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Institutional Pedagogy and Artistic Orientation: Examining Final Project Themes among Visual Arts Students

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Abstract. Final project themes in visual arts education are often viewed as individual creative choices, while their association with institutional contexts remains underexamined. This study examines differences in the thematic orientation of visual arts students' final projects across three institutions. A comparative quantitative content analysis was conducted on 156 final project documents from three anonymized institutions in West Java, Indonesia: a Science and Technology-oriented School (STS), an Arts and Culture-oriented Institution (ACI), and a Teacher Education-oriented Institution (TEI). Each document was classified into one dominant thematic category based on its title, conceptual description, and narrative. The data were analyzed using frequencies, percentages, cross-tabulation, the Chi-Square Test of Independence, Cramer's V, and standardized residuals. Psychology was the most prevalent theme, followed by culture and environment. STS showed stronger representation of psychological, spiritual, gender, and science-related themes; ACI emphasized psychological, cultural, and medium-based themes; while TEI showed stronger representation of cultural, environmental, historical, political, and sports-related themes. A significant association was found between institutional context and thematic distribution, $\chi^2(22) = 72.77, p < .001$, with a moderate effect size (Cramer's V = .483). The findings suggest that final project themes may be interpreted as empirical traces of the interaction between institutional contexts and students' artistic orientations. However, they do not

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establish a causal effect of institutional pedagogy because individual interests, supervisory preferences, and social influences were not directly examined. The study contributes by positioning students' creative outputs as empirical indicators for examining institutional patterns in higher visual arts education.

Keywords: institutional pedagogy; artistic orientation; final project themes; visual arts education; quantitative content analysis

1. Introduction

In higher art education, undergraduate thesis artworks should not be understood merely as individual creative products. Rather, they can be interpreted as academic traces that reflect students' learning experiences, institutional cultures, and the ways in which artistic orientations are constructed throughout the educational process. Art education within universities plays a significant role in developing visual literacy and shaping students' understanding of artistic practice as a form of knowledge production, expression, and cultural reflection (González-Zamar et al., 2023). However, a fundamental issue remains that the themes of undergraduate thesis artworks are often treated solely as academic documentation rather than as empirical sources for examining the relationship between institutional pedagogy and students' artistic orientations.

Consequently, higher education institutions lack a robust basis for evaluating the extent to which curriculum characteristics, academic traditions, and campus social environments are reflected in students' creative outputs. Artistic knowledge is not developed in isolation; rather, it emerges through learning experiences, visual practices, and reflective processes embedded within art education (Marinkovic, 2021). Against this backdrop, the present study positions thesis artwork themes as important indicators for examining how institutional pedagogy shapes students' artistic tendencies. Such an inquiry is particularly important because assessment in art education should consider the relationship between learning processes, artistic criteria, and creative outcomes in a more reflective and evidence-based manner (Groenendijk et al., 2019).

Previous studies have explored art education in relation to creativity, visual experience, and pedagogical practices in higher education. Tam (2023) investigated the integration of creative-thinking pedagogy into university art courses and found that explicitly designed pedagogical strategies can strengthen students' creative thinking capacities during visual production processes. Similarly, Arriba Bueno et al., (2019) examined the use of contemporary art in higher education and demonstrated that art can function as a pedagogical medium for fostering creativity and interdisciplinary critical thinking. Garcia-Lazo (2022) investigated dialogic pedagogy in art education and revealed that dialogue, visual experience, and critical reflection contribute significantly to students' understanding of artistic works.

More recently, Akenson and Scollen (2025) argued that creativity within tertiary art curricula remains a continuing conceptual and pedagogical debate. While these studies have provided valuable insights into learning processes and artistic development in higher education, they have not specifically examined thesis artwork themes as empirical indicators of the relationship between institutional pedagogy and students' artistic orientations. Recent interdisciplinary educational research further demonstrates that students' academic and creative outcomes are associated with the pedagogical environments, instructional strategies, and institutional contexts in which learning occurs. In rural and distance-learning settings, variations in learner achievement have been linked to contextual and instructional conditions that shape access to and engagement with learning opportunities (Purigay et al., 2026).

Studies involving haptic-enhanced immersive simulations and structured drawing tasks also indicate that carefully designed multimodal and visual learning strategies can support conceptual understanding and retention (Purigay, 2025a, 2025b). Similarly, AI-supported tutoring has been associated with the development of graphical reasoning and science process skills (Purigay & Lopez, 2026). Although conducted in science education, these studies provide relevant interdisciplinary evidence that students' outcomes emerge through interactions among instructional design, representational practices, technological support, and learning context. This perspective supports the present study's examination of students' final project themes as creative outcomes associated with differing institutional pedagogical environments.

Building upon these previous studies, research in art education has predominantly focused on creativity development, visual experiences, dialogic pedagogies, and curriculum enhancement in higher education contexts (Akenson & Scollen, 2025; de Arriba et al., 2019; Garcia-Lazo, 2022; Tam, 2023). Although these contributions have advanced understanding of artistic learning and production processes, they have not positioned thesis artwork themes as empirical data through which institutional pedagogical characteristics can be interpreted. This study addresses that gap by conceptualizing thesis artwork themes not merely as academic records but as representations of artistic orientations shaped by curricula, academic traditions, and the social environments of higher education institutions. The novelty of this research lies in its comparative examination of thematic tendencies in student artworks across different institutions as reflections of their distinctive pedagogical and socio-cultural characteristics.

In doing so, the study extends the scope of art education research beyond analyses of learning processes toward an examination of creative outputs as indicators of institutional culture. Accordingly, this study seeks to answer the following research question: How is institutional pedagogy reflected in the thematic tendencies of undergraduate thesis artworks produced by visual arts students? Based on this research question, the study proposes the following hypotheses:

H₀: There is no significant association between institutional background and the thematic tendencies of undergraduate thesis artworks produced by visual arts students.

H₁: There is a significant association between institutional background and the thematic tendencies of undergraduate thesis artworks produced by visual arts students.

2. Theoretical Framework

2.1 Visual Arts Education in Higher Education

Visual arts education in higher education should be understood as an academic field that extends beyond the development of technical artistic skills to encompass the cultivation of visual knowledge, creative reasoning, interpretive capacities, and cultural awareness through artistic practice (Heaton & Kuan, 2023). Within university contexts, visual arts learning is not solely concerned with the production of artworks; it also shapes how students perceive, think, communicate ideas, and situate artistic concepts in relation to broader social and intellectual issues (Skender & Dubovicki, 2024).

Art schools and academic art programs do not function as neutral spaces; rather, they are embedded within cultural, institutional, and ideological structures that influence students' learning experiences and positions within artistic practice (Robinson, 2021). From this perspective, visual arts education in higher education is conceptualized as an academic-institutional process that shapes students' artistic understanding, visual interpretation, and creative orientations. This understanding provides the foundation for examining how institutional pedagogy contributes to the formation of students' artistic tendencies.

2.2 Institutional Pedagogy and Artistic Orientation

Institutional pedagogy in visual arts education may be understood as the ways in which educational institutions shape students' learning experiences through curricula, academic culture, assessment practices, pedagogical relationships, and campus social environments. Art curricula do not merely regulate instructional content; they also influence how students understand artistic practice, the social role of art, and the possibilities for creative expression (Howard, 2019). Likewise, assessment practices in art and design education contribute to students' perceptions of artistic quality, academic standards, and the direction of creative production (Robins, 2016). Contemporary art and design education increasingly emphasizes learning environments that are open to diverse perspectives, embodied experiences, and decolonial forms of awareness (MacGill, 2023).

In higher education settings, broader social transformations, technological developments, and interdisciplinary approaches also shape the evolution of art pedagogy and influence the ways students construct their creative orientations (Sclater & Lally, 2018). Consequently, students' artistic orientations cannot be viewed solely as products of personal preference; rather, they emerge through interactions among curriculum structures, academic culture, assessment practices, institutional values, and social experiences within the university environment. From this standpoint, the analysis of undergraduate thesis artworks

should focus on the themes selected by students, as themes represent the intersection of learning experiences, institutional values, and artistic decisions manifested in creative works.

Beyond visual arts education, broader educational research demonstrates that students' academic and creative outcomes are shaped by the interaction among institutional environments, instructional design, and pedagogical practices. Institutional environments establish the cultural expectations, resources, relationships, and opportunities through which students participate in learning, thereby influencing their engagement and academic development (Kahu & Nelson, 2018; Kim et al., 2019). Instructional design further structures how learning objectives, activities, assessment, feedback, authenticity, and student agency are integrated to support meaningful learning across disciplinary contexts (Duchatelet et al., 2024). Pedagogical practices that promote active participation, dialogue, reflection, collaboration, and authentic problem-solving can strengthen students' cognitive engagement and creative development (Harris & de Bruin, 2018; Sawyer, 2019).

In particular, creativity-supportive teaching environments provide psychological safety, encourage intellectual risk-taking, value unconventional ideas, and develop students' confidence in navigating creative processes (Brauer et al., 2025). Conversely, restrictive learning environments and narrowly structured instruction may limit students' agency, experimentation, and willingness to explore alternative ideas. These broader educational perspectives reinforce the proposition that students' creative outputs do not emerge solely from individual abilities or preferences. Rather, they are produced within pedagogical ecosystems that organize learning experiences, legitimate particular forms of knowledge, and influence the academic and creative possibilities available to students.

2.3 Final Project Themes as Creative Outputs

In visual arts education, students' final projects constitute a point of articulation between learning experiences, reflective processes, and artistic decisions developed throughout their higher education journey. Within educational contexts, artworks do not merely represent visual skills; they also function as mediums for meaning-making, idea expression, and the interpretation of personal and social experiences (Buttle & Mullaney, 2023; Spangenberg, 2023). The creative process is closely associated with the development of critical and reflective thinking, as students transform visual experiences, discussions, and artistic knowledge into works that can be interpreted within academic contexts (Buttle & Mullaney, 2023; Daniel, 2025).

In higher arts education, students' creative outputs are likewise connected to learning experiences, creative practices, and their readiness to engage with broader social and professional artistic environments (Daniel, 2025; Manceor, 2024). Within this framework, the themes of final projects are particularly significant because they reveal the issues, objects, experiences, and values that students choose to represent through visual language. Accordingly, examining final project themes enables this study to investigate how students' artistic

orientations are formed through the interplay of academic experiences, creative practices, and institutional environments.

Conceptually, visual arts education in higher education, institutional pedagogy, artistic orientation, and final project themes constitute an interconnected analytical framework. Visual arts education provides the academic space in which visual knowledge and creative practices are developed, while institutional pedagogy operates through curricula, academic culture, assessment practices, and campus social environments. Through these processes, students' artistic orientations emerge in their choices of ideas, issues, subjects, media, and modes of artistic expression. Final project themes subsequently serve as concrete articulations of these orientations, as they embody traces of learning experiences, institutional values, and students' creative decision-making processes. Therefore, this study positions final project themes as an analytical entry point for examining the relationships among institutional characteristics, pedagogical processes, and the artistic tendencies of visual arts students.

3. Methodology

3.1 Research Design and Procedure

This study employed comparative quantitative content analysis design. This approach was selected because the research data consisted of undergraduate thesis artworks documented in textual form, which required systematic coding into thematic categories and subsequent transformation into numerical data to generate valid and replicable inferences (Krippendorff, 2018; Neuendorf, 2017; Riffe et al., 2019). The comparative dimension of the study was intended to examine differences in thematic patterns across institutional contexts, thereby enabling thematic tendencies to be interpreted in relation to institutional pedagogical environments. The research procedure consisted of six stages: (1) identifying thesis documents as data sources, (2) collecting and organizing documents, (3) developing thematic categories, (4) coding thematic content, (5) converting coded data into numerical datasets, and (6) conducting comparative analyses of thematic distributions across institutions.

3.2 Research Sites and Data Sources

The study was conducted at three public universities in West Java, Indonesia. The institutions were purposively selected because they had established visual arts education programs, accessible undergraduate thesis archives, and distinct academic orientations relevant to the study's comparative purpose. To protect confidentiality and minimize reputation-based interpretation, the institutions were assigned pseudonymous codes reflecting their dominant academic orientations: Science and Technology-oriented School (STS), Arts and Culture-oriented Institution (ACI), and Teacher Education-oriented Institution (TEI). STS represents a university with a strong science and technology ecosystem, ACI denotes an institution primarily oriented toward arts and cultural studies, and TEI refers to a university historically grounded in teacher education and pedagogical training.

The corpus comprised 156 undergraduate thesis documents produced by visual arts students between 2019 and 2021: 82 from STS, 34 from ACI, and 40 from TEI. Although institutional anonymization protected confidentiality, it limited the extent to which the observed patterns could be linked to specific curricula, institutional histories, or educational policies. Therefore, the findings should be interpreted within the three institutional orientations examined and should not be generalized to all visual arts higher education institutions in Indonesia.

3.3 Data Collection

Data was collected through documentation techniques using purposive document sampling. Documentation was considered appropriate because content analysis research relies on textual and documentary sources that can be systematically coded to produce valid and replicable findings (Krippendorff, 2018; Neuendorf, 2017). Purposive sampling was employed to ensure that only documents relevant to the research objectives and containing analyzable thematic information were included in the dataset (Riffe et al., 2019).

To be included in the analysis, documents had to meet three criteria: (1) they were undergraduate thesis projects produced by visual arts students, (2) they contained a title and/or conceptual description of the artwork, and (3) they provided sufficient thematic information to allow classification into predefined thematic categories. Documents lacking adequate thematic information or those whose content could not be verified were excluded from the analysis.

3.4 Coding Procedure

The thematic categories were developed through an iterative review of the artwork titles, conceptual descriptions, and artistic narratives. Recurring themes were initially identified, compared, and grouped according to their conceptual similarities, while themes representing distinct artistic concerns were retained as separate categories. This process resulted in 12 thematic categories, each of which was subsequently defined through an operational focus and representative indicators.

Two coders independently classified each document by examining its artwork title, conceptual description, and artistic narrative using predefined operational definitions. Each artwork was assigned to one of 12 thematic categories: psychology, spirituality, philosophy, culture, social issues, gender, environment, medium exploration, science, history, sports, or politics. When multiple themes were present, the category that most consistently represented the artwork's central issue, stated purpose, and conceptual emphasis was selected. Assigning one dominant theme ensured mutually exclusive classification, prevented double counting, and allowed each document to occupy only one cell in the Chi-Square analysis. Coding was based on the contextual meaning of the complete document rather than isolated keywords. Inter-coder reliability was substantial (Cohen's Kappa = 0.74), and disagreements were resolved through discussion with reference to the operational definitions. Table 1 summarizes the operational focus and representative indicators of each category.

Table 1: Operational Focus and Representative Indicators of Thematic Classification

Theme	Operational focus	Representative indicators
Psychology	Psychological conditions and personal emotions	Anxiety, trauma, loneliness, inner conflict
Spirituality	Religious beliefs and transcendent experiences	Faith, worship, sacred symbols, spiritual reflection
Philosophy	Abstract reflection on existence and values	Truth, morality, existence, meaning of life
Culture	Traditions, heritage, and collective identity	Local rituals, customs, cultural symbols
Social issues	Problems affecting society or communities	Poverty, inequality, violence, marginalization
Gender	Gender identities, roles, and inequalities	Women's experiences, stereotypes, discrimination
Environment	Ecological issues and human-nature relationships	Pollution, environmental damage, conservation
Medium exploration	Experimentation with materials and techniques	Mixed media, alternative materials, technical innovation
Science	Scientific phenomena, knowledge, or technology	Biology, medicine, astronomy, technology
History	Past events, figures, and collective memory	Historical conflicts, national figures, remembrance
Sports	Athletic activities and sporting experiences	Athletes, competition, movement, sporting culture
Politics	Power, governance, and political processes	Authority, elections, protest, public policy

Note. The indicators are illustrative rather than exhaustive. Final classification was determined by the dominant contextual meaning expressed across the complete document.

3.5 Data Analysis

Given the unequal number of documents across participating institutions, data interpretation was based not only on absolute frequencies but also on within-institution percentages. The use of percentages allowed thematic distributions to be compared proportionally despite differences in group size (Field, 2018). Consequently, thematic tendencies were interpreted according to the relative proportion of categories within each institution rather than solely through raw document counts.

Quantitative analyses included frequency distributions, percentage calculations, cross-tabulations, the Pearson Chi-Square Test of Independence, a Monte Carlo exact test, adjusted standardized residuals, and Cramer's V. Each document represented a separate undergraduate thesis artwork, was included only once in the dataset, and was assigned to only one institution and one dominant thematic category; therefore, the observations were treated as independent. Cross-tabulation and the Pearson Chi-Square Test of Independence were used to examine the association between institutional context and thematic categories.

However, 25 of the 36 cells (69.4%) had expected frequencies below five, indicating that the expected-frequency assumption of the Pearson Chi-Square test was not satisfied. Therefore, a Monte Carlo exact test was conducted to obtain a

more reliable estimate of statistical significance. The analysis was based on 1,000,000 randomly generated contingency tables with fixed marginal totals. This procedure was selected instead of merging categories because each thematic category represented a theoretically distinct artistic orientation. Adjusted standardized residuals were examined to identify institution-theme cells contributing to the overall association. The Holm correction was applied to these cell-level comparisons to control the family-wise error rate, and only differences that remained significant after correction were interpreted. Cramer's V was calculated to determine the strength of the association (Cohen et al., 2018; Field, 2018). Statistical significance was established at $p < .05$. Consistent with the observational design, the findings were interpreted as associations rather than causal relationships. All quantitative analyses, including the Monte Carlo exact test, were performed using IBM SPSS Statistics version 22.

3.6 Validity and Reliability

The validity and reliability of the coding system were evaluated to ensure consistency and accuracy in thematic classification. Content validity was assessed to determine whether the coding framework adequately represented the meanings contained within the documents and aligned with the objectives of the study (Krippendorff, 2018; Neuendorf, 2017).

Content validation was conducted by three experts in visual arts and art education who reviewed the thematic categories, operational definitions, thematic indicators, and examples of coding decisions. The expert evaluation yielded a mean score of 3.61 out of 4.00, indicating that the coding framework was highly appropriate for use in the study.

Before reliability testing, the two coders were trained using the coding framework and independently classified a practice set of documents. Their coding decisions were subsequently discussed to clarify category boundaries and ensure consistent application of the dominant-theme criteria. Inter-coder reliability was then assessed using a randomly selected subset of 39 documents, representing 25% of the total corpus. The documents were independently classified by both coders. Cohen's Kappa was employed because the data consisted of nominal categories and the statistic accounts for chance agreement (MacPhail et al., 2016; O'Connor & Joffe, 2020). The analysis produced $\kappa = 0.74$, 95% CI [0.60, 0.88], indicating substantial inter-coder agreement.

Coding disagreements were resolved through consensus discussion. The coders jointly re-examined the artwork titles, conceptual descriptions, and artistic narratives by referring to the operational definitions and dominant-theme criteria established in the coding framework. For documents containing multiple themes, the final category was determined according to the theme most consistently reflected in the artwork's stated purpose and conceptual emphasis. The agreed classifications were then recorded in the final dataset used for statistical analysis.

3.7 Ethical Considerations

This study adhered to ethical principles for documentary research. The data consisted of undergraduate thesis documents obtained from institutional

repositories and academic archives, and no direct interaction with human participants was involved. To ensure confidentiality, the identities of all participating institutions and students were anonymized, with universities represented by the codes STI, ACI, and TEI. No personally identifiable information was included in the analysis or reporting of findings. The study focused exclusively on thematic patterns in students' final artworks, and all results were presented in aggregate form for scholarly and research purposes.

4. Results

4.1 Profile of Final Project Documents

The results analysis began with an examination of the document corpus that served as the empirical foundation of the study. The corpus consisted of 156 undergraduate final project documents produced by visual arts students from three institutional contexts in West Java, Indonesia, whose identities were anonymized. The three contexts were coded as Science and Technology-oriented School (STS), Arts and Culture-oriented Institution (ACI), and Teacher Education-oriented Institution (TEI). Presenting the document profile is important for establishing the composition of the dataset before examining thematic distributions. The distribution of final project documents by institutional type is presented in Table 2.

Table 2: Distribution of Final Project Documents Across Anonymized Institutional Types

Institutional Code	Institutional Type	Number of Documents	Percentage
STS	Science and Technology-oriented School	82	52.56%
ACI	Arts and Culture-oriented Institution	34	21.79%
TEI	Teacher Education-oriented Institution	40	25.64%
Total		156	100.00%

As shown in Table 2, documents from STS constituted the largest proportion of the corpus, accounting for 82 documents (52.56%). TEI contributed 40 documents (25.64%), while ACI contributed 34 documents (21.79%). This distribution indicates unequal numbers of documents across institutional types. Therefore, thematic analyses in subsequent sections are interpreted not only through absolute frequencies but also through within-institution percentages to facilitate proportional comparisons of thematic tendencies.

4.2 Overall Distribution of Final Project Themes

The overall thematic distribution was analyzed to provide an initial overview of the thematic composition of the final project corpus. At this stage, all documents were examined collectively without distinguishing institutional contexts. Each document was classified into one primary thematic category based on the dominant idea reflected in the title, conceptual description, and artistic narrative of the artwork. This overall distribution serves as a descriptive foundation for understanding aggregate thematic patterns before examining institutional variations. The results are presented in Table 3.

Table 3: Overall Distribution of Final Project Themes

Theme Category	Frequency	Percentage
Psychology	36	23.08%
Culture	31	19.87%
Environment	17	10.90%
Social	15	9.62%
Philosophy	14	8.97%
Spiritual	12	7.69%
Medium	11	7.05%
Gender	7	4.49%
History	6	3.85%
Science	4	2.56%
Politics	2	1.28%
Sport	1	0.64%
Total	156	100.00%

Table 3 indicates that psychology was the most frequently represented theme, accounting for 36 documents (23.08%) of the total corpus. Culture ranked second with 31 documents (19.87%), followed by environment with 17 documents (10.90%). In contrast, sport, politics, and science represented the least frequent categories, accounting for 0.64%, 1.28%, and 2.56% of the corpus, respectively. Overall, the findings suggest that final projects were predominantly concentrated on psychological, cultural, and environmental issues. However, this aggregate pattern does not reveal whether these tendencies were evenly distributed across institutions or varied according to institutional context.

4.3 Thematic Distribution Across Institutional Contexts

The thematic distribution by institutional context was examined to identify how thematic categories were represented within each institutional type. Because the number of documents differed across STS, ACI, and TEI, the results are presented using both absolute frequencies and within-institution percentages. Internal percentages enable more proportional comparisons because each category is calculated relative to the total number of documents within the same institution. The distribution of final project themes across institutional contexts is presented in Table 4.

Table 4: Final Project Themes by Institutional Context

Theme Category	STS		ACI		TEI	
	n	%	n	%	n	%
Psychology	26	31.71	10	29.41	0	0.00
Spiritual	10	12.20	2	5.88	0	0.00
Philosophy	9	10.98	4	11.76	1	2.50
Culture	9	10.98	10	29.41	12	30.00
Social	9	10.98	2	5.88	4	10.00
Gender	7	8.54	0	0.00	0	0.00
Environment	5	6.10	1	2.94	11	27.50
Medium	3	3.66	5	14.71	3	7.50
Science	3	3.66	0	0.00	1	2.50
History	1	1.22	0	0.00	5	12.50
Sport	0	0.00	0	0.00	1	2.50
Politics	0	0.00	0	0.00	2	5.00
Total	82	100.00	34	100.00	40	100.00

Table 4 demonstrates that thematic distributions differed across institutional contexts. At STS, psychology represented the most prominent theme, accounting for 26 documents (31.71%). Spirituality ranked second with 10 documents (12.20%), while philosophy, culture, and social themes each accounted for 9 documents (10.98%). Gender and science themes appeared primarily within STS, with gender showing a relatively notable proportion (8.54%). These findings suggest that final projects at STS tended to focus on subjective, reflective, and conceptual issues.

At ACI, psychology and culture were equally dominant, each accounting for 10 documents (29.41%). Medium exploration ranked next with five documents (14.71%), followed by philosophy (11.76%). These findings indicate that thematic tendencies at ACI were associated not only with psychological and cultural concerns but also with material exploration and visual language as significant components of artistic orientation.

At TEI, culture was the most prominent category, accounting for 12 documents (30.00%), followed by environment with 11 documents (27.50%). History also emerged as a notable theme with five documents (12.50%), while social themes accounted for 10.00% of the corpus. Unlike STS and ACI, psychology and spirituality were absent from the analyzed TEI corpus. These patterns suggest that final projects at TEI were more strongly oriented toward cultural, ecological, historical, and social issues.

Overall, Table 3 demonstrates that thematic tendencies were not distributed uniformly across the three institutional contexts. STS exhibited stronger concentrations in psychology, spirituality, gender, and science; ACI displayed a balance between psychology, culture, and medium exploration; whereas TEI emphasized culture, environment, history, politics, and sport. These differences suggest variations in artistic orientation that may be interpreted in relation to the pedagogical characteristics and institutional contexts of each university.

To facilitate proportional comparison across institutional contexts, the percentage distribution of themes across STS, ACI, and TEI is visualized in Figure 1. Because the number of documents differed across institutions, the figure provides a clearer representation of thematic concentrations within each context.

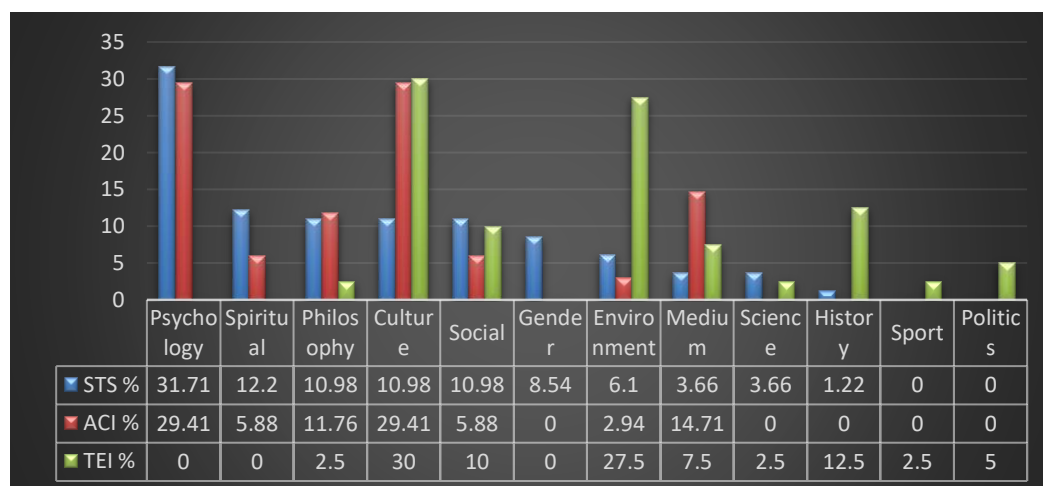


Figure 1: Percentage Distribution of Final Project Themes Across Institutional Contexts

Figure 1 illustrates the variation in thematic distributions across the three institutional contexts. At STS, psychology was the dominant theme, followed by spirituality, philosophy, culture, and social issues. At ACI, psychology and culture represented the highest proportions, while medium exploration also appeared more prominently than in the other institutions. In contrast, TEI exhibited strong concentrations in culture and environment, accompanied by the presence of history, politics, and sport themes that were absent from ACI. Visually, the figure reinforces the finding that each institution demonstrates distinctive thematic tendencies, suggesting that students' final project orientations reflect the pedagogical characteristics of their respective institutional environments.

4.4 Association Between Institutional Context and Final Project Themes

Inferential analysis was conducted to determine whether institutional context was significantly associated with final project theme categories. This analysis was based on a cross-tabulation between institutional type and thematic category, followed by a Chi-Square Test of Independence. The test was employed to assess whether the observed thematic distribution differed significantly from the distribution expected under conditions of independence. The results are presented in Table 5.

Table 5: Chi-Square Test of Independence

Test	Value	df	Significance	Decision
Pearson Chi-Square	72.77	22	< .001	Significant
Monte Carlo significance	—	—	< .001	Significant

Note. Twenty-five of the 36 cells (69.4%) had expected frequencies below five, and the minimum expected frequency was 0.218. Therefore, Monte Carlo significance was used as a robustness check.

As shown in Table 5, the Pearson Chi-Square Test indicated a statistically significant association between institutional context and the distribution of final project themes, $\chi^2(22, N = 156) = 72.77, p < .001$. However, 25 of the 36 cells (69.4%) had expected frequencies below five, and the minimum expected frequency was 0.218. Because this condition did not satisfy the conventional expected-frequency assumption, a Monte Carlo procedure was conducted to obtain a more reliable estimate of statistical significance. The Monte Carlo result remained statistically significant ($p < .001$), providing additional support for the robustness of the observed association.

Consequently, the null hypothesis stating that there is no association between institutional context and final project theme categories was rejected, while the alternative hypothesis was supported. This finding demonstrates a statistically significant association but does not establish that institutional pedagogy causally determines students' thematic choices or that students' projects necessarily align with their respective institutional fields. Following the identification of a significant association, an additional analysis was conducted to assess the strength of the relationship. Cramer's V was used as a measure of association between the two categorical variables. The results are presented in Table 6.

Table 6: Symmetric Measure of Association

Measure	Value	Approx. Sig.	Interpretation
Cramer's V	0.483	< .001	Moderate association

Table 6 indicates that Cramer's V was 0.483 ($p < .001$), suggesting a moderate association between institutional context and final project theme categories. This finding indicates that thematic distributions varied systematically across the participating institutions. However, the observed association does not establish that institutional orientation caused students' thematic choices or prove that final project themes necessarily aligned with their respective institutional fields.

In practical terms, this moderate association indicates that institutional context is a substantively relevant factor in understanding thematic variation, although students' individual interests and other contextual factors remain important. Accordingly, thematic mapping may provide institutions with useful evidence for reviewing curriculum emphasis, supervision practices, and opportunities for students to explore a broader range of artistic themes.

Following the identification of the overall association, adjusted standardized residuals were examined to identify the specific institution-theme cells contributing to the Chi-Square result. Because 36 cells were evaluated, the Holm correction was applied to control the family-wise error rate arising from multiple cell-level comparisons. Only institution-theme cells that remained statistically significant after the Holm correction were interpreted. The results are presented in Table 7.

Table 7: Significant Adjusted Standardized Residuals After Holm Correction

Institutional Context	Theme Category	Adjusted ResidualHolm-Adjusted p	Holm-Adjusted p	Pattern
TEI	Psychology	-4.02	.002	Lower than expected
TEI	Environment	3.91	.003	Higher than expected
TEI	History	3.30	.033	Higher than expected

Table 7 presents the institution-theme cells that remained significant after the Holm correction. Within TEI, psychological themes occurred less frequently than expected (*adjusted residual* = -4.02, Holm-adjusted p = .002), whereas environmental (*adjusted residual* = 3.91, Holm-adjusted p = .003) and historical themes (*adjusted residual* = 3.30, Holm-adjusted p = .033) occurred more frequently than expected. These cell-level patterns contributed to the overall association but do not demonstrate causation or necessary alignment between institutional fields and students' thematic choices.

Taken together, the results presented in Tables 5, 6, and 7 indicate a statistically significant association between institutional context and students' final project themes. Given the violation of the expected-frequency assumption, the Monte Carlo exact result provided the primary evidence of statistical significance, while Cramer's V indicated a moderate association. The adjusted standardized residual analysis further identified the institution-theme cells that contributed to the overall association after controlling for multiple comparisons using the Holm correction. Specifically, within TEI, psychological themes occurred less frequently than expected, whereas environmental and historical themes occurred more frequently than expected. These findings indicate patterned differences in thematic distributions across institutions but do not establish causal influence or prove that students' projects necessarily aligned with their respective institutional fields.

5. Discussion

The findings of this study offer a new understanding that final project themes can be interpreted as empirical traces of institutional pedagogy in visual arts education. Student final artworks have often been understood primarily as individual products representing students' interests, personal expression, or technical abilities. However, the present findings indicate that thematic choices are also associated with the institutional contexts in which students learn.

Variations in thematic distributions across STS, ACI, and TEI suggest that students' artistic horizons are associated with differences in curricula, academic culture, studio traditions, assessment practices, and supervision patterns. This interpretation is consistent with studies showing that studio-based art education is related to institutional norms, learning environments, and pedagogical changes in higher education (Charters & Murphy, 2021). The role of curriculum in relation to the development of visual consciousness is also emphasized in discussions of art school education, in which visual learning is understood as a distinctive form

of academic and cultural formation (Riley, 2021). The hypothesis was supported by the Chi-Square Test of Independence, $\chi^2(22) = 72.77, p < .001$. Accordingly, the null hypothesis (H_0), stating that institutional context and final project theme categories were independent, was rejected, while the alternative hypothesis (H_1) was supported. Cramer's V of 0.483 indicated a moderate association, showing a meaningful relationship between institutional context and students' thematic choices. Creative arts pedagogy in higher education is closely related to institutional values, educational expectations, and broader learning cultures (Jensen et al., 2022; Wilkinson, 2020). Overall, the findings answer the research question by indicating that variations in institutional pedagogy are associated with how students select issues, frame experiences, and translate ideas into final project themes.

Although the overall association between institutional context and thematic orientation was statistically significant, categories with relatively small frequencies, particularly politics and sports, should be interpreted cautiously. Their limited observations may produce less stable percentage distributions and standardized residual estimates, making them more sensitive to small changes in frequency. Therefore, institution-specific patterns in these categories should be regarded as indicative rather than conclusive.

The overall prominence of psychological and cultural themes may reflect two particularly accessible sources of artistic inquiry: students' personal experiences and their surrounding sociocultural environments. Psychological themes enable students to translate emotions, identity formation, anxiety, trauma, and inner conflict into visual forms, whereas cultural themes draw on familiar traditions, collective identities, rituals, and heritage. Their prominence may also be associated with curricular emphasis, studio assignments, supervisory expertise, assessment expectations, and students' exposure to particular artistic discourses. Reflective and expression-oriented studio practices may encourage psychological exploration, while learning activities emphasizing cultural heritage and local identity may support culturally oriented projects. However, because these institutional and educational factors were not directly examined, they should be understood as plausible contextual explanations rather than confirmed causal mechanisms.

The differences in thematic patterns across institutions suggest that students' artistic orientations are associated with the interaction between personal choices and institutional pedagogical ecosystems. At STS, the prominence of psychological, spiritual, gender, and science-related themes suggest a tendency toward reflective, conceptual, and interdisciplinary artistic exploration. This tendency aligns with research showing that contemporary art and design education increasingly provides opportunities for reflective practice, digital documentation, and conceptual development beyond technical production (Hameed & Mimirinis, 2024). At ACI, the prominence of psychological, cultural, and medium-based themes suggests an orientation toward personal expression, cultural identity, material exploration, and visual language. Studio learning in art and design education provides opportunities for experimentation, critique, and

iterative idea development, which may be associated with students' thematic and material decisions (Chau et al., 2022). The affective, ecological, and material dimensions of art and design learning may further explain the relationship between students' creative outputs, sensory experience, meaning-making, and artistic engagement (Hall & Turner, 2021). Meanwhile, TEI displayed a comparatively stronger social and educational orientation through cultural, environmental, historical, political, and sports-related themes. This pattern may be understood in relation to the capacity of art and design education to connect creative practice with social justice, civic concerns, and public life (Epp Buller, 2021). Collectively, these findings suggest that creativity in visual arts curricula should be understood not merely as an individual capacity but also as being associated with institutional pedagogy, disciplinary expectations, and the social orientation of higher arts education (England, 2023).

These findings align with previous studies emphasizing reflection, personal meaning-making, cultural identity, and social engagement in visual arts education (England, 2023; Epp Buller, 2021; Hall & Turner, 2021; Hameed & Mimirinis, 2024). However, this study extends the literature by demonstrating that these themes were distributed differently across institutional contexts. The significant Chi-Square result and moderate Cramer's V (0.483) suggest that institutions may function as educational environments in which formal curricula, disciplinary traditions, assessment practices, supervision, and studio interactions shape the artistic possibilities available to students. This interpretation may explain the higher-than-expected occurrence of environmental and historical themes and the lower-than-expected occurrence of psychological themes at TEI. Nevertheless, because these institutional mechanisms were not directly examined, they should be understood as theoretically informed interpretations rather than confirmed causal explanations.

Conceptually, this study reinforces the view that visual arts institutions are not neutral spaces, but pedagogical environments associated with how students understand artworks, select themes, and construct their artistic positions. Art curricula are related not only to learning content but also influence how students understand identity, inclusion, and social positioning in visual practice. Recent research on art and design education shows that issues of inclusion, recognition, and participation are associated with students' experiences of learning spaces and their positioning within artistic communities (Al Hashimi et al., 2021). Gendered assumptions and unequal patterns of participation in art education also show that thematic expression is connected to broader institutional and cultural structures (Marx, 2022).

Within this process, assessment and supervision are associated with the standards by which artworks are regarded as meaningful, appropriate, and valuable as an academic artwork. Assessment and feedback practices in higher education influence how students interpret quality, respond to evaluative expectations, and position themselves as active agents in learning (Winstone & Boud, 2022). Academic counselling and supervisory support are also important in art and design education because they may assist students in negotiating learning

difficulties, clarify academic direction, and strengthen creative decision-making (Wang et al., 2024). Moreover, thematic variation across institutions indicates that art learning experiences are connected to embodiment, identity, experience, and power relations operating within educational spaces. Thus, final project themes may be understood as an intersection between learning experiences, institutional values, and students' artistic decisions.

The main contribution of this study lies in shifting how creative outputs in visual arts education are interpreted. Previous studies have largely emphasized learning processes, creativity, visual experience, studio pedagogy, or assessment practices, whereas this study positions final project themes as empirical data for understanding the character of institutional pedagogy. In visual arts education, artworks are not merely final products; they also function as spaces for reflection, critique, and the articulation of students' learning experiences. Recent studies on creative arts higher education suggest that student creative work is closely related to academic resilience, reflective capacity, and the ability to respond to complex educational challenges (Winters, 2022). Practice-based and creative research in art and design education also shows that creative works can function as knowledge-bearing artefacts because they embody inquiry, experimentation, and situated understanding (Vaughan, 2025).

Therefore, the empirical contribution of this study lies in providing quantitative evidence of thematic tendencies in student final projects across three institutional types. Its methodological contribution lies in the use of quantitative content analysis to examine students' artistic orientations through final project documents. The relevance of creative outputs as evidence of learning is also supported by recent discussions on neuroaesthetics, which emphasize that art-making involves perception, cognition, affect, and meaning construction rather than technical skill alone (Wild, 2024). Conceptually, this study expands the understanding of institutional pedagogy by showing that associations with institutional context are reflected not only in formal curricula or studio practices but also in the creative themes selected by students. Thus, the new understanding generated by this study is that final project themes can function as indicators of academic culture, pedagogical orientation, and the value structures of visual arts institutions.

The practical implication of this study is that visual arts study programs need to use thematic mapping of final projects as a basis for curriculum reflection, academic supervision, and studio culture development. If certain themes are overly dominant, study programs can evaluate whether such tendencies reflect the distinctive strengths of the institution or indicate limitations in students' thematic exploration. Curriculum and professional development studies in arts higher education show that institutional logics are associated with what is taught, how students are prepared, and how creative professionalism is imagined (England, 2023). Supervisors can also use these findings to broaden students' exploration of personal, social, cultural, ecological, technological, political, and medium-based issues. In higher arts education, learning experiences connected to socio-professional practices are important because they may support students'

readiness to engage in broader artistic fields. Current debates on employability in arts and humanities education also remind us that professional preparation should not be reduced to labour-market outcomes, but should include critical, creative, and cultural formation (Ashton et al., 2023). Theoretically, this study shows that institutional pedagogy can be read through students' creative outputs, thereby extending art education analysis from learning processes to artistic products as indicators of academic culture.

However, interpretations of categories with small frequencies, such as sports and politics, should be made cautiously to avoid overgeneralization. Such caution is important because higher education contexts involve classed, cultural, affective, and institutional relations that may be associated with how students access, frame, and express particular themes (Mulcahy & Martinussen, 2022). Therefore, this study suggests that final projects can be interpreted as a space of articulation between students' personal choices, pedagogical experiences, and institutional structures associated with their artistic orientations.

6. Conclusion

This study concludes that institutional context is significantly associated with the thematic tendencies of visual arts students' final projects. The distribution of themes was not random but exhibited distinct patterns across STS, ACI, and TEI. STS was characterized by stronger emphases on psychology, spirituality, gender, and science-related themes; ACI showed greater tendencies toward psychology, culture, and medium exploration; whereas TEI demonstrated stronger orientations toward culture, environment, history, politics, and sports. These differences indicate that final project themes reflect not only students' personal interests but also their relationships with curricula, academic culture, studio traditions, supervision practices, and broader institutional orientations. The key contribution of this study is the proposition that final project themes can be interpreted as empirical traces of institutional pedagogy.

In this sense, student artwork should be understood not merely as individual creative products but also as indicators of the relationship between institutional contexts, students' artistic horizons, and their creative orientations. Conceptually, this study extends visual arts education research beyond learning processes toward an examination of creative outputs as representations of pedagogical culture. Methodologically, it demonstrates the value of quantitative content analysis for mapping students' artistic orientations through final project documents. Given the observational and comparative nature of the study, these findings should be interpreted as evidence of statistically significant associations rather than as proof that institutional pedagogy causally determines students' thematic choices.

Overall, the findings highlight the importance of interpreting final projects as spaces where personal choices, educational experiences, and institutional structures converge. Future research involving institutions across multiple regions, longitudinal designs, and mixed-methods approaches is needed to

examine more comprehensively how institutional pedagogy interacts with individual, supervisory, and social factors in shaping students' creative outputs.

7. Suggestions

Visual arts programs are encouraged to use thematic mapping of final projects as a basis for curriculum evaluation, academic supervision, and the development of learning environments. Such mapping can help institutions identify dominant themes, underrepresented areas, and opportunities for expanding students' artistic exploration. Future studies should involve institutions across multiple regions and employ longitudinal and mixed methods designs combining thematic analysis, curriculum review, studio observation, and interviews with students and supervisors. These approaches could provide more comprehensive evidence regarding the interaction of institutional pedagogy, individual interests, supervisory practices, and social contexts in shaping students' creative outputs.

8. Limitations

This study analyzed final project documents from only three institutions in West Java, limiting the generalizability of its findings. It focused on thematic categories without examining visual characteristics, creative processes, or artistic quality. Institutional pedagogy was also not investigated directly through curriculum analysis, observations, or interviews. Therefore, the findings indicate contextual associations rather than causal effects. In addition, the small frequencies of political and sports themes may reduce the stability of their statistical estimates; thus, these patterns should be interpreted cautiously.

Conflict of Interest

The authors declare no conflicts of interest related to this study.

9. Declaration of Use of AI

Grammarly and Claude were used solely to check grammar and improve linguistic clarity. All scholarly content, data analysis, interpretation of findings, and conclusions were developed by the authors, who assume full responsibility for the manuscript's accuracy and integrity.

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