


# Improving Student Learning Outcomes Through the Inquiry Method on Visual Journal Material in Arts and Culture Subjects in Class X E.9 of SMA Negeri 1 Padang

 <https://doi.org/10.31004/jele.v11i2.2009>

\*Fitriah Azizah, Fuji Astuti, Andrizal, Ardipal<sup>abcd</sup>

<sup>1234</sup>Art Education Study Program, Padang State University, Indonesia

Corresponding Author: [fitriahazizah93@gmail.com](mailto:fitriahazizah93@gmail.com)

## ABSTRACT

Student learning outcomes in the visual journal material of the Arts and Culture subject in class X E.9 SMA Negeri 1 Padang are still low due to the teacher-centered approach that limits active student involvement. This study aims to examine the effectiveness of the inquiry method to improve student learning outcomes. This type of research uses Classroom Action Research (CAR) with the Kemmis and McTaggart model in two cycles. The population and sample consisted of 36 students of class X E.9. Instruments include learning outcome tests, observation sheets, questionnaires, and documentation, analyzed descriptively quantitatively using SPSS and qualitatively through triangulation. The results show an increase in the average value from 74.28 (pretest) to 80.81 (cycle I) and 89.44 (cycle II), with a standard deviation decreasing from 3.62 to 2.47. Observations recorded a significant increase in student activity. The study concluded that the inquiry method is effective in improving learning outcomes and student involvement in visual journal learning.

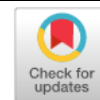
**Keywords:** *Classroom Action Research, Inquiry Method, Learning Outcomes, Arts and Culture, Visual Journal*

### Article History:

Received 19<sup>th</sup> January 2026

Accepted 03<sup>rd</sup> March 2026

Published 04<sup>th</sup> March 2026



## INTRODUCTION

The learning process determines students' responses to achieving the ultimate learning objectives at school. Each learning process in various subjects influences how students receive and understand the material taught, including Arts and Culture subjects, which are an integral part of the school curriculum (Elfrida Gupita Eka Cipta, 2019; Sandi & Bumiayu, 2020). Arts and Culture education is multilingual and multidimensional, with the aim of developing students' abilities to express creativity through media such as visual language, sound, movement, and their integration (Sandi & Bumiayu, 2020; Widodo et al., 2022). However, freedom of expression does not always automatically increase students' learning motivation (Pratiwi & Aisyah, nd; Huda et al., 2023).

At SMA Negeri 1 Padang, Arts and Culture learning is still considered less important by some students due to low active teacher-student interaction, minimal interest in the material, and less participatory delivery methods. This condition hinders the optimal understanding and implementation of Arts and Culture concepts (Firmansyah & Jiwandono, 2022; Wijoyo, 2018). Initial observations in class X E.9 showed suboptimal understanding of visual journal material, with low learning outcomes due to passive student activity and lack of initiative in seeking information or expressing visual ideas (Elfrida Gupita Eka Cipta, 2019; Asali Lase, 2024).

The main problem is the teacher-centered learning strategy, which places the teacher at the center and students as passive recipients, limiting active student engagement. This approach limits students' opportunities to engage directly in the learning process, necessitating student-centered alternatives (Firmansyah & Jiwandono, 2022; Akhmad Sudrajat, 2023). Observations confirm low student engagement in discussions and visual exploration, which is suspected to be related to a lack of interactive strategies (Wijoyo, 2018;

Khasanah & Aswar, 2024). This situation demands an approach that encourages active participation to shape understanding through direct experience (Anisa Melianti, 2023; Pratiwi & Aisyah, n.d.).

This study aims to examine the effectiveness of the inquiry method to improve student learning outcomes in the visual journal material of the Arts and Culture subject in class X E.9 of SMA Negeri 1 Padang. The urgency of the research arises from the low learning outcomes due to the conventional approach, where the inquiry method is relevant because it activates students through the stages of asking, observing, exploring, and concluding independently (Akhmad Sudrajat, 2023; Asali Lase, 2024). The novelty lies in the specific application of the inquiry method to visual journal learning at the high school level, which is still rarely studied even though previous studies have shown its positive impact on fine arts (Pratiwi & Aisyah, nd; Anisa Melianti, 2023).

## METHOD

### Types and Methods of Research

This study uses a Classroom Action Research (CAR) approach as the main design, which is reflective and planned to improve the quality of the learning process and enhance student learning outcomes (Imam Machali, 2022; Khasanah & Aswar, 2024; Sugiyono, 2021). CAR refers to the Kemmis and McTaggart model, which includes four interconnected stages: planning, action implementation, observation, and reflection, implemented in two cycles to ensure gradual improvement (Khasanah & Aswar, 2024; Sudaryono, 2022; Emzir, 2023). This approach emphasizes educators' understanding of the curriculum, learning experiences, and assessment of processes and outcomes, so that learning becomes more educational and contextual (Imam Machali, 2022; Creswell & Poth, 2021).

### Data Analysis Instruments and Techniques

The research instruments included observation sheets to assess teacher and student activities, learning outcome tests (pretest and posttest), student response questionnaires, and supporting documentation, designed to measure phenomena in a planned and systematic manner (Sugiyono, 2018; Nurfajriani et al., 2024; Sudaryono, 2022). Data analysis techniques combined quantitative and qualitative descriptive methods, where quantitative data were processed using descriptive statistics with SPSS to calculate the mean, standard deviation, and percentage of learning completion (Nur Afandi et al., 2022; Afriani et al., n.d.; Emzir, 2023). Qualitative data were obtained from observations, field notes, and structured or unstructured interviews to analyze the dynamics of student activities and attitudes, thereby strengthening the credibility and validity of the findings comprehensively (Nurfajriani et al., 2024; Siti Romdona et al., 2025; Creswell & Poth, 2021).

### Population and Sample

The study population was all students of class X E.9 of SMA Negeri 1 Padang in the 2024/2025 academic year, with a sample of 36 students who were fully involved as subjects (Khasanah & Aswar, 2024; Sugiyono, 2021). This sample selection was purposive because the class represents the context of Arts and Culture learning with the problem of low learning outcomes in visual journal material (Imam Machali, 2022; Sudaryono, 2022).

### Research Procedures

The research procedure begins with initial observations to identify problems, followed by syllabus and instrument planning in Cycle I, implementation of inquiry method actions (observing, asking, exploring, concluding), observation, and reflection for improvement in Cycle II (Imam Machali, 2022; Khasanah & Aswar, 2024; Emzir, 2023). Each cycle ends with learning outcome measurements through pretests and posttests, analyzed using SPSS, and triangulation of qualitative data from observations and interviews to validate improvements (Nurfajriani et al., 2024; Nur Afandi et al., 2022; Creswell & Poth, 2021). This process is repeated until satisfactory learning completion criteria are achieved.

## RESULTS AND DISCUSSION

### SPSS Descriptive Analysis Data Results

This research was conducted in two cycles of action aimed at analyzing the effectiveness of the application of the inquiry method in improving the learning outcomes of class X E.9 students of SMA Negeri 1 Padang in visual journal learning. This research involved 36 students as research subjects. The data obtained were then processed and analyzed using a descriptive statistical approach with the support of SPSS software through the following analysis stages:

	N	Descriptive Statistics			
		Minimum	Maximum	Mean	Standard Deviation
posttest_Cycle_I	36	75.00	85.00	80.8056	2.48216
posttest_Cycle_II	36	84.00	94.00	89.4444	2.46628
Pretest	36	67.00	80.00	74.2778	3.62224
Valid N (listwise)	36				

The findings of classroom action research conducted on class X E.9 students of SMA Negeri 1 Padang showed that the application of the inquiry method to visual journal material in the Arts and Culture subject was able to improve student learning outcomes gradually and sustainably. Descriptive analysis of student learning outcomes was conducted on 36 students who participated in the entire series of learning actions.

In the pretest stage, before the inquiry method was implemented, the average score was 74.28, with a minimum score of 67 and a maximum of 80, and a standard deviation of 3.62. The data findings indicate that student learning outcomes in the initial stages of visual journal learning are still at a fairly adequate level, with relatively diverse levels of ability variation. This condition reflects that previous learning has not fully encouraged students to understand the concept and process of visual recording optimally.

The results of the application of the inquiry method in Cycle I showed a significant increase in student learning outcomes. The average posttest score reached 80.81 with a range of scores between 75 and 85 and a standard deviation of 2.48. The average increase of 6.53 points from the pretest results confirmed that inquiry-based learning made a positive contribution to improving student understanding. The implementation of the inquiry stages, which included observing, asking questions, exploring, and presenting visual journals independently, encouraged students' active involvement in the learning process.

In Cycle II, the optimization of inquiry-based learning resulted in a surge in student learning outcomes that was significantly higher than before. The average posttest score reached 89.44 with a range of scores between 84 and 94 and a standard deviation of 2.47. The increase in the average score of 8.64 points compared to the achievement in Cycle I indicates that the implementation of the inquiry method, which was designed in a more focused and organized manner, had a stronger impact on improving student learning outcomes in the visual journal material. In addition, the high lowest score limit achieved in Cycle II indicates that all students have met the established learning completion criteria.

The results of the comprehensive descriptive analysis show that the application of the inquiry method to the visual journal material in the Arts and Culture subject in class X E.9 of SMA Negeri 1 Padang significantly improves student learning outcomes. The increase in average scores accompanied by a decrease in standard deviations confirms that inquiry-based learning not only improves students' academic achievement, but is also able to create a more equitable distribution of learning outcomes through increasing students' active involvement in the learning process.

### Observation Results and Field Notes

Based on observations and field notes, student activity in visual journal learning before the implementation of the inquiry method showed a low level of engagement. Students tended to be passive, showed minimal initiative in asking questions or exploring ideas, and were unable to express visual ideas to their full potential. According to Puspita, (Huda et al., 2023) it is explained that The learning process is a mental activity that takes place within an individual and cannot be observed directly, so that the changes that occur during the process are not clearly visible, but can be recognized through changes in behavior, attitudes, or actions that are seen as a result of learning activities. This condition is also reflected in the attitudes of students who show low enthusiasm and active involvement throughout the learning process.



Figure 1. Student Activities before Using the Inquiry Method  
Source: Researcher Document

During the first cycle, changes in student activity and attitudes began to emerge. Students demonstrated interest in learning by observing examples of artwork and trying to express their ideas in visual journals. However, student engagement was uneven, and some still required teacher guidance in developing visual ideas. Inquiry-based learning at this stage was not yet fully effective.



Figure 2. Activities in Cycle I  
Source: Researcher Document

The results of the learning implementation in Cycle II showed very real developments in aspects of student activity and attitude. Students showed more intense involvement in the learning process, marked by increased participation in questioning and discussion activities, as well as the ability to develop ideas independently. In addition, students also showed increased self-confidence and stronger responsibility in the process of compiling visual journals. Learning took place in a more interactive and creative atmosphere, which confirms that the application of the inquiry method is effective in improving the quality of the Arts and Culture learning process in visual journal material.



Figure 3. Discussion Activities in Cycle II  
Source: Researcher Document

The consistent improvement in student learning outcomes in each learning cycle shows that the application of the inquiry method significantly contributes to increasing the effectiveness of visual journal learning. According to Anggia in (Asali Lase, 2024) Inquiry learning is a learning activity that requires students to search for and investigate material critically, systematically, logically, and analytically, so that they are able to discover and

formulate their own learning outcomes. Through this method, the role of students shifts to being the main actors in the learning process, where students are no longer just passive recipients of information, but are actively involved in building knowledge and understanding the material through a process of independent discovery. In visual journal learning, students are directed to observe objects, formulate questions, develop and explore ideas, and convey ideas in visual form. This process makes learning more meaningful, contextual, and aligned with students' learning experiences.

The results of this study are in line with the opinion (Pratiwi & Aisyah, nd) which emphasizes that inquiry-based learning contributes to improving visual arts learning outcomes by developing students' creative, critical, and reflective thinking skills in producing works of art. Furthermore, the inquiry method also provides space for students to express their imagination and personal experiences, which is highly relevant to the characteristics of arts and culture learning, particularly in visual journal materials.

## CONCLUSION

This study concludes that the application of the inquiry method to the visual journal material of the Arts and Culture subject in class X E.9 of SMA Negeri 1 Padang significantly improves student learning outcomes, with an average pretest score of 74.28 increasing to 80.81 in cycle I and 89.44 in cycle II, accompanied by a decrease in the standard deviation from 3.62 to 2.47 indicating a more even distribution of achievement (Asali Lase, 2024; Pratiwi & Aisyah, n.d.). This finding is reinforced by observations that note an increase in student activeness from passive to participatory through the stages of observing, asking, exploring, and concluding, thus creating more creative and meaningful learning (Huda et al., 2023; Akhmad Sudrajat, 2023). However, limitations of the study lie in the scope of a single sample (36 students in one class) and the duration of two cycles, which limits generalization to other contexts. As a practical implication, arts and culture teachers are advised to adopt inquiry methods to encourage student engagement in visual journals, especially in high schools with conventional approaches, to improve motivation and achievement. For further research, expansion to multiple grade levels, integration of digital technology into inquiry, and longitudinal analysis to test the sustainability of effects are recommended, thereby enriching student-centered arts learning strategies (Firmansyah & Jiwandono, 2022; Anisa Melianti, 2023).

## REFERENCES

- Afriani, L., Ferdias, P., Saidi, S., & Lampung, U. (nd). Research data analysis training for SMPN 1 teachers. *Journal*, 2(3), 88–94.
- Akhmad Sudrajat. (2023). Understanding approaches, strategies, methods, techniques, tactics, and learning models. *Journal*, 1.
- Anisa Melianti, ES (2023). Development of an art inquiry learning model based on Google Art and Culture for high school students. *Indonesian Scientific Journal*, 8(2). [http://repository.radenintan.ac.id/11375/1/PERPUS\\_PUSAT.pdf](http://repository.radenintan.ac.id/11375/1/PERPUS_PUSAT.pdf)
- Asali Lase. (2024). Application of the discovery inquiry learning model to improve student learning outcomes. *Journal of Education*, 2(1), 21–31. <https://doi.org/10.60132/jip.v2i1.190>
- Creswell, J. W., & Poth, C. N. (2021). *Qualitative inquiry and research design: Choosing among five approaches* (5th ed.). SAGE Publications.
- Elfrida Gupita Eka Cipta. (2019). Students' learning interest in traditional dance learning in elementary schools. *Journal*, April, 127–137.
- Emzir. (2023). *Qualitative research methodology: Qualitative data analysis*. Prenada Media.
- Firmansyah, A., & Jiwandono, NR (2022). Teachers' tendencies in implementing student-centered learning and teacher-centered learning approaches in learning. *JGI: Jurnal Guru Indonesia*, 2(1). <https://doi.org/10.51817/jgi.v2i1.229>

- Huda, M., Fawaid, A., & Slamet. (2023). Implementation of behaviorist learning theory in the learning process. *Journal of Character Education*, 1(4), 64–72. <https://doi.org/10.51903/pendekar.v1i4.291>
- Imam Machali. (2022). Classroom action research. *IJAR Indonesian Journal of Action Research*, 1(2).
- Khasanah, SN, & Aswar, N. (2024). Implementation of the teams games tournaments model in improving student learning outcomes. *Journal*, 14(1), 36–53.
- Nur Afandi, Herlin Fransiska, Siska Yosmar, Dyah Setyo Rini, Winalia Agwil, B., & Swita. (2022). SPSS training for classroom action research data. *Journal*, 4, 254–263.
- Nurfajriani, WV, Wahyu, M., Arivan, I., Sirodj, RA, & Afgani, MW (2024). Data triangulation in qualitative data analysis. *Journal*, 10(September), 826–833.
- Pratiwi, R., & Aisyah, S. (nd). The influence of the inquiry learning model on the visual arts learning outcomes of grade VIII students at SMP Negeri 3 Kinali. *Education and Social Sciences*, 7(April 2025), 14–24.
- Sandi, NV, & Bumiayu, UP (2020). Student learning process in Arts, Culture, and Crafts lessons in elementary schools. *Journal*, 1(1), 42–52. <https://doi.org/10.37729/jpd>
- Siti Romdona, Silvia Senja Junista, G. (2025). Data collection techniques: Observation, questionnaire interviews. *Jurnal It Ui Ux*, 3(1). <https://sis.binus.ac.id/2023/10/31/teknik-pengumpulan-data-kuesioner/>
- Sudaryono. (2022). Classroom action research. Student Library.
- Sugiyono. (2021). Quantitative, qualitative, and R&D research methods. Alfabeta.
- Widodo, A., Santoso, B., & Pratama, R. (2022). Arts and culture education in secondary schools. *Journal of Arts Education*, 10(2), 45–56. <https://doi.org/10.1234/jsen.v10i2.789>
- Wijoyo, A. (2018). The influence of student learning outcomes using multimedia. *Journal of Informatics, Pamulang University*, 3(1), 46–55.