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Spaces for Aesthetic Creation and Experimentation in Art Education

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Abstract

This article analyses the educational possibilities of art installations in the training of future early childhood and primary school teachers. I start by reviewing the origins of installation art before presenting an experience designed for teachers based on the creation of scale models and installation experiences. Scale model installations constitute a tool for future teachers to explore contemporary artistic creation while fostering creativity and reflection on their role as educators. This study employs a constructivist qualitative methodology using *action-based research* and a journal to record the progress of the students throughout the project. The initial results demonstrate the educational value of this experience and its potential to generate further educational experiences to explore contemporary art themes and other areas of the curriculum. The use of installation art in education is compatible with a diversity of approaches, materials, and media and opens the door to new lines of research.

Introduction

Installation art encompasses a wide range of artistic mediums and disciplines. As an artistic genre, it blurs the lines between different fields, expands creative possibilities with a wide variety of approaches, and challenges the idea of what is considered a work of art and the function of the work of art. Kosuth (1991), as a defender of conceptual art and through his double professional role as an art critic and installation artist, offers an enriching vision of the nature and function of art, rejecting the production of the work as an ornamental object. The current design of installations adapts to new formats such as the interactive ones by Lilly and Hung-Min, (2022), in which the interaction of the participant is encouraged and the spaces are transformed. The power of installation art to transform spaces can be experienced in works such as *Le Palais Ideal*, built between 1879 and 1912 by Ferdinand Cheval (Le Palais Idéal du Facteur Cheval, 1879-1912), *The Watts Towers* (1921–1954) by Simon Rodia (MIT Libraries, 2013), as well as in more recent works like *Cadillac Ranch* (1974) by Ant Farm (MOMA, n.d.) and *Tilted Arc* (1981) by Richard Serra (Mundy, 2019).

I intend to go beyond installations as works of art in public spaces to study their application in educational contexts. To put artistic installations in early childhood education into practice in the classroom, various variables come into play, such as aesthetic appreciation, game mechanics, and learning processes. Philosophers such as Huizinga (1949) indicate that play is associated with the nature of culture, is a right of the child, and is an essential experience for their development. Among the multiple benefits that play presents in children's recreational aesthetic spaces, I highlight that play provides experimental learning that favours collaboration and encourages social, cultural, and personal development (Mucci et. al., 2023; Ruiz & Abad, 2020).

Origins and Evolution of Installations as a Form of Aesthetic Creation

Installation art is a form of intermedia, a hybridisation of different artistic disciplines (e.g. sculpture, painting, and architecture) that transgresses boundaries of media and how art is created, blurring the roles of artist and spectator. As installations are typically composed of several interrelated media, it is impractical to study the installation art genre from a historicist or avant-garde perspective since there are no defined ways of conceiving an installation in a specific medium. Instead, installation designs tend to encompass diverse approaches to the use of different media and dialogue among their constituent elements (De Oliveira et al., 2003).

Although its origins date back to the nineteenth century, installation art emerged on the art scene in the 1960s and 1970s before solidifying its place in the art world. Since then, the concept of installation art has continued to evolve and has been the subject of extensive research (Bishop, 2005; Lawrence, 2003). In the field of art, installations represent a form of

artistic expression that reconfigures a space while respecting its perimeter. Installations are immersive and akin to what Richard Wagner referred to as *Gesamtkunstwerk* or a “total work of art” (De Oliveira et al., 1996). The genre can be defined in terms of *Merz*, a term coined by Kurt Schwitters to describe a combination of collage, painting, assemblage, and recycled materials in his works. Similarly, the terms *intervention art*, *environmental art*, *event art*, and *project art* have also been used by artists, critics, and curators to refer to these heterogeneous pieces.

Throughout its history, installation art has been defined in a standardised and canonical way. After originating in Western culture, it was influenced by the avant-garde movements of the 20th century, sharing similarities with Futurism, Cubist collage, Surrealism, readymade techniques, Dadaism and the constructions of Schwitters and Baader, the spatial concept of Lissitzky in his work *Proun Room* (1923), the approaches of the *Bauhaus*, and the *Spatialism* of Fontana (De Oliveira et al., 1996). Installation artists explore beyond the illusory space of conventional art forms and integrate their works into the physical environment and architectural spaces. Installations constitute multidisciplinary experiences of artistic representation based on components such as improvisation, participation, and provocation of the spectator. These works draw from happenings, pop paintings by Kienholz, Oldenburg, Segal and Thek, *Fluxus*, minimalism, land art with a distinction between in situ and non-in situ works (Smithson, 1979), Arte Povera, process art, and conceptualism. Since 1960, the genre has been defined by the works of artists such as Joseph Beuys, Richard Serra, Niki de Saint Phalle and Jean Tinguely, Dan Flavin, Ilya and Emilia Kabakov, Tracey Emin, and Damien Hirst.

The formats of installation art are wide-ranging, and from an educational perspective, it is worth highlighting installations designed for adults, such as *The Unilever Series* (2000–2012), and children, such as *Sketch Aquarium: Connected World* (2021) by teamLab, which will be explored in the following section. Examples of more analogue or conventional children’s installations include *Artland* (2016–present) and *Wobbleland* (2013–2014), which have an underlying educational theme. In terms of art education, it is worth mentioning the *Bombearte Project* (2015–2022) by Marín and Roldán (2021), where drawings, sculptures, and paintings created by children promote a learning environment in disadvantaged areas. Additionally, *City for Children Under 99 years Old* by Basurama (São Paulo, Brazil, 2016) features recycled elements to create playful environments and *Tape Wanås* (2022) involves the creation of sculptures with biodegradable tape.

Contemporary Installation Art for Children

Contemporary artists have created projects for children and families (Sherman, 2010) that actively involve children through tools such as drawing and space construction. Horn (2006)

has explored the participation of children in such ephemeral installations. These projects connect children to contemporary culture through experimentation and reflection. This section presents a selection of emerging artists who have created art installations for children, whether using digital technologies, such as teamLab, or analogue techniques, such as *Artland* (2016–present) and *Wobbleland* (2013–2014).

Artland (2016–present) by Do Ho Suh

A participatory installation that engages with children, encouraging them to use their imagination to create new shapes and characters out of coloured clay. This is a particularly good example for prompting future teachers to learn about installations while also exploring simple applications for children in the classroom using coloured clay.

Sketch Aquarium: Connected World (2021) (Figure 1) by teamLab

An interactive installation centred around a projection of an aquarium with sea creatures created using paper templates designed, coloured, and scanned by children. This installation is a valuable example to study with future teachers as it illustrates how a new and immersive space can be created to foster participation and engagement.

Wobbleland (2013–2014) (Figure 2) by Marisol Rendón

An installation designed for children to interact with sculptural forms of food. It is a good example for future teachers to discover a new way of presenting everyday objects to children. The *Wobbleland* model is a useful resource for students to see a three-dimensional prototype before its construction in a museum.



Figure 1. *Sketch Aquarium: Connected World* (2021) by teamLab.

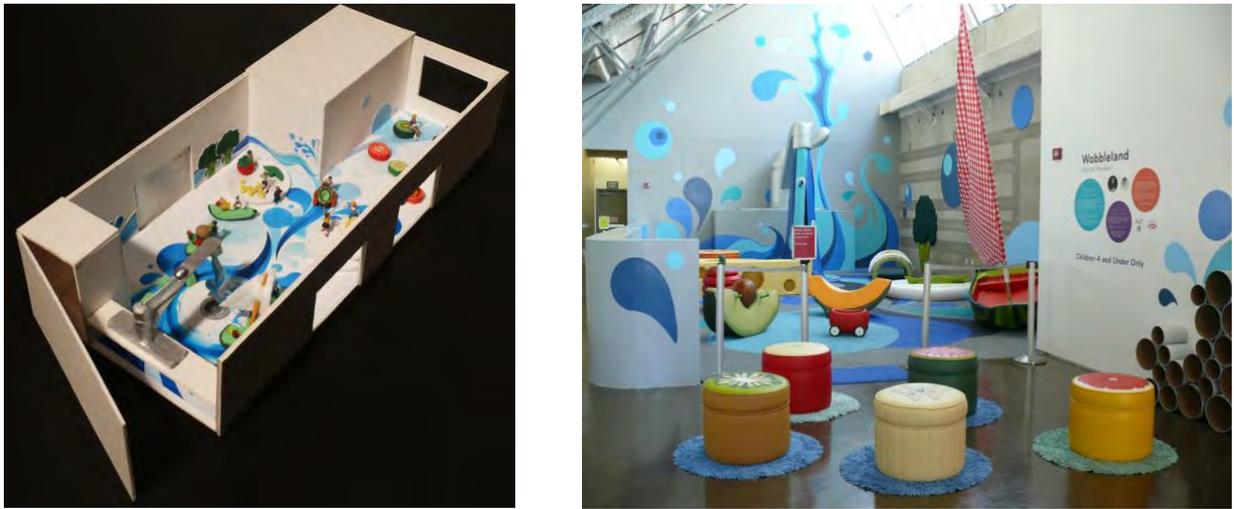


Figure 2. *Wobbleland* (2013-2014) by Marisol Rendón.

Note. Scale model (left) and installation (right).

These examples of contemporary children's installations are directly related to the methodology used in this experience with the future teachers, which is explored later in the article.

Educational Applications of Children's Installations

The use of art installations in early childhood education has been researched by authors interested in the meaning that objects acquire in these spaces (Blagoeva, 2019; Brown, 2015; Mesías et al., 2020; Ruiz & Abad, 2020) and the interactions generated through experimentation. Educational installations are inspired by Aucouturier's pedagogy (2004) based on psychomotor practice and contemporary art aesthetics. The genre has also been examined in depth as process art (Martínez, 2019) and as an educational resource for future teachers. This research has enriched the approach to the use of space for future early childhood and primary education teachers by considering installations as pieces with certain aesthetic elements that can be arranged to create structures that can be walked through, manipulated, or interacted with by children. The numerous benefits of educational installations include the fact that they facilitate open, flexible, and joint creativity and can be constructed with a wide variety of media.

Some noteworthy children's play installations in educational contexts include the works of Marín and Roldán, Basurama, and Numen.

The Bombearte Project (2015–2022) by Marín and Roldán (2021) (Figure 3)

A collaborative installation involving teachers and primary and secondary students in a school in Tegucigalpa, Honduras. This project aimed to promote artistic education by relating Mayan sculptures with works of contemporary art in educational centers at risk of social exclusion.

City for Children Under 99 years Old (2016) (Figure 4) by Basurama

An interactive installation designed with repurposed metal barrels. A children's playground created to be used as a climbing structure or public furniture.

Tape Wanås (2022) by Numen (Figure 5)

An installation made from biodegradable tape, featuring a structure formed by organic shapes that can be walked through and a composition resembling biomorphic architecture, constructed as a network with a sculptural membrane.



Figure 3. *The Bombearte Project* (2015–2022) by Marín & Roldán (2021).

Note: La clase Piedra: Dibujando una calavera de Copán, 2019.



Figure 4. *City for Children Under 99 years Old* (2016) by Basurama.



Figure 5. *Tape Wanås* (2022) by Numen.

Note. Wanås Konst Sculpture Park, Sweden. (Jonke et al., 2022).

An Installation-Creation Project and its Methodology

To explore the educational possibilities of art installations in the training of future early childhood and primary school teachers, I designed an installation-creation project with *play-based learning* at the core. I will call this project “The Experience.” The experience was carried out with undergraduate students from the University of La Laguna, Tenerife, in two different academic years, 2019-2020 and 2023-24. It was based on art lessons from two different subjects. In 2019-2020, a total of 99 primary education students participated between October to December 2019, and 95 undergraduate students in Early Childhood Education participated between February to May 2020. Regarding 2023-24, 73 undergraduate students participated in creating the installations between October to December 2023. In the first part, due to the large number of students, the installations were created as small-scale models; only models and installations from the Primary Grade have been selected. In the next section, *Design of the Experience*, I provide details about how the models were translated into large-

scale installations made by students.

This experience was described and examined through the following questions:

1. How can art installations be adapted by future teachers for application in early childhood and primary education to promote collaborative projects?
2. Can future teachers use these projects to generate didactic materials, based on practical experience with children's installations and scale models, while reflecting on their teaching?

I will first present the design of the Experience, followed by how I evaluated the Experience using action research.

Design of the Experience

The main teaching methodology employed in this experience is *play-based learning*. I explore how a connection can be woven between methodologies, presenting practical experiences created by teachers and analysing how children perceive them.

The installations are designed as spaces to live aesthetic, playful, and research-based experiences that guide the child in unstructured learning processes in which objects, colour, and light play an essential role. The designs of contemporary installations follow the pedagogies of Reggio Emilia and Loris Malaguzzi and the ludic mechanics associated with early childhood and primary education are used. This is why play-based learning fits into this educational practice,

Thus, when creating children's installations in art education, teachers should approach their design using manipulative materials, encouraging children's drawing and practices based on playful mechanics. As such, play-based learning is a methodology that ties in well with this experience. These ideas were developed by pedagogues such as Froebel, who created didactic play materials with educational activities based on building blocks for children such as those called *gifts*. In addition, Montessori designed a methodology for children that encourages individual initiative and the infant's skills through play, and Loris Malaguzzi developed a pedagogy in which the environment plays an essential role and is the basis for educational practices based on playful, creative processes (Malaguzzi, 1996; Edwards, et. al. 2011). These three pedagogues suggested that children learn social skills and acquire knowledge and abilities through play. This methodology can be applied when creating installations where children perceive the design as a playful space for creation, interaction, and learning. Through play and its application to the educational curriculum (Wood & Attfield, 2005), children can

set new goals in a stimulating and participatory environment.

As an introduction to the topic, the future teachers were provided with various materials, including art books for children (Renshaw & Williams, 2013), books based on art installations for adults (Bishop, 2005; Lawrence, 2003), and publications on installations in artistic education implemented in the classroom (Horn, 2006; Marín & Roldán, 2021; Martínez, 2019). Three additional resources were fundamental for the practical experience: 1) Design axis; 2) Paper folding tabs; 3) Didactic scheme of the project.

Design Axis

The artistic experience started with exposing the students to images of installations intended for adults in exhibitions such as *The Unilever Series* (2000–2012), children’s art installations, and other installations related to art education. Before designing the scale models, the class selected a topic from the early childhood or primary school curriculum, followed by a period of creating and sharing ideas in groups to convey educational content. Each installation had to meet specific requirements—it had to contain an educational and playful component, employ accessible materials, and incorporate certain elements created using paper folding. These elements had to be movable so that children could interact with them. In addition, the installation had to be participatory and interactive and able to be traversed by children with a view to fostering experiential learning.

When creating the scale model, students were required to connect the visual and textual components of the piece. Any ideas related to educational content were expressed both textually and visually, using visual thinking to create infographics, diagrams, visual maps, icons, and symbols. The students understood that, in education, the focus should be on the process rather than the final product.

Paper Folding Worksheets

The educational worksheets (Marqués, 2023a) were created for a workshop held by the author at a conference in Texas, designed around the Texas State curriculum, but which could be adapted to other curricula. The basic premise was simple, namely, using an accessible material such as paper to construct figures to create installations for children based on the repetition of a figure, such as the popular crane or other motifs with paper engineering or paper folding.

Educational Outline of the Project: Scale Model and Installation

The evolution of how the scale models were created and how they could be implemented as installations is illustrated in Figure 6.

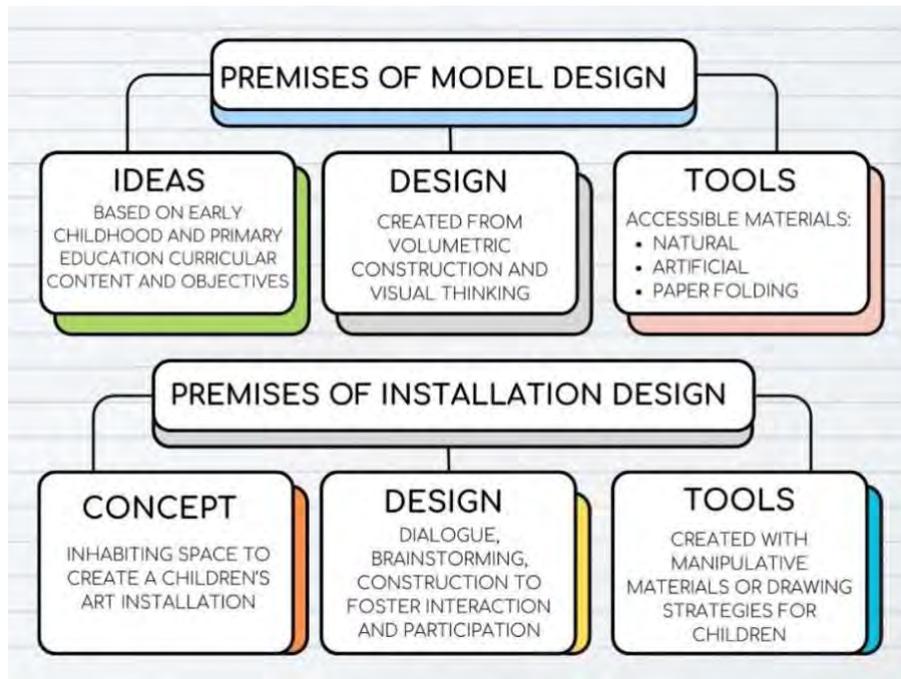


Figure 6. Proposed Ideas for Project Development.

Note. Scale model and art installation design premises (2023). Compiled by the author.

Evaluation of the Experience through Action-Based Research

Due to the innovative nature of the Experience and the diversity of the data collected, I followed an action research approach (Cohen et al., 2005) to analyse the different phases of the process: 1) planning, 2) action/execution, 3) observation, and 4) reflection and analysis of the results (Figure 7) in order to answer the aforementioned research questions.

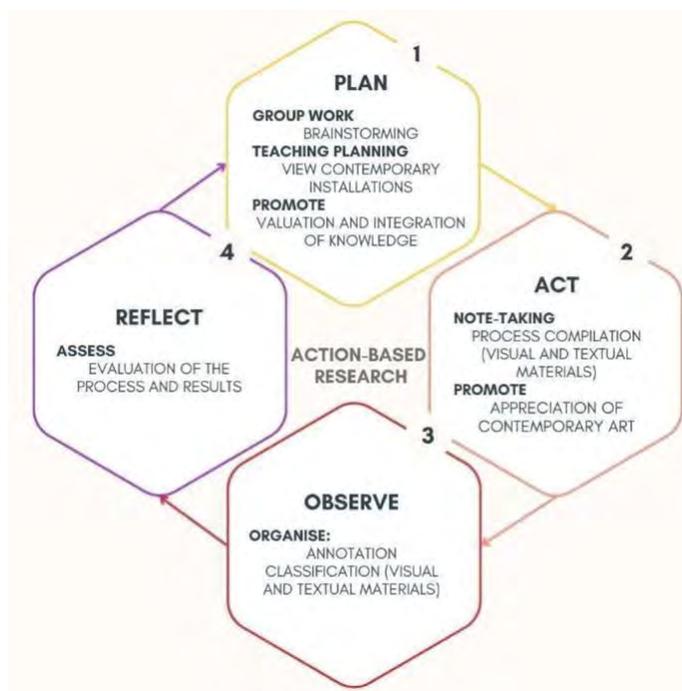


Figure 7. Overview of the Action Research Approach.

Note. Visual design of the action research of the installation project (2023). Illustration prepared by the author, based on Blagoeva (2019).

The proposal was made in two different academic years. In the 2019-2020 academic year, the undergraduate students from Primary and Childhood education made the models. In the 2023-2024 academic year, the future Primary teachers were provided images of models from 2019-2020 and asked to choose one and build a large-scale installation model for children based on the ideas developed in the original model. Among the instructions, they were told that it should be aesthetic, playful, and that the children should be able to interact with the elements that made it up. They were also told that the incorporated elements had to be made by them, not from prefabricated material, photocopies, or copies of drawings.

In both academic years, groups of approximately five people each were formed. In 2019-2020, it was a practical assignment, and, in 2023-24, they reflected on the process. The 2023-2024 groups had to take three images each day and a short 10-second video to document the process before, during, and after the installation. In total, there were six sessions in which 18 images and six short videos were collected from each group. This was used so that the students could reflect on their practice based on a table provided (Marqués, 2023b).

Three tools were used to collect data, achieve the proposed objectives, and answer the research questions: (a) observation based on pedagogical documentation (written and visual

material) (Carr & Lee, 2012) at each stage of the process, (b) action-based research applied to the project and results, and (c) a journal to record the students' progress while creating the models.

Each stage of the study allowed preservice teachers to share their experiences, make observations in order to adopt new pedagogical approaches, demonstrate their teaching competencies, and reflect on the results to improve their teaching practice. In this case, written data were collected chronologically at the beginning of the study in two categories: (a) project planning notes and (b) project progress journal. The goal was to generate knowledge and experience through practice from the teachers' perspective. Reflecting on the notes allowed me to better understand the teaching and learning process, as well as the challenges and successes of applying this practical experience in the classroom.

To answer the research questions, I analysed the entries made by the students in their journals, which revealed their responses to the collaborative project, including its visual characteristics and how it was constructed. Regarding the possibilities of unified integration of knowledge, the students established conceptual relationships between subjects from the beginning since they had to work interdisciplinarily with art content and other curricular subjects. The design and creation of models is an interdisciplinary practical experience in which to develop and apply various skills: conception, design, layout, group discussion, execution, etc. Finally, the students collectively gave their suggestions for applying the findings to the design of learning environments in early childhood or primary education. These suggestions were articulated in the reports delivered on the evaluation and reflection of the proposal. In this practice, I saw a significant level of commitment and collaboration among participants. In the design of learning environments, students started from a greater reflection on their process, completing a table with the stages of creation before, during, and after the installation and recording the process with images and videos (Marqués, 2023b). With this, I saw how the practical aspects of the project were complemented by the reflective aspects and the process as a whole.

The Outcomes: Installation Examples

This section shows the models made by the students of the 2019-20 academic years and their interpretation as an installation with Primary Grade students in the 2023-24 academic year. Regarding the design of the installation, the students created models to teach an educational topic related to an area of the curriculum required by the Government of the Canary Islands (Spain). In the first experience, for reasons of cost, practicality, and space, small-scale models were created instead of full-size structures. In the second part, ideas from the original models were used to design and construct a large-scale model of an installation. The ultimate goal was for the creations to mimic life-size installations in classes with children or to inspire installations in a real physical space. An important component of this process was

collaboration and collective reflection between students and teachers.

Figures 8, 9, and 10 each include a pairing of photographs of the installations. The images on the left in each figure document models designed by the future primary education teachers of the 2019-20 academic year, and the images on the right show the implementation as a large-scale installation model. All of the installation designs were related to nature. The large-scale designs were created with manipulative components that could be moved in space or recreated with cardboard and accessible materials.

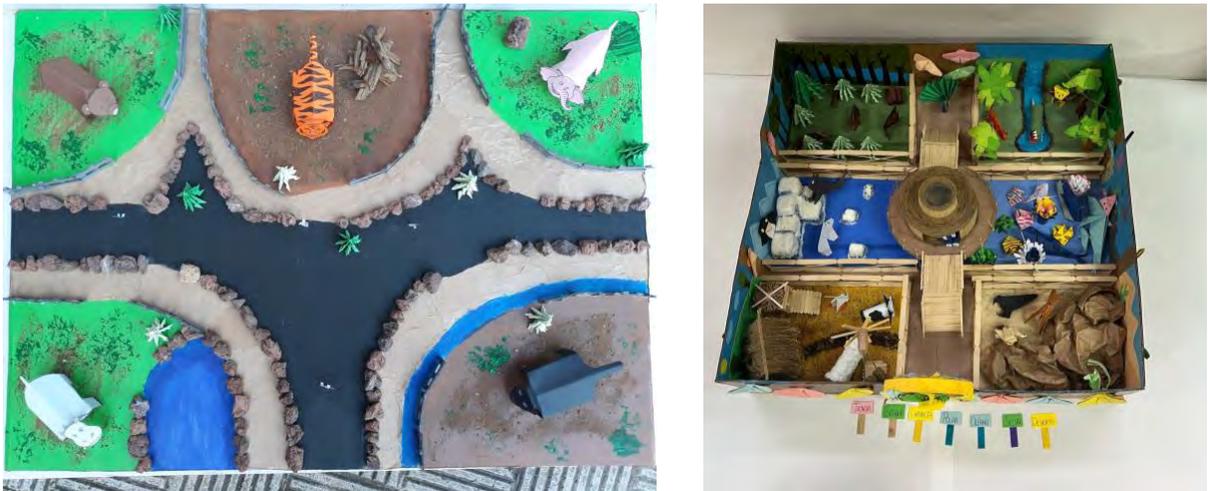


Figure 8. Students' work.

Note. Scale model: *Discovering the habitats* (left), 2019-2020. Designed by primary education degree students: Pablo Galloway, Adrián Oliva, and Ernesto José Luque. Installation based on the interpretation of the model (right): *Discovering the habitats* (2023) by primary education degree students: Noelia María Acosta, Victoria Adrián, Miriam Díaz, Alba de León, and Eva González. Installation approximated size: 8 x 37 x 37 inches. Photographs taken by author.



Figure 9. Students' work.

Note. Scale model: *The forest* (left), 2019-2020. Designed by primary education degree students: David Mendez, Silvia Mesa and Allyson Toledo. Installation based on the interpretation of the model based on the forest (right) by primary education degree students in 2023: Paula Delgado, Rocío Afonso, Verónica Fariña, Adriana Acuña, Claudia Expósito, and Christian Adrián Delgado. Installation approximated size: 39 x 79 x 47 inches. Photographs taken by author.



Figure 10. Students' work.

Note. Scale model: *The 4 seasons* (left), 2019-2020. Designed by primary education degree students: Jennifer Suárez, Erica Trujillo, and Carmen Zurita. Installation based on the interpretation of the model based on the 4 seasons (right) by primary education degree students in 2023: Ainhoa Bethencourt, Cristian Antúnez, Paola Hernández, Aroa Farrais, and Carolina Hernández. Installation approximated size: 43 x 43 x 43 inches. Photographs taken by author.

The student work on the left in Figure 8 represents a model of the forest, applying the technique of paper folding, while the image on the right shows the interpretation of this model in which a large-scale installation of natural habitats was made.

The model shown on the left in Figure 9 depicts the seasons of the year, with trees and characters created using paper engineering and natural materials to represent the surface, such as the leafy forest floor on the second level. When created as a large-scale installation, as seen in the image on the right in Figure 9, each of the four seasons could be located in a different corner of the classroom, thereby fostering movement and engagement among children.

Figure 10 shows the large-scale interpretation of the four stations. The photograph in the left of Figure 10 shows the four seasons using a base of a trunk and then each of the seasons of the year is structured by floors. The image on the right in Figure 10 shows an interpretation of said model, taking the idea and creating it on a surface in space.

In addition to designs of installations based on a model, students created complementary educational material. For example, the “seasons of the year” group included an activity and game to complement the installation (Figure 11). They also created a visual map of the material used (Figure 12), which is the result of having completed an activity I designed to support this project, *Annex: Evaluation and reflection on the project: Installation*, which can be accessed through the link in the reference list (see Marqués, 2023b).



Figure 11. Complementary Educational Material.

Note. Educational material, 2023. Created by primary education degree students: Ainhoa Bethencourt, Cristian Antúnez, Paola Hernández, Aroa Farras, and Carolina Hernández. Photograph taken by author.

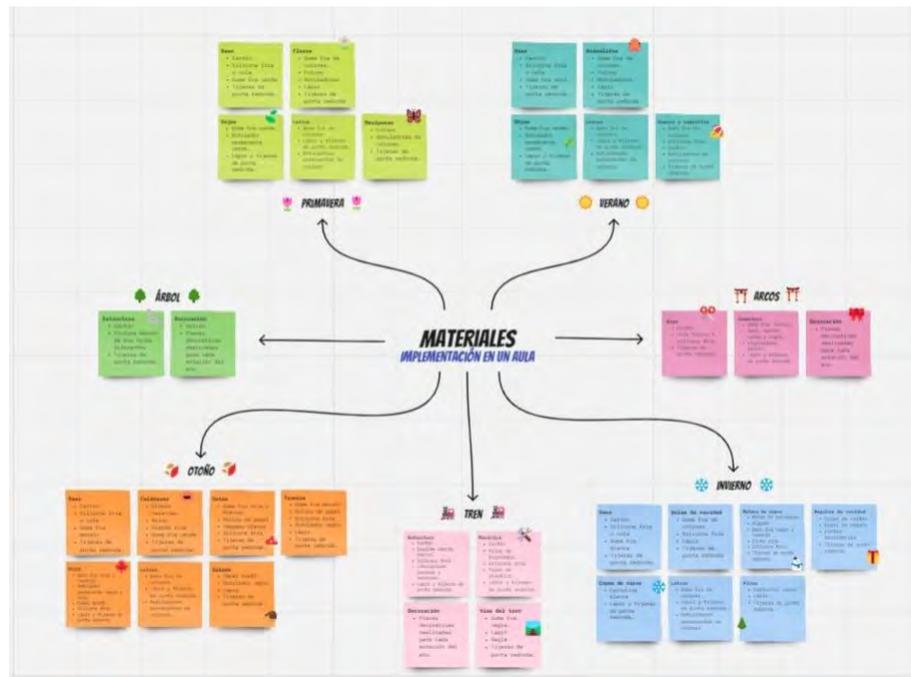


Figure 12. Student Concept Map.

Note. Concept map, 2023. Created by primary education degree students: Ainhoa Bethencourt, Cristian Antúnez, Paola Hernández, Aroa Farrais, and Carolina Hernández. Photograph taken by author.

Analysis and Discussion

This experience demonstrates the important educational potential of the design and construction of children's learning environments to promote meaningful learning for primary education degree students and allow them to connect their prior knowledge, acquire new skills, and exchange ideas. It is important to highlight that, probably due to lack of time, the material designed by the students seemed to focus more on the details of the installation than on the concept or the way a child would interact with the space. For this, a prior phase of brainstorming, viewing works by other artists, and collective criticism of the proposals seems necessary, especially with regard to the educational and interaction aspects.

The two levels of implementation (models and full-size installations) must be taken into account during the process, along with their advantages and limitations. As for the models, they were a step prior to the creation of the installations, they were made in detail, and they allowed students to explore and develop curricular content from other areas (natural sciences or social sciences, among others), with minimal time and effort. Students were then able to compare, analyse, and modify their designs in a group. No ethical issues were raised during

the experience. It is also worth reiterating that the potential for interaction between children was prioritised over the didactic objectives of the design, even if the student work did not fully reflect this priority.

Regarding the large-scale installations made by the students, this process reproduced the main ideas from the small-scale models as installations in space. These were primarily created as large models and the implication was positive. For a future project, it would be good to value the child's interaction with the objects as it happens in collaborative art or to develop as an Art Based Research project (Hickey et. al. 2021), where each child completes a part of the installation without closed patterns. In art education, there are several examples focused on children's installations that I would like to highlight, including Marín and Roldán's (2021) work with development cooperation, Martínez's (2019) study of installation as processual art, Mesías et al.'s (2020) installations for children, and Ruiz and Abad's (2020) installations for children based on accessible practices in education. In all these examples, it is interesting to highlight the way in which this artistic practice is explored and reflected upon in education.

The following considerations reflect the extent to which our initial research questions have been answered:

Regarding the first research question, which asks how art installations can be adapted and applied in collaborative projects for early childhood or primary education, this experience revealed a high level of collaboration between the participants. This idea is supported by literature in the works of Ruiz and Abad (2020) with accessible materials and in the Bombearte project by Marín and Roldán (2021), which uses a photographic record with an enriched methodological approach based on a/r /tography (Irwin et al., 2004). Students were also asked to analyse their process and see what materials and artists they could use in the Primary classroom (see Marqués, 2023b).

Regarding the second research question, which asked how future teachers might use these projects to generate didactic materials, this process showed that future teachers can create teaching resources using the educational cards on paper-folding described previously (Marqués, 2023a) or based on concepts such as shape, colour, and texture. Similarly, during the process of group design of the models, the education students considered how these ideas could be applied with children. In this sense, examples of how to use these resources in the classroom can be seen in the artistic education projects of Marín and Roldán (2021), Martínez (2019), and Horn (2006). The educational material was created by the future teachers based on a playful application (Figure 11). They were told that they could create a board game, a crossword puzzle, or a word search to complete the creation of the installations.

Recommendations and Implications

Installations and models are an especially useful resource for teachers when classroom space is limited. The design of installations and models must incorporate manipulative or mobile materials and other tools to encourage children's drawing and creativity.

Although the use of mock-ups offers the advantages of speed, versatility, and economy, it can favour a design process more focused on the scenography and the result, and de-emphasize an essential aspect of the installation, namely, the interaction of children. However, this challenge can be overcome by emphasizing the importance of children's engagement and participation during the design process and through specific interaction experiments with children before creating the installation.

Ideas to explore for future research include studying the technological aspects of interactive installations and how to apply them to educational projects, incorporating notions of contemporary art and rhizomatic learning (Lilly & Hung-Min, 2022). Regarding new ideas for implementing similar projects, teacher educators could emphasize other curricular areas or employ different artistic techniques (e.g. drawing, photography and sculpture), whereby the process is prioritised over the product and creativity over technical aspects. Regarding the implementation of installations, special emphasis should be placed on experiential learning, a concept explored by Özçam and Kayan (2022) on the application of installations in design with the work *Tape Wanâs* (2022), involving an experience with biodegradable plastic. This is a suitable approach to be applied in art education, whereby the learner is an active apprentice who constructs and interprets information, skills, and values based on experience.

Challenges and Limitations of the Study

In the 2019-2020 experience, the main limitation of the study was the fact that the installations were created exclusively as scale models. The initial idea was to start with a preliminary scale model phase followed by the construction of selected designs as full-size installations. In the 2023-2024 experience, students could create the installations in sufficiently realistic size, which provided new lessons. Surely the most notable lessons were insisting on the use of simple materials and prioritizing the educational concept and interaction over detail in reproduction. In this case, the main limiting factor was the time available for planning and executing the work with the indicated priorities.

Conclusion

The project had a positive outcome from a pedagogical standpoint, not only due to the higher-than-expected quality results but also due to the active participation of the students and the

enthusiasm and impact of seeing something that they had created together—a work in which they saw themselves as creators. It should be noted that the future teachers achieved a higher level of communication and interaction among themselves and with the teacher throughout the process of creating the models. This high level of communication may have been a result of the fact that the project was based on the experiences of educational installations from similar educational projects by Marín and Roldán (2021), Martínez (2019), Mesías et al. (2020), and Ruiz and Abad (2020). This experience demonstrates that installation art is a suitable genre for art education due to the possibilities it offers as an educational resource. It is an innovative tool that can be easily incorporated into the classroom if designed in a practical and appropriate way.

In addition to the pedagogical advantages of this experience in art education (e.g., creativity, participation, and learning of artistic techniques), the creation of installation scale models is affordable, offers a high degree of flexibility in the use of techniques, and can be carried out with simple resources and minimal space requirements. Ultimately, this experience can be adapted to all educational levels and stages while combining play and art seamlessly.

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