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### Implementing Deep Learning as a Pedagogical Approach in Elementary Fine Arts Education: A Qualitative Case Study of Student Creativity

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#### Abstract

This study explores the implementation of Deep Learning as a pedagogical approach to supporting student creativity in fourth-grade Fine Arts education at SD Inpres Perumnas Palu. A qualitative single-case study was conducted involving one Fine Arts teacher and 25 fourth-grade students. Data were collected through classroom observations, semi-structured interviews with the teacher and selected students, and documentation, and were analysed using the interactive model of Miles and Huberman, which includes data reduction, data display, and conclusion drawing and verification. The findings showed that the Deep Learning approach was enacted through five interconnected stages: learning planning, stimulus and orientation, idea exploration, the creative process, and reflection. The use of recycled plastic bottles as functional flower pots connected artistic expression with environmental awareness, practical design, and students' everyday experiences. Students displayed creative behaviours through fluency, flexibility, originality, and elaboration, as reflected in alternative sketches, modified designs, varied decorative choices, functional features, and revisions after feedback. However, student participation was uneven; while some students worked independently, others required examples, encouragement, repeated prompts, or practical assistance. Teacher facilitation through reflective questioning, feedback, motivation, and differentiated scaffolding was therefore important in supporting meaningful participation. The study illustrates how Deep Learning can support contextual and creativity-oriented Fine Arts learning using accessible recycled materials.

**Keywords:** Student Creativity, Deep Learning, Fine Arts, Elementary School

## **INTRODUCTION**

Fine Arts education in elementary schools provides an important context for students to develop visual-spatial awareness, aesthetic sensitivity, and creative thinking through artistic production. Such learning experiences enable students to explore visual ideas, experiment with materials, make design decisions, and express personal meanings through visual forms. A recent systematic review of art and design education identified experiential learning, artistic practice, interdisciplinary projects, and design-based activities as common approaches for fostering creative thinking, particularly through fluency, flexibility, originality, and elaboration (Samaniego et al., 2024). In addition, a meta-analysis of 22 visual art-based educational interventions found a moderate overall effect of visual arts participation on creativity, suggesting that arts learning can provide meaningful conditions for creative development across educational levels (Peleka et al., 2026). Thus, in contemporary education, creativity should be understood not merely as artistic talent, but as the capacity to generate possibilities, respond flexibly to problems, and develop appropriate and meaningful solutions in diverse learning contexts (Runco & Jaeger, 2012).

To strengthen meaningful learning within the existing national curriculum, the Indonesian Ministry of Primary and Secondary Education has promoted Deep Learning as a pedagogical approach that emphasises mindful, meaningful, and joyful learning. However, translating these principles into classroom practice remains challenging. Recent reviews show that teachers' instructional understanding of Deep Learning is often limited, and the approach may be reduced to digital technology or specific instructional models rather than understood as a comprehensive pedagogical orientation (Syaifulloh, 2026). Additional barriers include limited teacher competence, insufficient contextual learning materials, inadequate assessment systems, unequal infrastructure, and administrative workloads (Warnia WR et al., 2026). Although Deep Learning has been increasingly promoted within the Merdeka Curriculum, empirical evidence on how teachers enact its principles in elementary Fine Arts classrooms remains limited. This gap is important because Fine Arts learning requires teachers to facilitate idea exploration, material experimentation, creative decision-making, and reflection within everyday classroom constraints.

Previous studies have examined various approaches to supporting creativity in art education, including digital technologies, media-based learning, and open-ended artistic activities. Much of this literature, however, focuses on intervention outcomes or the effectiveness of particular learning designs. A systematic review identified experiential learning, artistic practice, interdisciplinary projects, and design-based activities as common approaches for fostering fluency, flexibility, originality, and elaboration (Samaniego et al., 2024). Research on AI-based pedagogy in primary visual arts education also suggests that AI, AR, and VR may enhance engagement and feedback, although their use is often constrained by infrastructure and teacher preparation (Ramli et al., 2025). Reviews of creativity pedagogy in art and design further emphasise the importance of classroom processes, teacher guidance, and assessment in supporting creative learning (Sawyer, 2017). Nevertheless, further research is needed to understand how teachers enact Deep Learning through classroom interaction, idea exploration, reflective questioning, and material experimentation in public elementary schools with limited resources.

SD Inpres Perumnas Palu provides a relevant context for exploring this issue. Preliminary classroom observations indicated that Fine Arts learning had begun to incorporate principles associated with Deep Learning through contextual, project-based activities using recycled plastic bottles as learning materials. Rather than relying on advanced digital technology, students were encouraged to explore ideas, create functional artworks, reflect on their learning experiences, and develop creativity using materials that were easily accessible in their surrounding environment. This classroom context offers an opportunity to examine how Deep Learning principles are translated into authentic teaching practices within a public elementary school setting.

Therefore, this study does not seek to test the effectiveness of the Deep Learning approach; rather, it explores how the approach was implemented in fourth-grade Fine Arts learning and how students displayed creativity during the learning process. The study examines how the teacher organised contextual and project-based activities, facilitated idea exploration, and supported students' artistic production and reflection. Particular attention is given to the emergence of fluency, flexibility, originality, and elaboration through students' sketches, design decisions, artworks, and reflections. The findings are expected to provide practical insights into the implementation of Deep Learning in elementary Fine Arts education and contribute empirical evidence on how meaningful, contextual, and resource-accessible learning experiences can support students' creative engagement in authentic classroom settings.

## **RESEARCH METHOD**

This study employed an exploratory qualitative single-case study to examine how the Deep Learning approach was enacted in Fine Arts learning and how students displayed creativity in a natural classroom context. A qualitative case study was appropriate because the study focused on an in-depth understanding of one bounded classroom setting, including the instructional process, teacher mediation, students' creative participation, and contextual conditions rather than testing the effectiveness of an intervention (Creswell & Poth, 2018; Merriam, 2010). The exploratory orientation was selected because empirical evidence on how teachers translate Deep Learning principles into everyday elementary Fine Arts practice remains limited. Accordingly, the study sought to describe and interpret classroom processes, teacher practices, and students' creative experiences within their natural learning environment.

The study was conducted in one fourth-grade classroom at SD Inpres Perumnas Palu during the second semester of the 2025/2026 academic year. Participants included one Fine Arts teacher and 25 fourth-grade students who took part in a recycled-plastic-bottle learning project. The teacher was included because she directly planned and implemented the Deep Learning-oriented activities, while all students participated in the observed classroom sessions. Three students were purposively selected for semi-structured interviews based on their participation in the project and the availability of relevant learning artefacts, including sketches and completed artworks (Ahmad & Wilkins, 2025; Samaniego et al., 2024). This selection enabled the study to obtain student perspectives alongside classroom observations, teacher accounts, and documentary evidence. This selection enabled the study to capture contrasting student experiences relevant to the qualitative case-study focus.

Data were collected through classroom observations, semi-structured interviews, and document analysis to triangulate classroom practices, participant accounts, and student artefacts (Creswell & Poth, 2018). Observations used a researcher-developed rubric based on fluency, flexibility, originality, and elaboration to document students' creative behaviours during idea generation, design modification, artwork production, and reflection (Acar et al., 2024). The rubric and interview guide were reviewed by two experts in elementary and Fine Arts education for relevance, clarity, and observability, then revised based on their feedback (Mokkink et al., 2025). Interviews with the teacher and selected students, together with lesson modules, sketches, artworks, photographs, and assessment records, were used to enrich the evidence base.

Data collection and analysis proceeded iteratively until subsequent observations and interviews no longer provided substantively new information regarding the implementation of Deep Learning and students' creative behaviours. Data were analysed using the interactive model of data condensation, data display, and conclusion drawing and verification (Miles et al., 2014). Observation notes, interview transcripts, and documentary evidence were coded according to the stages of Deep Learning implementation and the four dimensions of students' creativity, then compared across data sources using an analytic matrix. Credibility was strengthened through triangulation across observations, interviews, and documents, as well as member checking with the classroom teacher to assess the plausibility of the researchers' interpretations (Birt et al., 2016). Analytic notes were maintained throughout coding and interpretation to support transparency in the analytical process.

## **FINDINGS & DISCUSSION**

### **Findings**

#### ***Implementing Deep Learning as a Pedagogical Approach***

The Fine Arts learning project was conducted in one fourth-grade classroom at SD Inpres Perumnas on 29 April 2026. The activity centred on transforming used plastic bottles into functional flower pots. Observation, interview, and documentary evidence showed that the Deep Learning approach was enacted through five interconnected stages: learning planning, stimulus and orientation, idea exploration, the creative process, and reflection. These stages formed a connected sequence rather than separate activities. Students were introduced to recycled bottles as potential art materials, discussed possible forms and decorations, prepared initial designs, produced their flower pots, and reflected on the completed products. Through this process, the project connected Fine Arts learning with familiar materials, environmental awareness, and practical design.

#### ***Learning Planning***

The learning project was planned around the use of recycled plastic bottles as accessible materials for creating flower pots. Lesson documentation showed that the activities combined artistic expression, functional design, and environmental awareness. Students were expected to transform used bottles into decorative and usable flower pots rather than merely reproduce a single model provided by the teacher. The planned learning activities included exploration, artwork production, presentation, and reflection.

The teacher also organised the learning sequence from introduction to production and reflection. Guiding questions such as “*How can a used bottle become an attractive artwork?*” and “*Which colours would make the flower pot look appealing?*” were prepared to stimulate students’ curiosity and initial design thinking. These questions were intended to encourage students to consider the visual and functional possibilities of the materials before beginning the project.



Figure 1. Teacher Explaining the Recycled-Bottle Flower-Pot Project

### *Stimulus and Orientation*

At the beginning of the lesson, the teacher introduced examples of recycled bottles and asked students to consider their possible functions, shapes, and decorative features as flower pots. Students discussed that flower pots could make plants look neat and attractive, while used bottles could be reused rather than discarded. This discussion helped connect the project with students’ everyday experiences and environmental concerns. The teacher also encouraged students to express initial ideas about colours, shapes, and decorations before beginning the design stage. As the teacher explained:

*“I apply Deep Learning by connecting Fine Arts material with students’ everyday experiences. Students are not only given theory, but are invited to understand the meaning of the work and create based on their own ideas.” (G/W1/29-04-2026)*

This stage prepared students to begin exploring their own flower-pot designs.

### *Idea Exploration*

Before beginning the production process, students discussed possible designs and prepared preliminary sketches. The sketches included variations such as flower motifs, cartoon characters, animal shapes, and different colour combinations. Through discussion and sketching, students were able to consider alternatives before selecting a final design.

As the teacher explained:

*“Students are given opportunities to explore ideas before making their work, usually through discussion or initial sketches so that the ideas generated are more varied.”*  
(G/W1/29-04-2026)

Classroom observations showed that some students prepared two or three alternative sketches before deciding on a final design. Students also exchanged suggestions about suitable shapes and colours. This stage provided space for students to express personal ideas and make initial design decisions before working directly with the recycled bottles.

### *Creative Process*

During production, students cut, painted, decorated, and modified recycled plastic bottles based on their selected designs. The teacher monitored the activity, provided practical assistance when needed, and used reflective questions such as *“Why did you choose this shape?”* and *“Are the drainage holes large enough?”*. Some students worked independently, while others needed help with cutting, attaching ropes, combining colours, or adjusting the pot’s function. Tiya used green leaf motifs, Fika created a hanging pot with rope, and Eka added drainage holes and planting media. These examples show that students developed different ideas while working with the same recycled materials.



Figure 1. Process Of Creating A Work

### *Reflection*

At the end of the project, students presented their flower pots and explained their choices of shape, colour, decoration, and function. Several students described the purpose of drainage holes, hanging ropes, colour combinations, and decorative motifs in relation to the appearance and use of their products. The teacher guided reflection through questions such as *“Does your work match your initial plan?”* and *“Which part still needs improvement?”*

Several students revised their products after reflection by strengthening hanging ropes, adding paint layers, improving the pot shape, or creating additional drainage holes. The teacher also gave positive feedback to all students without comparing their work. Reflection therefore provided an opportunity for students to review, improve, and explain their artworks rather than simply submit a finished product.

Overall, the implementation transitioned from teacher-directed product making to a

more student-centered process of idea exploration, material experimentation, production, and reflection.

### ***Students' Creative Behaviours in the Art-Making Process***

Students' creative behaviours were identified through fluency, flexibility, originality, and elaboration. Evidence was drawn from classroom observations, students' sketches, completed flower pots, photographs, and interviews with selected students. These behaviours appeared during idea generation, design modification, artwork production, and revision.

#### *Fluency*

Fluency refers to the ability to generate multiple ideas or possible responses during the creative process (Munandar, 2009). During the idea-exploration stage, students were encouraged to consider different shapes, colours, decorations, and functions for their flower pots. Documentation showed that some students prepared more than one design alternative before beginning production.

Tiya Damayanti, for example, created three initial sketches with different pot shapes before selecting a leaf-motif design. Her sketches indicated that she considered several visual possibilities before deciding on the final product. As the teacher explained:

*“Students are given opportunities to explore ideas before making their work, usually through discussion or initial sketches so that the ideas generated are more varied.”*  
(Teacher, G/W1/29-04-2026)

This finding suggests that the exploration stage provided opportunities for students to generate and compare ideas before working directly with recycled plastic bottles.



Figure 2. Fluency Aspect, Students Create Works

#### *Flexibility*

Flexibility refers to the ability to modify ideas, consider alternatives, and adapt a design when encountering new possibilities or constraints during the creative process (Munandar, 2009). In this project, flexibility was visible when students changed or developed their initial designs while working with recycled plastic bottles.

Fika Anggriani initially planned to make a simple flower pot but later developed the design into a hanging pot. Other students adjusted colours, altered decorative elements, modified the bottle shape, or combined several colours to improve the appearance or function of their work. Students also used different materials and techniques, including paint, decorative paper, and rope.

As the teacher explained:

*“When students face difficulties, they try to find another way or change part of the work so that the result remains good.”* (Teacher, G/W1/29-04-2026)

These observations indicate that students did not always follow their initial designs rigidly, but adapted their ideas in response to available materials, functional needs, and emerging design possibilities.



Figure 3. Flexibility Aspect, Making Various Shapes of Flower Pots

### *Originality*

Originality refers to the ability to produce ideas or products that show distinctive personal characteristics rather than simply reproducing an existing example (Munandar, 2009). Documentation of students’ artworks showed variation in the shape, colour, decoration, and function of the flower pots.

For example, Tiya Damayanti created a green flower pot with leaf motifs, Fika Anggriani developed a hanging-pot design, and Eka Angriani added drainage holes and decorative ornaments. These differences suggest that the selected students incorporated personal choices into their products.

As the teacher explained:

*“Each student produces different work because they use colours, shapes, and decorations according to their own creativity.”* (Teacher, G/W1/29-04-2026)

However, originality was not equally visible across all students. Some students needed examples, encouragement, or teacher prompts before deciding on a design. The teacher responded by using reflective questions rather than directly determining students’ designs, allowing them to continue developing their work while retaining opportunities for individual decision-making.



Figure 4. Aspect of Originality, Unique and Different Works,

### *Elaboration*

Elaboration refers to the ability to develop, enrich, and add detail to an initial idea or product (Munandar, 2009). In this project, elaboration was visible when students added visual and functional details to their flower pots.

Eka Angriani, for example, added drainage holes to the bottom of the plastic bottle to prevent water from collecting inside the pot. Other students added colour combinations, floral images, leaf motifs, simple decorative patterns, hanging ropes, and other ornaments. Some students also refined their work by strengthening ropes, adding paint layers, or improving decorative elements after receiving feedback.

As the teacher explained:

*“Students were able to develop the colouring and shape of their work quite well and add decorative elements according to their ideas.”* (Teacher, G/W1/29-04-2026)

These examples indicate that students extended their initial designs through aesthetic and functional modifications during the production and reflection stages.



Figure 5. Elaboration Aspect, Work Results

These additions indicate that students did not stop at the basic transformation of a plastic bottle into a flower pot. Instead, they extended and refined their initial designs through aesthetic and functional modifications.

### ***Teacher Facilitation and Uneven Student Participation***

The findings showed that teacher facilitation was central to students' participation in the open-ended Fine Arts project. During the creative process, the teacher monitored each student's work, asked reflective questions, and provided formative feedback. Questions such as *“Why did you choose this shape?”* and *“Are the drainage holes large enough so that water does not collect?”* encouraged students to consider the reasons behind their design decisions rather than merely follow procedures.

The teacher also provided guidance during the idea-exploration stage. Students were given opportunities to discuss possible designs and prepare initial sketches, while the teacher offered assistance when they experienced difficulty deciding on shapes, colours, or decorations. As the teacher explained:

*“Students are given opportunities to explore ideas before making their work, usually through discussion or initial sketches so that the ideas generated are more varied.”*  
(Teacher, G/W1/29-04-2026)

During production, the teacher did not give detailed instructions for one fixed product. Instead, students were allowed to determine their own working methods and final designs, while the teacher circulated to provide motivation, suggestions, and assistance when needed. Student participation, however, was uneven. Classroom observations showed that most students were able to work independently, although some still needed teacher assistance when using tools or determining particular aspects of their designs. This pattern was supported by the teacher’s statement:

*“Most students were able to create work based on their own ideas, although some still looked at examples from their friends.”*  
(Teacher, G/W1/29-04-2026)

Thus, the teacher’s facilitation involved reflective questioning, guidance during idea exploration, formative feedback, motivation, and practical assistance. While some students confidently developed their own ideas, others relied on examples, peer designs, or repeated prompts. These differences indicate that teacher scaffolding remained important in supporting participation in open-ended Fine Arts activities while allowing students to retain ownership of their design choices.

## **Discussion**

### ***Implementing Deep Learning as a Pedagogical Approach***

The findings suggest that the Deep Learning approach in the fourth-grade Fine Arts project at SD Inpres Perumnas was enacted as a contextual pedagogical process that integrated meaningful understanding, concept application, and reflection. Rather than positioning Fine Arts as a purely technical activity, the teacher connected the project with students’ everyday experiences by using recycled plastic bottles to create functional flower pots. This activity invited students to consider not only how to decorate the bottles, but also how their products could be used, improved, and related to environmental concerns.

This interpretation is consistent with the pedagogical orientation of Deep Learning in Indonesian primary education, which emphasises meaningful, mindful, and joyful learning. Meaningful learning occurs when classroom tasks are connected with familiar experiences, while mindful learning involves attention to decision-making and reflection throughout the learning process (Feri et al., 2025).

The use of accessible materials also supported experiential and design-oriented learning. Students were encouraged to transform discarded bottles into flower pots with different colours, decorations, hanging mechanisms, and drainage features. This is aligned with research showing that experiential learning, artistic practices, and interdisciplinary or design-based activities can provide important conditions for creative thinking in art and design education (Samaniego et al., 2024).

The implementation was also characterised by student participation during discussion,

sketching, production, and reflection. Students were not asked to reproduce one fixed model; instead, they were given opportunities to discuss possible designs, prepare sketches, and make choices about colour, shape, decoration, and function. Such practices reflect key features of creative pedagogy, including idea generation, exploration, learner agency, problem-solving, collaboration, and teacher support (Cremin & Chappell, 2021).

The teacher's role was particularly important in maintaining a balance between guidance and student autonomy. During the project, the teacher asked reflective questions, encouraged students to explain their choices, and provided practical support when students encountered difficulties. This form of support is consistent with literature on art and design pedagogy, which highlights scaffolded learning, design thinking, and critique as important approaches for nurturing creative autonomy while maintaining instructional structure (Zakaria et al., 2025).

Reflection further strengthened the Deep Learning process. Students were invited to present their flower pots, explain their choices, and revise aspects of their work after feedback. Their revision such as strengthening hanging ropes, adding paint layers, or creating drainage holes showed that students engaged with their work as an evolving design process rather than as a one-time product. This finding is consistent with research suggesting that scaffolded reflective activities can support learners in revising design decisions and improving the quality of their work (Liu et al., 2025).

The findings suggest that Deep Learning in this case was implemented through a contextual, student-centred, and project-based Fine Arts process. However, the results should not be interpreted as proving that the approach was universally effective. Instead, the study illustrates how Deep Learning principles were translated into classroom practice through accessible materials, guided exploration, reflective questioning, and opportunities for students to make design decisions.

### ***Students' Creative Behaviours in the Art-Making Process***

The findings show that students displayed creative behaviours through fluency, flexibility, originality, and elaboration during the recycled-plastic-bottle flower-pot project. Creativity was evident not only in the final products but also in idea generation, sketching, design modification, material selection, and revision.

Fluency was shown when students considered different shapes, colours, decorations, and functions before producing their flower pots. Some students prepared more than one sketch, while Tiya Damayanti created three alternative designs before selecting a leaf-motif pot. This suggests that the exploration stage provided opportunities for students to generate and compare ideas. Such opportunities are important for supporting divergent thinking in elementary learning (Paz-Baruch et al., 2025; Ruiz-del-Pino et al., 2022).

Flexibility appeared when students modified their initial ideas during the production process. Fika Anggriani, for example, changed a simple flower-pot design into a hanging pot. Other students adjusted colours, shapes, ropes, and decorative elements according to the materials available and the function they wanted to achieve. This reflects creative learning processes that involve experimentation, problem-solving, and adaptation (Cremin & Chappell, 2021)

Originality was reflected in the differences among students' artworks. Tiya created a

green leaf-motif pot, Fika developed a hanging pot, and Eka added drainage holes and decorative details. However, originality was not equally visible across all students. Some students still needed examples, reassurance, or teacher prompts before making design decisions. This indicates that open-ended activities need to be accompanied by teacher support so that students can participate more confidently in creative tasks (Zakaria et al., 2025)

Elaboration was evident when students added aesthetic and functional details, including colour combinations, ornaments, hanging ropes, and drainage holes. Several students also refined their products after feedback by strengthening ropes, adding paint layers, or improving decorations. Reflection therefore helped students reconsider and improve their designs rather than simply submit finished products. This finding is consistent with research showing that scaffolded reflection can support learners in refining design decisions and creative work (Liu et al., 2025).

Overall, the project created opportunities for students to explore ideas, make design choices, experiment with materials, and revise their work. However, students participated differently: some worked more independently, while others required examples, encouragement, or technical assistance. This highlights the importance of differentiated teacher scaffolding in open-ended Fine Arts learning.

### ***Teacher Facilitation and Uneven Student Participation***

The findings suggest that teacher facilitation was essential in helping students participate in an open-ended Fine Arts project. Although students were given freedom to determine the shape, colour, decoration, and function of their flower pots, this freedom was supported through teacher monitoring, reflective questioning, feedback, motivation, and practical assistance. Thus, student-centred learning in this context did not mean that the teacher withdrew from the learning process. Instead, the teacher remained actively involved in providing support that enabled students to continue working while preserving their ownership of design decisions.

Reflective teacher questioning was important because it encouraged students to explain the reasons behind their design choices. Questions such as “*Why did you choose this design?*” and “*How could this flower pot function better?*” invited students to consider both the aesthetic and practical aspects of their work. In product-design learning, attention to the relationship between form, strength, and function can support more deliberate design decisions (Mukherjee, 2021). Similarly, aesthetic improvement in product design involves balancing visual appeal with functional requirements (Mohd Qadafie Ibrahim et al., 2024). In this study, reflective questions supported students in revising and developing their flower-pot designs rather than simply producing a predetermined product.

The findings also showed that student participation was uneven. While some students were able to work more independently and make decisions about their designs, others still relied on teacher support, peer examples, or repeated guidance. This variation suggests that open-ended learning activities may be experienced differently depending on students’ confidence, prior experience, and ability to translate ideas into concrete forms. Research on open-ended learning environments similarly indicates that equitable participation requires attention to differences in students’ access to support, opportunities to contribute, and readiness to engage with complex tasks (Fonteles et al., 2024; Soomro et al., 2025). Therefore, creativity should not be understood as a uniform outcome that emerges equally across all learners.

In this situation, differentiated scaffolding became important. Technical assistance was needed when students encountered difficulties using tools, attaching ropes, combining colours, or deciding how to develop a particular part of their work. At the same time, encouragement and prompts were needed for students who were hesitant to begin or unsure about their own ideas. Such scaffolding is important because it supports students' participation without replacing their choices with teacher-directed solutions. This finding is consistent with evidence that scaffolding in arts learning can provide technical assistance and encouragement for students experiencing difficulties while maintaining opportunities for creativity and active participation (Saputri & Wahyuningtyas, 2024).

The findings further suggest that formative feedback supported students in revising their work. When students received suggestions about the appearance or function of their flower pots, they were able to make adjustments rather than stop at the first version of their design. This process is important because creative work often develops through revision, feedback, and reconsideration. Scaffolded reflection can help learners identify weaknesses in their designs and refine their work through gradual improvement (Liu et al., 2025).

Teacher facilitation was not separate from students' creative participation; it was one of the conditions that enabled it. The teacher's role involved balancing freedom and support: allowing students to make personal choices while providing assistance when they needed help to continue. This suggests that Deep Learning in elementary Fine Arts classrooms requires flexible and differentiated scaffolding so that students with different levels of independence can participate meaningfully in creative activities.

## **CONCLUSION**

This qualitative single-case study examined how the Deep Learning approach was implemented in a fourth-grade Fine Arts project at SD Inpres Perumnas Palu. The findings showed that the approach was enacted through five interconnected stages: learning planning, stimulus and orientation, idea exploration, the creative process, and reflection. Using recycled plastic bottles as materials for functional flower pots connected Fine Arts learning with students' everyday experiences, environmental awareness, practical design, and artistic expression. Students displayed creative behaviours through fluency, flexibility, originality, and elaboration, as reflected in their sketches, design modifications, decorative choices, functional adjustments, and revisions after feedback. However, students participated with different levels of independence, indicating that reflective questioning, feedback, motivation, and practical assistance were important forms of differentiated teacher scaffolding. Although limited to one classroom, one teacher, and one project, this study provides a contextual illustration of how Deep Learning can support meaningful and creativity-oriented Fine Arts learning through accessible recycled materials.

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