

A Visual Analysis Model Integrating Design Perspectives and Elements in Students' Imaginative Drawings

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ABSTRACT

This study examines how perspective and nirmana principles are integrated in imaginative drawings produced by Primary School Teacher Education (PGSD) students in visual arts learning. Previous discussions of students' drawings in art education have often treated perspective as a technical matter and nirmana as a list of visual elements. This study addresses that limitation by positioning both concepts as an integrated visual literacy framework for reading spatial construction, compositional order, and pedagogical readiness among prospective elementary school teachers. A descriptive qualitative design was employed using visual artwork analysis, classroom observation, documentation, and literature study. Ten student artworks were selected through criterion-based purposive sampling because they represented diverse themes, visual complexity, and varied applications of perspective and nirmana. The analysis sheet was developed from perspective indicators, nirmana principles, and stages of art criticism, then strengthened through expert judgment and inter-rater discussion. The findings reveal three patterns of visual construction: narrative-spatial, decorative-dense, and thematic-symbolic. Students demonstrated strength in visual imagination, local themes, color exploration, rhythm, and thematic unity; however, they still showed weaknesses in horizon awareness, vanishing point consistency, scale relations, proportional accuracy, focal point, and visual hierarchy. The study proposes a Perspective-Nirmana Integration model as a conceptual contribution for analyzing imaginative drawings in visual arts learning. Pedagogically, the findings imply that PGSD visual arts instruction should connect imaginative exploration with systematic exercises in spatial representation, composition, visual hierarchy, and reflective critique.

KEYWORDS

Imaginative Drawing
Design Elements
Nirmana
Perspective
Visual Analysis

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INTRODUCTION

Visual arts learning in higher education is not merely oriented toward the production of artworks, but also toward the formation of visual literacy, aesthetic sensitivity, creativity, and pedagogical competence (Freedman, 2025). In the Primary School Teacher Education Study Program (PGSD), this competence is important because students are prepared to become elementary school teachers who will later guide children in observing, interpreting, and creating visual forms. Drawing activities therefore need to be understood not only as technical exercises, but also as media for organizing ideas, constructing visual meaning, and developing the ability to communicate through form, color, space, and composition. (*Design Drawing*, 2026)

In contemporary elementary education, visual literacy has become increasingly important because children learn not only through verbal explanations but also through images, diagrams, illustrations, and other visual representations (Jannah et al., 2026). Consequently, prospective elementary school teachers are expected to possess the ability to

interpret and construct visual information effectively. Developing this competence through visual arts learning enables PGSD students to integrate artistic expression with instructional communication, thereby supporting meaningful, creative, and engaging learning experiences across various school subjects.

Imaginative drawing enables students to transform personal experiences, fantasies, local culture, environmental issues, and everyday life into visual narratives. In the PGSD context, it is pedagogically relevant because it connects artistic expression with learning themes that are meaningful to children. However, imaginative freedom does not always produce well-organized visual compositions, as students' works often demonstrate weaknesses in spatial construction, proportion, composition, focal points, and visual hierarchy. These limitations indicate that imaginative drawing requires a solid foundation in perspective and nirmana principles. Perspective, commonly introduced as a technique for creating the illusion of three-dimensional space on a two-dimensional surface (Salam et al., 2020), also functions as a visual thinking system that helps learners understand viewpoint, spatial depth, proportion, and relationships among objects. Therefore, the ability to apply perspective reflects not only technical drawing skills but also spatial awareness and the capacity to organize visual experiences coherently.

Nirmana, in the Indonesian visual arts education tradition, is a central concept that refers to the organization of visual elements and principles (Fahmi et al., 2026). It includes lines, planes, forms, colors, textures, space, balance, rhythm, unity, harmony, contrast, proportion, and emphasis. Nirmana is not simply a collection of formal elements; it functions as a pedagogical foundation for training students to compose, simplify, balance, and give meaning to visual forms (Ardianto et al., 2024). Through nirmana, students learn to transform scattered objects into an ordered and communicative visual structure.

Although perspective and nirmana are frequently introduced as separate components of visual arts education, they function synergistically in the creation of effective visual compositions. Perspective primarily contributes to the organization of spatial relationships, depth, scale, and viewpoint, whereas nirmana governs the arrangement of visual elements into balanced, harmonious, and communicative compositions (Mubarat & Ilhaq, 2021). Their integration allows students not only to construct convincing visual spaces but also to express ideas through coherent visual structures that are aesthetically meaningful. From a pedagogical perspective, understanding this relationship is particularly important for prospective elementary school teachers because they are expected to facilitate children's visual thinking through well-organized artistic experiences rather than merely teaching drawing techniques. (Dewi et al., 2025)

Previous studies have examined drawing from various perspectives, including creativity, visual literacy, perspective drawing, and compositional competence in art education. More recent research has shown that drawing activities contribute to students' visual thinking, spatial understanding, and visual literacy, while also highlighting the importance of integrating visual analysis into teacher education. Other studies have emphasized the role of visual literacy and compositional learning in helping students organize visual elements and communicate meaning effectively (Guo et al., 2024). However, these studies have generally examined perspective, visual literacy, or compositional principles independently, with limited attention to how perspective and nirmana interact in shaping the visual quality of imaginative drawings, particularly among PGSD students (Suci et al., 2024). This gap highlights the need for an integrated analytical framework that simultaneously examines spatial construction and compositional organization within the same visual work.

This study therefore aims to analyze the integration of perspective and nirmana principles in imaginative drawings by PGSD students in visual arts learning. Unlike a purely evaluative study, this article seeks to develop a conceptual reading of students' works by identifying visual patterns, interpreting their pedagogical meaning, and proposing a Perspective-Nirmana Integration model for visual arts learning. The study is guided by the following research questions: (1) How are perspective principles applied in PGSD students' imaginative drawings? (2) How are nirmana elements and principles organized in the students' works? (3) What patterns of integration between perspective and nirmana can be identified from the artworks? (4) What are the implications of these patterns for visual arts learning for prospective elementary school teachers?

Perspective is a visual representation system that allows objects, space, and distance to be constructed on a flat plane. In art learning, perspective is not only understood as a technique of drawing lines towards a lost point, but also as a way of thinking visually in reading spatial relationships (Anggorowati & Untari, 2024). Awareness of horizon lines, missing points, viewpoints, object overlaps, size differences, object placement, proportions, and scale are important parts in building spatial readability in drawing works. Through mastery of these components, students can arrange the visual field in a more directed way so that the close-far, front-back, large-small, and high-low relationships between objects can be understood more logically and aesthetically.

In the context of fine arts education, perspective is also closely related to spatial reasoning skills and visual literacy (Lowrie et al., 2019). Drawing activities require students to transform the experience of seeing, imagining, and understanding three-dimensional space into two-dimensional visual forms. This process involves interconnected perceptual, cognitive, and motor abilities in the formation of visual representations. Therefore, perspective learning needs to be positioned not just as a technical exercise, but as a strategy to develop students' ability to understand the structure of space, organize objects proportionally, and communicate visual ideas more clearly. Thus, perspective serves as an important basis in building imaginative image qualities that are not only expressive, but also communicative and have visual regularity.

Nirmana is a fundamental framework for organizing visual elements into coherent and meaningful compositions. In art education, it develops students' visual literacy by introducing the relationships between visual elements and design principles before they create representational works (Imanto et al., 2025). Its elements include line, shape and form, plane, color, texture, value, and space, while its principles comprise balance, rhythm, unity, harmony, contrast, proportion, and emphasis. Together, these elements and principles create visual order and aesthetic coherence in a composition. (Lauer & Pentak, 2007)

From a pedagogical perspective, nirmana fosters perceptual awareness, visual reasoning, and aesthetic judgment (Pandey, 2024). Through its application, students learn to organize visual weight, create rhythm through repetition, use color to establish mood and hierarchy, and emphasize focal points to guide viewers' attention. Therefore, nirmana serves not only as a formal design concept but also as a foundation for developing creativity and visual literacy in art education.

This study adopts visual literacy and art criticism as its analytical orientation. Visual literacy refers to the ability to read, interpret, evaluate, and produce meaning through visual forms, enabling learners to understand how visual elements communicate ideas and experiences (Avgerinou & Pettersson, 2011). Meanwhile, art criticism provides a systematic framework for examining artworks through the stages of description, analysis, interpretation, and evaluation, allowing visual characteristics to be understood within their aesthetic and

educational contexts (Fadhil Maulana et al., 2024). This orientation ensures that the analysis moves beyond merely identifying visual elements and design principles. Instead, it encourages an interpretation of why particular visual tendencies emerge, how they construct meaning, and what they imply for students' visual understanding and learning.

Perspective and nirmana are conceptually interrelated. Perspective constructs spatial structure, while nirmana organizes visual elements within that structure. A work may have rich colors and decorative forms, but without spatial hierarchy it may appear crowded and flat. Conversely, a work may show depth but still lack harmony, rhythm, or emphasis. The integration of both principles is therefore essential for producing imaginative drawings that are expressive, communicative, and aesthetically ordered.

METHOD

This study used a descriptive qualitative design with visual artwork analysis as the main approach. The design was selected because the data consisted of visual phenomena in students' drawings, including spatial structure, proportion, scale, color, rhythm, balance, unity, and emphasis. The study was not designed to measure learning outcomes statistically, but to interpret visual tendencies and formulate conceptual patterns from students' imaginative drawings.

The data source consisted of ten imaginative drawings produced by PGSD students during visual arts learning activities. The works were selected using criterion-based purposive sampling. The criteria were: (1) the artwork was produced in the same learning context; (2) the work contained imaginative visual narratives; (3) the work showed identifiable perspective and nirmana elements; (4) the works represented varied themes, including local culture, environment, tourism, education, social life, and nationalism; and (5) the works showed different levels of visual complexity. The selection of ten works was considered adequate for qualitative visual analysis because the purpose was to obtain depth of interpretation rather than statistical generalization.

Data were collected through artwork documentation, classroom observation, and literature study. Artwork documentation served as the primary data because the research object was the visual structure of students' imaginative drawings. Observation was used to identify learning context, students' tendencies in arranging objects, and the way they responded to visual art assignments. Literature study supported the interpretation of perspective, nirmana, visual literacy, composition, and art education concepts.

The research instrument consisted of an observation guide and an artwork analysis sheet. The analysis sheet was developed from three theoretical sources: perspective principles, nirmana principles, and the stages of visual art criticism. To improve credibility, the instrument was reviewed through expert judgment by lecturers in visual arts education. The analysis was also discussed among raters to reduce single-researcher subjectivity and to reach agreement on the interpretation of visual tendencies.

Table 1. Analytical framework for the Perspective-Nirmana Integration model

Dimension	Indicator	Analytical Focus	Interpretive Question
Perspective	Space and depth	Foreground, middle ground, background, overlapping, distance	How does the work construct readable space?
Perspective	Horizon and vanishing tendency	Eye-level awareness, direction of lines, convergence, viewpoint	Does the drawing show conscious spatial orientation?

Perspective	Scale and proportion	Near-far size relations, object proportion, spatial relationships	Are object relations visually logical and proportional?
Nirmana	Visual elements	Line, form, plane, color, texture, value, space	How are visual elements selected and arranged?
Nirmana	Compositional principles	Balance, rhythm, unity, harmony, contrast, emphasis	How does the work organize visual weight and attention?
Integration	Visual hierarchy and meaning	Relation between spatial structure, composition, theme, and focal point	How do perspective and nirmana jointly shape meaning?

Data analysis was conducted through four stages. First, each artwork was described by identifying its theme, dominant objects, visual elements, and spatial structure. Second, the work was analyzed using perspective and nirmana indicators. Third, the findings were interpreted by relating visual tendencies to the learning context and visual literacy concepts. Fourth, cross-case synthesis was conducted to formulate patterns of perspective-nirmana integration. Data validity was strengthened through persistent observation, technique triangulation, expert judgment, and inter-rater discussion.

RESULT AND DISCUSSION

The analysis of ten PGSD students' imaginative drawings shows that students were able to develop rich themes and visual narratives. The works represented natural landscapes, local culture, Kahayan Bridge, Kota Cantik Palangka Raya, environmental degradation, education, family, children's activities, and the 79th Anniversary of the Republic of Indonesia. These themes indicate that students did not merely copy objects, but transformed their social, cultural, and environmental experiences into visual narratives. The central issue was not the absence of imagination, but the uneven integration between spatial construction and visual organization.

Code	Theme	Perspective Tendency	Nirmana Tendency
K1	Cultural and natural landscape	Spatial layering through mountains, river, road, and natural objects	Bright colors, rhythmic repetition, decorative lines, narrative unity
K2	Kahayan Bridge	Relatively readable depth through bridge, river, road, and city background	Strong local theme, object diversity, balanced color, thematic unity
K3	Local culture	Dense space with inconsistent scale, proportion, and hierarchy	Cultural motifs, expressive color, texture, decorative rhythm
K4	Children's activities	Plane divided into several scenes; depth remains flat	Story unity, bright color, repetition of figures
K5	Environmental degradation	Diagonal division clarifies environmental	Contrast, repetition, rhythm, symbolic

		zones; inconsistent	scale still	environmental message
K6	Education and family	Simple space with natural and architectural background	with architectural figures, bright colors, emphasis on learning activity	
K7	Local culture and nature	Landscape space with traditional house, river, and cultural figures	Contrast, texture, cultural symbols, dramatic atmosphere	
K8	Kota Cantik Palangka Raya	Roads, icons, and landscape construct visual space	Text, ornaments, local icons, color, and theme create unity	
K9	Education, nationalism, environment	Dense space; many objects compete in one plane	Strong symbols and colors, but visual focus is divided	
K10	79th Anniversary of Indonesia	Foreground, middle ground, and background are relatively readable	National theme, bright colors, flag symbols, celebratory unity	

The Application of Perspective in Students' Imaginative Drawings

The application of perspective appeared mainly through intuitive spatial strategies. Students tended to divide the drawing plane into foreground, middle ground, and background by placing large objects in the lower area and smaller objects in the upper area. Roads, rivers, bridges, diagonal planes, mountains, and building rows were often used to direct the viewer's gaze into deeper space. This indicates an initial form of spatial awareness, even though it was not always supported by explicit linear perspective construction.

K2, which presents the Kahayan Bridge, demonstrates a relatively successful spatial arrangement. The bridge functions as a dominant spatial anchor, while the river, houses, boats, trees, community activities, and local cultural icons expand the visual field. The work shows that local landmarks can serve as spatial and cultural references at the same time. In this case, perspective is not only a technical device but also a way of organizing local visual identity.

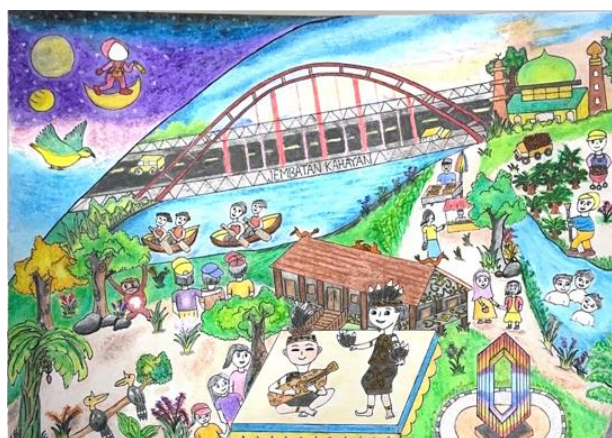


Figure 1. Kahayan Bridge

However, the analysis also shows that most works did not yet demonstrate consistent use of horizon line and vanishing point. Background objects were sometimes drawn nearly

the same size as foreground objects, which reduced the impression of distance. K3, for instance, displays many cultural objects, human figures, animals, traditional houses, and ornaments. Although the work is visually rich, the density of objects weakens depth, proportion, and hierarchy. This finding suggests that students need guided exercises in spatial simplification, scale gradation, and viewpoint awareness.



Figure 2. Local Culture

The weakness of perspective should not be interpreted as a failure of creativity. Rather, it indicates that students are still at an intuitive stage of spatial representation. They can create narrative space but have not yet fully mastered spatial logic. For prospective elementary school teachers, this finding is important because they must not only draw but also explain spatial concepts to children in simple, structured, and visually meaningful ways.

The Application of Nirmana Principles in Students' Imaginative Drawings

Compared with perspective, nirmana principles were more visibly developed in students' works. Students showed confidence in using lines, forms, colors, planes, repetition, contrast, and thematic unity. Lines appeared as object contours, boundaries between planes, decorative patterns, movement directions, and connectors between narrative elements. Color became one of the strongest aspects because students used bright, contrasting, and expressive colors to construct atmosphere and visual appeal.

K8, themed Kota Cantik Palangka Raya, shows how nirmana principles create thematic unity. The work combines text, hornbill, orangutan, traditional house, city icons, road, ornaments, and social activities. The visual elements are distributed across the plane so that the composition appears lively. The work demonstrates that students can use local identity as a compositional resource. Text and icons do not merely decorate the work; they function as signs that organize the theme and guide interpretation.



Figure 1. Kota Cantik Palangka Raya

Rhythm appeared through the repetition of trees, clouds, roads, human figures, buildings, ornaments, flowers, and waves. In K5, repetition and contrast strengthen the environmental message. The diagonal division between damaged and green areas creates a visual comparison between destruction and preservation. The work shows that nirmana can function not only aesthetically but also communicatively, because contrast and repetition help clarify the message.



Figure 3. Environmental Damage

Nevertheless, several works still require strengthening in focal point, visual hierarchy, object simplification, and color harmony. Many students tended to give equal visual weight to all objects. As a result, the viewer's attention became divided. This problem is especially visible in works that contain too many important objects in one plane. The challenge is not only to add visual elements, but also to select, simplify, and arrange them so that the main message becomes clear.

Patterns of Perspective-Nirmana Integration

Cross-case analysis produced three patterns of integration between perspective and nirmana. First, the narrative-spatial pattern appears in works that use spatial layers to support visual storytelling, such as K2 and K10. In this pattern, perspective helps arrange events and

objects, while nirmana strengthens the theme through color, rhythm, and unity. The result is a work that is relatively readable both spatially and narratively.

Second, the decorative-dense pattern appears in works such as K3 and K9. These works have strong imagination, rich symbols, bright colors, and decorative details, but the density of objects weakens spatial depth and focal point. This pattern shows that students often prioritize narrative abundance over visual hierarchy. Pedagogically, this indicates the need for exercises in selecting main objects, simplifying supporting details, and applying scale differences.

Third, the thematic-symbolic pattern appears in works such as K5 and K8. In this pattern, the artwork is organized around a clear theme or message, such as environmental degradation or local identity. Nirmana principles are used to strengthen symbols, contrast, text, and rhythm. Perspective is present, but not always fully systematic. This pattern shows that students are able to communicate ideas visually, but still need stronger spatial organization.

Table 2. Patterns of Perspective-Nirmana Integration in students' works

Pattern	Main Characteristic	Representative Works	Pedagogical Meaning
Narrative-spatial	Spatial layers support story and object relations	K2, K10	Students can connect space, theme, and visual narration
Decorative-dense	Rich objects and colors but weak hierarchy and depth	K3, K9	Students need object selection, scale control, and focal point training
Thematic-symbolic	Theme and symbols are clear; spatial structure needs strengthening	K5, K8	Students can communicate ideas but require stronger spatial organization

Perspective-Nirmana Integration Model for Visual Arts Learning

Based on the findings, this study proposes a Perspective-Nirmana Integration (PNI) model for analyzing and teaching imaginative drawing. The model consists of four interconnected stages: (1) spatial orientation, in which students identify foreground, middle ground, background, horizon, and viewpoint; (2) object relation, in which students arrange proportion, scale, and near-far relationships; (3) compositional organization, in which students apply line, color, rhythm, balance, harmony, contrast, and emphasis; and (4) reflective interpretation, in which students explain how visual elements support theme, message, and aesthetic value.

The PNI model contributes conceptually by showing that the quality of imaginative drawing is formed through the interaction between spatial structure and visual organization. Perspective provides the skeleton of space, while nirmana provides the grammar of composition. When both are integrated, students' works become not only expressive but also readable, balanced, and meaningful. This model can be used by lecturers to design assignments, assessment instruments, critique sessions, and remedial exercises in visual arts learning for prospective elementary school teachers.



Figure 4. HUT ke-79 Republik Indonesia

The pedagogical implication is that visual arts learning should not separate creativity from structure. Students should first be encouraged to explore themes and imagination, but they also need systematic guidance in spatial construction and compositional hierarchy. Learning activities may include simple one-point and two-point perspective exercises, foreground-middle ground-background studies, object scaling exercises, color harmony experiments, focal point analysis, peer critique, and reflective discussion of artworks. These activities can help PGSD students become more confident not only as art makers but also as future teachers who can facilitate children's visual expression.

CONCLUSIONS

This study concludes that PGSD students' imaginative drawings show strong creative potential, especially in the development of themes, local cultural references, visual narratives, expressive colors, decorative rhythms, and symbolic messages. The works demonstrate that imaginative drawing is an effective medium for training students to express ideas and connect visual arts learning with social, cultural, environmental, and national themes. From the perspective aspect, students were able to construct initial spatial impressions through the placement of objects in foreground, middle ground, and background. They also used roads, rivers, bridges, diagonal planes, and landscapes to suggest depth. However, the application of perspective remained mostly intuitive. Weaknesses appeared in horizon line awareness, vanishing point consistency, scale, proportion, and spatial relationships among objects.

From the nirmana aspect, students showed stronger mastery in line, form, plane, color, rhythm, balance, contrast, and thematic unity. Nevertheless, several works still need improvement in visual hierarchy, focal point, object simplification, and color harmony. The findings show that the main challenge is not lack of imagination, but the need to organize imagination through spatial and compositional principles.

The main contribution of this study is the formulation of the Perspective-Nirmana Integration model. This model explains that imaginative drawing quality is shaped by the interaction between spatial structure and visual organization. Theoretically, the model contributes to visual arts education by connecting perspective, nirmana, visual literacy, and art criticism. Pedagogically, it can be used to guide visual arts learning, artwork analysis, assessment, and critique activities for PGSD students. Future studies may expand the number

of artworks, involve students from different institutions, compare beginner and advanced learners, or test the PNI model in classroom action research. Further research may also include students' reflective statements so that visual analysis can be connected with their creative intentions and learning experiences.

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