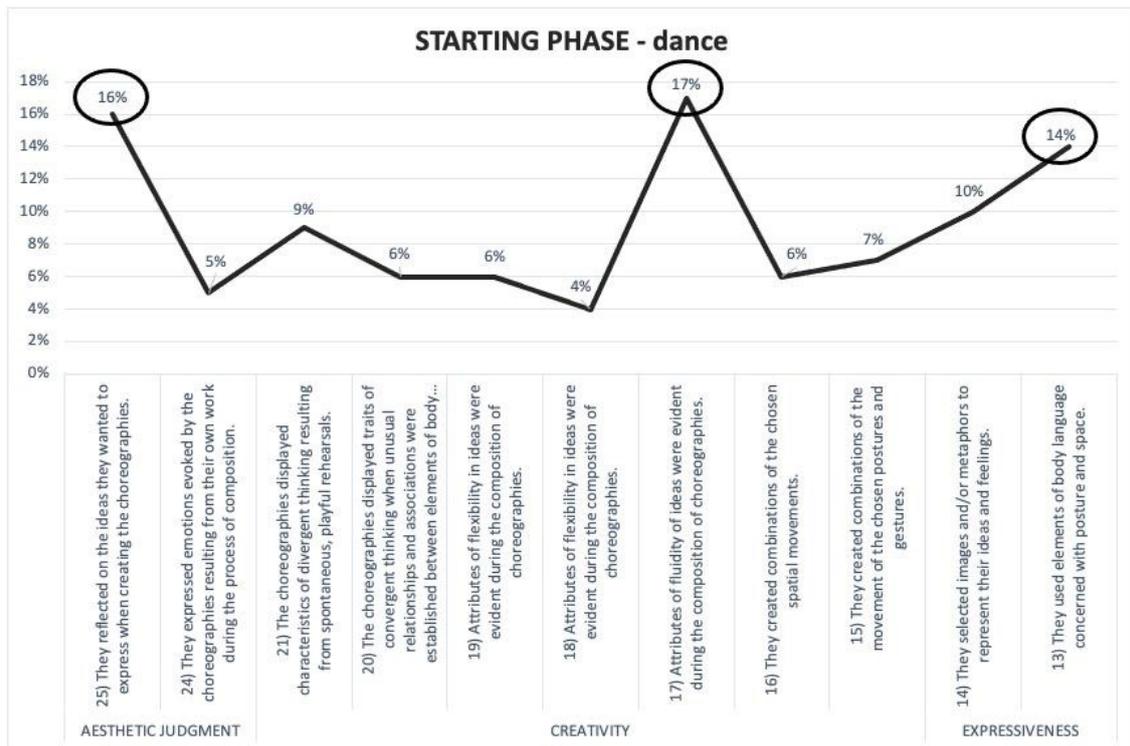
Graph by the authors.

4.2. Developmental phase

In this second phase of the process, the results were primarily associated with artistic and aesthetic traits present in the musical composition. We observed that the students continually consulted the score, which denoted their good organisation and attention to musical details. During rehearsals, they focused on consolidating different sections of the music or choreography, repeating them to achieve greater precision, coordination and rapport during their performance. When they detected any mistakes or something that did not seem right, they adjusted or modified it, always starting the piece of music or dance from the beginning to perfect the work and thus ensuring a sense of cohesion. Furthermore, they used different aspects of musical and physical language to reorganise their music and dance compositions.

At this stage, the group dynamics were clearly collaborative; it was remarkable to observe how they watched each other and used gestures and other hand movements to give instructions and coordinate the process. This nonverbal language reflected the rapport and mutual understanding existing among the participants. In fact, during one of the rehearsals, the students, sensing that the piece was beginning to flow, started jumping up and down, dancing and laughing to show their satisfaction and enjoyment. Another example is student AC, who, while leading her classmates and observing that the piece was being performed flawlessly, expressed her approval with an energetic "Right, we've got it!".

During the development of the music, the students also made aesthetic judgments about the performance of their creations (see graph 3), reflecting their emotional involvement with what they were composing. At one point during the performance, a student began improvising a melody on the slide whistle and shared it with the rest of the group:

> AY: "What I've just played is really cool, shall we use it?"
> One of his classmates agreed: "Yes, it sounds great."

In this way, they confirmed that they preferred the proposed change, and this sequence illustrates how they validated their ideas during the performance through aesthetic judgment. This behaviour was not detected when choreographing dances (see Graph 4).

Graph 3. Results for music in the developmental phase.
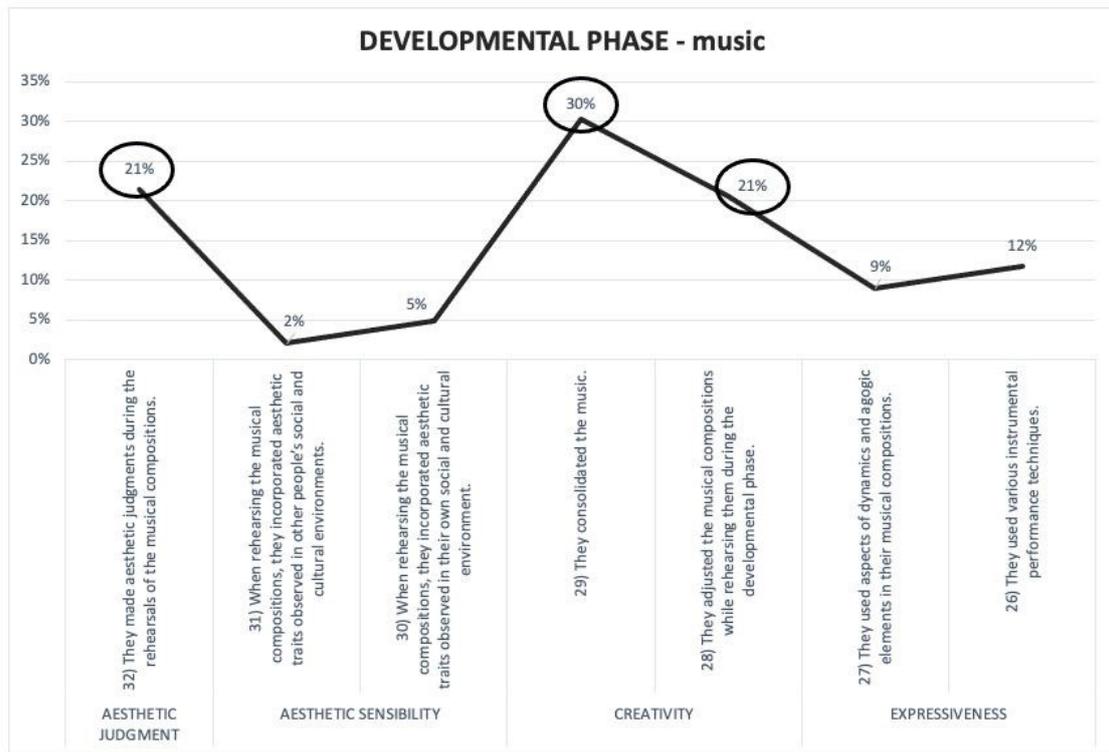
Graph prepared by the authors.

Graph 4. Results for dance in the developmental phase.
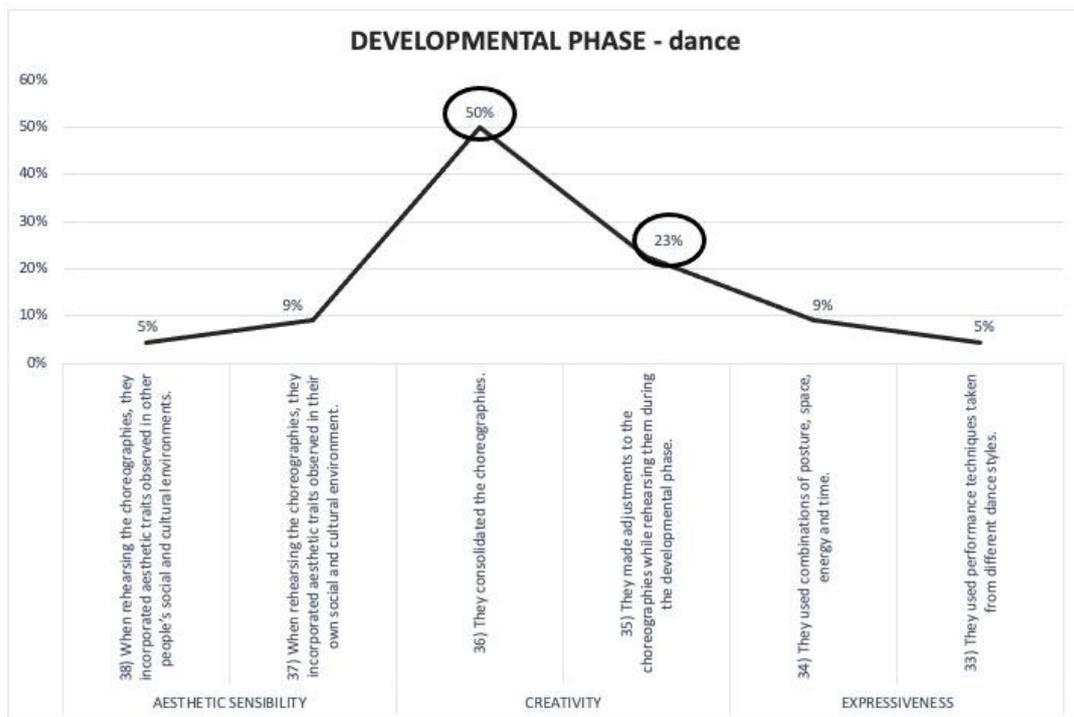
Graph prepared by the authors.

All said and done, the group's creative process was characterized by constant interaction between performance, rehearsals, reflection, revisions and spontaneous suggestions. Although some tensions arose during this stage because the group was immersed in a process of self-imposed pressure where each member was striving for perfection, the moments of collaboration and teamwork strengthened the group dynamics and the aesthetic quality of the final products.

4.3. Mise-en-scène

The ability to reflect on the symbolic meaning of the ideas expressed in their classmates' work was one of the most notable findings. It was observed that students displayed a marked interest in understanding the narrative thread of the works, prioritizing the rationalization of what others were trying to convey in their creations through the musical, choreographic and even scenic elements that they selected and incorporated into their own pieces.

When asked about the meaning of performances created by other groups, they all led off their answers with "What I understood…". This opening phrase reveals that, from an expressive point of view, 8-to-12-year-old primary school students focus more on a real, literal understanding of the narrative and the action expressed, discarding more metaphorical and abstract components with a hidden interpretation of ideas or messages that they were not ye bale to appreciate.

It is also worth noting that students exercised their creativity by imagining fictional situations or stories on viewing other students' performances. They connected what they heard and saw with objects, environments and situations that were part of their collective imagination, prioritizing narrative understanding over feelings. Furthermore, they drew attention in their conversations to those musical, choreographic and stage elements (costumes, props, effects, sets, etc.) that impressed them and that they considered original.

The students' role as spectators revealed that they do not focus their appreciation on the emotions conveyed, but rather on the logic of the narrative. They extracted a rational message about the work from the mise-en-scène, relegating the emotions to a secondary plane. At the same time, the works contained moral lessons that acted as triggers for reflection on values, ethics, social issues, etc.

Finally, the expression of aesthetic judgments was another relevant aspect. The students justified their opinions using technical criteria: they evaluated the works according to their performance, highlighting aspects such as rhythmic and melodic harmony in the music, or synchronization and coordination in the dance. A lack of coordination and contrasts made them uncomfortable, while clarity and precision were appreciated. Although they tended to be more evaluative than critical, these results demonstrate how the works stimulated their aesthetic judgment (see Graph 5).

Graph 5. Results for the final performance.
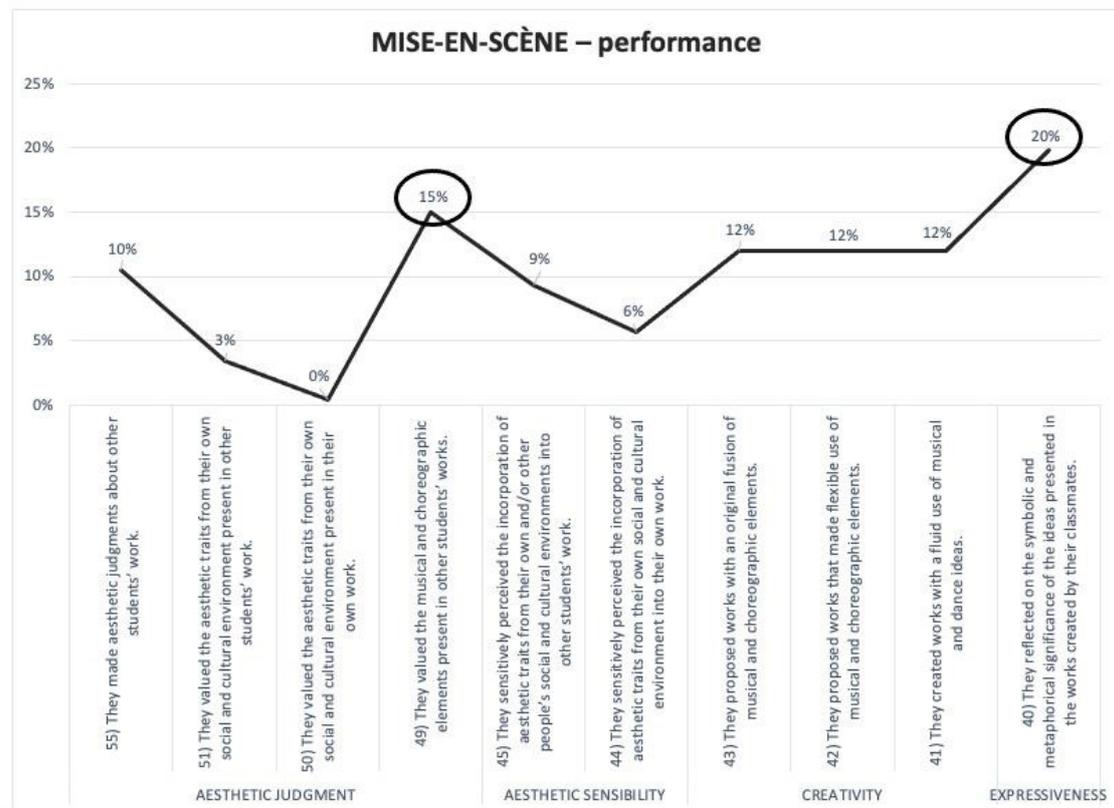
Graph prepared by the authors.

5. Final considerations

This study served to identify and analyse the aesthetic abilities and skills displayed by primary school students. It used a tool that allowed for the assessment of certain aspects of music and dance, taking into account the expected level of competence among students in this age group. In this regard, some items could be expanded

in order to address them more precisely and in greater depth in other contexts. For example, in the case of students in a dance school, the body-time category could be expanded beyond the factor of speed, and, items concerning harmony and musical styles or genres could be explored with students in a music school.

Three aspects of the results of this research should be highlighted: 1) the low presence of traits linked to sensibility; 2) the difficulties encountered with the symbolic representations during the creative process; and 3) the similarity of the aesthetic traits that emerged in both music and dance. The implications of these results are discussed below:

The low presence of the trait of aesthetic sensibility in the three phases of the process indicates that teachers should pay special attention to helping develop it (as pointed out by Vitalich Sallán, 2007). However, we are aware that the results may have been influenced by the difficulty of identifying aesthetic sensibility through video analysis, coupled with a limited awareness of the topic among students at this age.

All symbolic, abstract thought is strongly linked to individual maturity. In this sense, students drew on the possibilities offered by concrete musical and choreographic elements to create their works, but they rarely took a symbolic or metaphorical perspective. In contrast, they were capable (and this was very noticeable) of resorting to symbolism when they were spectators, which helped them to reflect on the ideas and give them meaning. Thus, a dichotomy emerges between the creators' intentions and the spectators' interpretation (D'hers & Musicco, 2015), which is by no means problematic but rather tends to enrich and imbue the artistic work with meaning.

Another factor that, according to the results, supplements and consolidates aesthetic learning outcomes was the collaborative work involving different art forms, as suggested by many studies (e.g., Burkharova & Urozhenko, 2020; González Zamar, 2024). The main aesthetic traits that come to the fore when focusing on one discipline are repeated similarly in others: reflection on ideas and expressiveness from within the artistic language itself during the initial stage; musical/choreographic work and the capacity for change linked to creativity during development; and the analysis of the components of music and dance in order to make aesthetic judgments during the performance. However, a point of discordancy emerges. During the development of the project, the musical side was highly valued, demonstrating aesthetic judgment, while this trait was surprisingly absent in the choreographic work. While further studies are needed to explore this aspect more deeply, one hypothesis suggests that the difference in background and prior experience of each subject could play a key role when it comes to explaining this discrepancy.

In a competency-based curriculum geared towards the development of integrated projects, such as in primary education, it is important to develop the different artistic languages in as broad and integrated a way as possible. To this end, it is essential to go beyond technical mastery and the final product and instead focus on the development of aesthetic education as a process. Experiencing the three roles – creator, performer and spectator – provides students with a full and enriching aesthetic experience. At the same time, it helps teachers to influence the development of their students' aesthetic sensibilities.

Therefore, we can affirm that this research breaks new ground in the study of the aesthetic dimension in schools, especially in collective interdisciplinary creative processes. It provides a clear definition of the characteristics of aesthetic abilities and skills and their application in the analysis of aesthetics. It also highlights those elements that foster the consolidation of students' aesthetic personality at different stages of the creative process, giving equal importance to the creative impulse, expressiveness during performance, and a sensitive and open attitude to art. Finally, this research provides music teachers with key information when it comes to optimising the development of artistic competence in interdisciplinary environments.

6. References

Araujo, G. C. de (2021). Arte e Estética na Educação: uma Dimensão Epistemológica. *Humanidades 11*(1), 1-22. https://doi.org/10.15517/h.v11i1.44157

Baker, M., Rudd, R. and Pomeroy, C. (2001). Relationships between critical and creative thinking. *Journal of Southern Agricultural Education Research*, *51*(1), 173-188.

Barcia, J. (2004). La condición expresiva del objetivo estético. Una reflexión en torno a Mikel Dufrenne. *Taula: Quaderns de pensament*, *38*, 241-262.

Barranco, M. C. (2007). La naturaleza de las propiedades estéticas y su papel en una nueva estética del gusto. *Enrahonar. An international journal of theoretical and practical reason*, *38*, 203-220. https://doi.org/10.5565/rev/enrahonar.339

Beudert, L. (2010). Arts teacher education. En *International Encyclopedia of Education* (pp. 695-701) Elsevier Ltd: https://doi.org/10.1016/B978-0-08-044894-7.00634-5

Bozal, V. (Ed.). (2010). *Historia de las ideas estéticas y de las teorías artísticas contemporáneas. Vol. 1*. Antonio Machado Libros.

Bruner, J. (2004). *Realidad mental y mundos posibles: Los actos de la imaginación que dan sentido a la experiencia.* Gedisa.

Burkharova, E., & Urozhenko, O. (2020). Artistic Reality in the Space of Digital Technologies: Towards the Problem of Art Criticism. *Questions of the Expertise in Culture, Arts and Desisign*, 9-14. https://doi.org/10.18502/kss.v4i11.7522

Burnard, P., & Henessy, S. (2006). *Reflective practices in arts education*. Springer.

Calderón-Garrido, D., Gustems-Carnicer, J. & Carrera, X. (2020). La competencia digital docente del profesorado universitario de música: diseño y validación de un instrumento. *Aloma: Revista de Psicologia, Ciències de l'Educació i de l'Esport, 38*(2), 139-148. https://doi.org/10.1177/0255761420954303

Carrasco-Barranco, M. (2007). La naturaleza de las propiedades estéticas y su papel en una nueva estética del gusto. *Enrahonar. An international journal of theoretical and practical reason, 38*, 203-220.

Carretero-Dios, H., & Pérez, C. (2005). Normas para el desarrollo y revisión de estudios instrumentales. *International Journal of clinical and health psychology*, 5(3), 521-551.

Cslovjecsek, M., & Zulauf, M. (2018). *Integrated music education. Challenges of teaching and teacher training.* Peter Lang.

Creswell, J. W., & Creswell, J. D. (2018). Research Design: Qualitative, Quantitative, and Mixed Methods Approaches. London: SAGE.

Decreto 175/2022, de 27 de septiembre, de ordenación de las enseñanzas de la educación básica. Diari Oficial de la Generalitat de Catalunya, 8762, 29 de setembre de 2022.

De la Roche, M. L. (2021). *Formación estética de pies a cabeza*. Universidad del Valle.

Dewey J. (2008). *El arte como experiencia*. Paidós.

D'hers, V., & Musicco, C. (2015) La expresividad y el movimiento desde una mirada metodológica: reflexiones en torno a las "entrevistas bailadas". *ASRI-Arte y Sociedad. Revista de investigación, 9*, 1-15.

Elosua, P. (2003). Sobre la validez de los tests. *Psicothema, 15*(2), 315-321.

Elosua, P. (2012). Tests publicados en España: Usos, costumbres y asignaturas pendientes. *Papeles del Psicólogo, 33*(1), 12-21.

Escobar-Pérez, J., & Cuervo-Martínez, Á. (2008). Validez de contenido y juicio de expertos: una aproximación a su utilización. *Avances en medición*, 6(1), 27-36.

Esquivias, M. T. (2004). Creatividad: definiciones, antecedentes y aportaciones. *Revista Digital Universitaria*, 5(1), 1-17.

Galván Lizarazo, A. P., Manjarres Forero, L. F., & Osuna Ospina, L. A. *De mentes creativas el desarrollo de los procesos cognitivos a través de la experiencia artística* (tesis doctoral, Universidad de la Sabana).

Gamarra de Denis, S. V., & Sosa de Wood, P. (2024). Enfoque integrador para las disciplinas artísticas del 1° y 2° Ciclo de la Educación Escolar Básica Basado en análisis curricular y pedagogías contemporáneas. *Revista UNIDA Científica*, 8(2), 73-87. https://doi.org/10.69940/ruc.20241205

Gardner, H. (1985). The centrality of modules. *Behavioral and Brain Sciences*, 8(1), 12-14. https://doi.org/10.1017/S0140525X00019270

Goleman D. (2013) *La inteligencia emocional ¿Por qué es más importante que el coeficiente intelectual?* Vergara.

Gould, E. (2006). Dancing composition: Pedagogy and philosophy as experience. *International Journal of Music Education*, 24(3), 197-207. https://doi.org/10.1177/0255761406069639

Hanza, K. (2008). La estética de Kant: el arte en el ámbito de lo público. *Revista de Filosofía, 64*, 49-63. https://doi.org/10.4067/S0718-43602008000100004

Henrich, D. (1992). Explicación kantiana del juicio estético. *Estudios de Filosofía, 6*, 77-94

Hospers, J. (1954). The Concept of Artistic Expression. *Proceedings of the Aristotelian Society*, 55, 313-344.

Landis, J. R., & Koch, G. G. (1977). The measurement of observer agreement for categorical data. *Biometrics, 33*(1), 159-174. https://doi.org/10.2307/2529310

LeCompte, M. D., & Goetz, J. P. (1982). Problems of Reliability and Validity in Ethnographic Research. *Review of Educational Research, 52*, 31-60. https://doi.org/10.3102/00346543052001031

LOMLOE (2020). Ley Orgánica 3/2020, de 29 de diciembre, por la que se modifica la Ley Orgánica 2/2006, de 3 de mayo, de Educación. *BOE, 340*, 122868-122953.

Martínez Miguélez, M. (2006). Validez y confiabilidad en la metodología cualitativa. *Paradigma*, 27(2), 7-33

Mertova, P., & Webster, L. (2012). Critical event narrative inquiry in higher education quality. *Quality approaches in higher education*, 3(2), 15-21.

Martin Prada, J. (2017). David Hume y el juicio estético. *Revista de filosofía, 73, 259-279*. https://doi.org/10.4067/S0718-43602017000100259

Pérez García, M. L., Ruiz, M. S., Carmona, M. D. T, Fuentes, B. E. R., & Silva, S. I. B. (2014) *Apreciación del Arte*. UAEMéx. México.

Potash, J. S., Bardot, H., & Ho, R. T. H (2012) Conceptualizing international art therapy education standards. *Arts in Psycotherapy*, 39(2), 143-150 https://doi.org/10.1016/j.aip.2012.03.003

Real Decreto 157/2022, de 1 de marzo, por el que se establecen la ordenación y las enseñanzas mínimas de la Educación Primaria. *Boletín Oficial del Estado*, nº 52, 2 de marzo de 2022.

Ronderos, M. E., & Mantilla, M. T. (2013). *Educación Artística.* Ministerio de Educación Nacional (Bogotá).

Shih, Y. H. (2018). Aesthetic Education for Young Children in Taiwan: Importance and Purpose. *International Education Studies* Vol. 11, No. 10. Canadian Center of Science and Education https://doi.org/10.5539/ies.v11n10p91

Silenzi, M. (2009). El juicio estético sobre lo bello: Lo sublime en el arte y el pensamiento de Kandinsky. *Andamios, 6*(11), 287-302.

Torrance, E. P. (1987). Teaching for creativity. En S. G. Isaksen (ed), *Frontiers of creativity research: Beyond the basics* (pp. 189-215). Bearly Limited.

Torres, J. J., & Perera, V. H. (2010). Cálculo de la fiabilidad y concordancia entre codificadores de un sistema de categorías para el estudio del foro online en e-learning. *Revista de Investigación Educativa*, 27(1), 89-103.

Viñas, M. F. (2019). Escuchamos y hacemos sonar las matemáticas. *Eufonía: Didáctica de la música*, (81), 44-51. Graó

Viñas, M. F., Casals, A., & Viladot, L. (2022). Emerging critical events in creative processes involving music, dance and mathematics in the school. *International Journal of Music Education*, *40*(2), 228-243. https://doi.org/10.1177/02557614211050996

Vitalich Sallán, P. A. (2007). Del juicio estético a la cartografía deleuziana: análisis de los juicios sobre gustos en la infancia. *Anuario de investigaciones, 14*.

Wolf, P. (1991). El aprendizaje artístico como conversación. *Hargreaves D. Infancia y educación artística. Madrid: Ediciones Morata*, 40-57.

Woods, P. (1993). Critical events in education. *British Journal of Sociology of Education*, *14*(4), 355-371. https://doi.org/10.1080/0142569930140401

Zamar, M. D. G. (2024). *Arte y Aprendizaje: Estrategias para la educación artística en primaria* (Vol. 179). Universidad Almería.

Ma. Fernanda Viñas completed her musical training at the Conservatory of Music and Dance of Buenos Aires and and later attained a Bachelor's Degree in Music Education at CAECE University. After moving to Barcelona in 2003, she pursued the Bachelor's Degree in Primary Education with a Music specialization at the University of Barcelona, followed by a Master's Degree in Musicology, Music Education, and Early Music Performance at the Autonomous University of Barcelona. She is currently finalizing her PhD in Music Education. She serves as an adjunct professor at UB and UAB, coordinates the Higher Degree in Pedagogy at ESEM-Taller de Músics, and is secretary of the SEM-EE Board of Directors. She also collaborates as a reviewer for the journal RIDE and sits on the editorial board of Infancia Latinoamericana. Her research examines creative processes, interdisciplinarity, and teacher training in music education. She is affiliated with the research groups GIDEM-UB, SigPRIME-ISME, and RELEM

Dr Laia Viladot. Head of the Music, Visual Arts and Physical Education Department at Universitat Autònoma de Barcelona (UAB) since 2021. Her service work has included holding positions of coordination in the Faculty of Education and Master programmes. Prior to start working at UAB in 2005, Laia taught in both music schools and secondary schools for several years. Her research interests centre on interaction in the music classroom, peer learning, and collective music composition. She has led and participated in national and European research projects and is currently hosting international pre and postdoctoral researchers. Laia has taught courses as a guest lecturer in various countries, has published several book chapters and educational materials, and has authored numerous research articles in both national and international journals.

Dr. Albert Casals. Senior Lecturer in Music Education at the Universitat Autònoma de Barcelona (UAB). He holds a PhD in Music Education, as well as degrees in Primary Music Teaching and Social and Cultural Anthropology. After ten years as a music teacher in primary schools, he has worked full-time since 2006 on the education of both pre-service and in-service teachers. His main research interests include music teacher education, the integration of music with other subjects in the school curriculum, and the role of ethnomusicology in educational innovation. He leads and participates in national and European projects and has authored numerous research articles in both national and international journals. He is currently the coordinator of the PhD programme at the Faculty of Education at the UAB.