

The Demonstration Method: Enhancing Learning Outcomes in the Creation of Gorga Motif Batik

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ABSTRACT

This study aims to improve learning outcomes of Gorga-patterned batik crafts through the application of the demonstration method to class XI students of SMA Negeri 1 Batang Kuis using the Classroom Action Research (CAR) approach, which is implemented through the stages of planning, action, observation, and reflection. The object of the study was all class XI students, while the subject of the study was class XI E, totaling 33 students selected using a simple random sampling technique. The demonstration method was chosen because it is able to provide concrete understanding by directly showing the process, steps, and techniques of batik, so that students can more easily imitate and practice them. The research instrument was a learning outcome test in the form of Gorga-patterned batik works carried out through pre-test and post-test. The score needed to achieve completeness is >78. The results of the study showed that the average class score in the pre-test stage was 76, which means that they had not yet achieved learning mastery. After the implementation of the demonstration method, the average class score increased to 83.45 or an increase of 9.80%, with all students (100%) achieving learning mastery. Of these, 8 students (18.18%) obtained the excellent category (A) and 25 students (81.81%) obtained the good category (B). Thus, it can be concluded that the demonstration method is effective in improving student learning outcomes in making Gorga motif batik. This study also recommends that art and culture teachers apply the demonstration method not only to improve learning outcomes, but also as an effort to preserve local culture through batik craft learning in schools.

KEYWORDS

Learning Outcomes,
Batik Craft, Gorga,
Demonstration Method,
Grade XI Students

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INTRODUCTION

Education aims to develop students' intellectual potential, skills, and character through an effective and meaningful learning process. In fine arts instruction, particularly craft, the learning process emphasizes not only knowledge but also psychomotor skills, which require hands-on experience and precise techniques. However, in practice, learning effectiveness is often hampered by the selection of inappropriate methods. In batik craft instruction at SMA Negeri 1 Batang Kuis, learning activities are still dominated by lectures and assignments without clear demonstrations. Students struggle to understand technical steps such as pattern making, using canting (canting), and coloring, often repeating the same mistakes. This situation is exacerbated by limited equipment, limited practice time, and the fact that batik is not a specific topic in grade 11. These obstacles directly impact low learning outcomes, with the majority of students failing to meet the school's Minimum Completion Criteria (KKM). Therefore, this issue highlights the need for improvements in the learning approach to ensure students achieve optimal understanding and skills.

According to [Purwanto \(2013:49, quoted in the journal Endayani et al., 2020\)](#), "The realization of abilities resulting from behavioral changes carried out by educational institutions is the result of learning." The capacity to develop cognitive, affective, and psychomotor domains. Low student learning outcomes and practical skills illustrate the need for more concrete, interactive learning methods that are in accordance with the characteristics of craft learning. The demonstration method is one of the most relevant alternatives because it provides direct visual examples so that students can observe, imitate, and practice the batik work steps more precisely. Through demonstrations, students can systematically understand the process from pattern making, canting, coloring, to pelorodan, while also correcting technical errors that previously often occurred. Learning through demonstrations also has the potential to increase student activeness, motivate them in the creative process, and foster an appreciation for local cultural values reflected in the gorga motif. Thus, the application of the demonstration method is an important solution to improve learning outcomes, both in terms of knowledge, attitudes, and skills in batik craft learning.

Several relevant studies support the effectiveness of demonstration methods in improving learning outcomes. Research by [Tarigan & Mesra, \(2013\)](#) showed that demonstrations were able to improve basic weaving skills in high school students through two systematic learning cycles. Research by [Dinata and Fuji Astuti \(2023\)](#) also proved an increase in dance learning outcomes at SMK Negeri 7 Padang after using demonstration methods with direct teacher guidance. Furthermore, research by [Faridah Agustinah \(2016\)](#) found that demonstrations were effective in improving simple batik skills in deaf students. Another study by [Puspitasari & Hafidah, \(2013/2014\)](#) also showed that batik activities through demonstrations can improve fine motor skills in early childhood. Even in the field of sports, research by [Umasugi et al., \(2023\)](#) proved that demonstrations were effective in improving learning outcomes in volleyball underhand serves in junior high school students. These various findings show that demonstration methods consistently improve practical skills in various fields. However, until now there has been no research that applies the demonstration method specifically to learning batik crafts with gorga motifs at the high school level, so this research has a clear state of the art position. [Click or tap here to enter text.](#)

Based on the research gap, this study has novelty because it examines the effectiveness of the demonstration method in learning batik craft with gorga motifs. According to [Saragi et al., \(2017: 2\)](#) each region in North Sumatra has its own uniqueness such as varied patterns and motifs that make the arts in North Sumatra increasingly diverse. The material combines technical skills of batik making with the richness of local Batak culture. The urgency of this research lies in the need for schools to improve the learning process so that student learning outcomes can achieve optimal completion, especially in subjects that require practical skills. The application of the demonstration method is expected to be an appropriate learning strategy to improve students' conceptual understanding, accuracy, creativity, and technical abilities. Therefore, the purpose of this study is to determine how much influence the demonstration method has on improving learning outcomes of batik craft with gorga motifs in grade XI students of SMA Negeri 1 Batang Kuis.

METHOD

This study uses a Classroom Action Research (CAR) approach. According to [Arikunto et al., \(2019\)](#) CAR is a study that explains the cause and effect of treatment, while also explaining what happens when the treatment is given, and explaining the entire process from the beginning of the treatment to the impact of the treatment. The goal is for students to be more successful in learning compared to daily learning that does not use actions. which is carried out in a cycle with the stages of planning, implementation of actions, observation, and reflection. The study aims to improve learning outcomes of Gorga-patterned batik crafts through the application of the demonstration method. The research location is SMA Negeri 1 Batang Kuis, with 33 class XI students selected as subjects using simple random sampling.

The independent variable in this study is the demonstration method, while the dependent variable is the learning outcomes of batik craft. The demonstration method is defined as learning by directly demonstrating the process of making Gorga batik motifs, which are then practiced by students.

Learning outcomes are measured through practical skills including motif design, canting, coloring, and independence in the work.

Data were collected through tests (pretest and posttest), observation, and documentation of student work. The research hypothesis states that the use of the demonstration method can improve learning outcomes of Gorga batik craft motifs among 11th-grade students at SMA Negeri 1 Batang Kuis.

The formula used to calculate student success is:

$$DS = \frac{\text{Score Obtained}}{\text{Score Maximum}} \times 100\%$$

Criteria: $0\% < DS < 78\%$ (not finished yet) and $0\% > DS > 78\%$ (complete)

Completeness is calculated using the formula:

$$DS = \frac{\text{Number of Students who experienced Changes (> 78)}}{\text{Number of Students}} \times 100\%$$

The formula used to calculate the average value of student learning outcomes as a class is as follows:

$$\bar{x} = \frac{\sum x}{n}$$

Information:

\bar{x} = is the average value

$\sum x$ = is the total number of students' scores

n = is the number of students

To calculate the difference in improvement from pre-test to post-test by calculating the average difference or percentage.:

$$\text{Percentage Increase} = \frac{\text{Post Test} - \text{Pre Test}}{\text{Pre Test}} \times 100\%$$

RESULT AND DISCUSSION

This study involved 33 eleventh-grade students, each of whom created two Gorga patterned batik pieces measuring 40 x 20 cm. Before the intervention, the teacher administered a pre-practice test according to the lesson plan to identify students' initial batik skills. The pre-practice results showed that most students still experienced difficulties in design, accuracy of canting, and coloring quality. This condition occurred because previous learning was more theoretical, while opportunities for direct practice were very limited. As a result, students' psychomotor abilities have not developed, and many of the works do not meet the completion standard.

To assess learning outcomes, this study used the Minimum Completion Criteria (KKM) of 78 applicable at senior high school named, SMA Negeri 1 Batang Kuis. Students are considered to have completed the course if they obtain a score of ≥ 78 , and not completed if their score is < 78 . The assessment was conducted using four main indicators, namely.

Table 1. Assessment Aspects

No.	Assessment Aspects	Weight
1	Gorga Motif Design	35
2	Canting	25
3	Coloring	25
4	Independence in Work	15
Amount		100

Table 2. Evaluation Criteria Indicators

Evaluation Criteria (%)	Description
85 - 100	Archieved
78 - 84	Fulfilled
65 - 77	Needs Improvement
<65	Action is Needed

After analyzing the initial skills, the researchers applied a demonstration method by directly showing all stages of batik making, starting from creating the design, transferring the pattern, the canting process, coloring, and rolling out the batik. Students were then given the opportunity to practice the steps that had been demonstrated. To ensure objective assessment, students' work during the pre-practice and post-practice stages was assessed by three assessors: two batik lecturers from Medan State University and one arts and culture teacher from Batang Kuis 1 State Senior High School. The assessment results from these indicators were used to determine whether there was an increase in the completeness and quality of learning outcomes after the implementation of the demonstration method.

1. Pre Test

Students learning outcomes on the pre-exam test indicated that they were not yet performing well or had not yet achieved the learning completion criteria. However, five students achieved scores above the Minimum Competency (KKM), while 28 students still fell short of the KKM. The distribution of learning outcomes during the pre-test phase can be seen in the following table.

Table 3. Percentage Distribution of Pre Test Learning Outcomes

No.	Description	Number of Students	Percentage
1	Very Good (A)	0	0%
2	Good (B)	5	15,15%
3	Fair (C)	28	84,84%
4	Not Good (D)	0	0%
Amount		33	100%

The learning completion rate is still 15,15% as shown above. This indicates that individual and classical learning completion in the class is still very low, with a class average of 76. Another 15.15% (equivalent to 5 out of 33 students) were declared incomplete because at the time of the measurement they had not received intervention (demonstration actions) or had not participated in the planned practice session. As a result, their scores/work results were still below the Minimum Completion (KKM) (<78) in the pre-action measurement, thus not showing the technical improvements (design, canting, coloring, independence) expected after the demonstration.

The results of the initial test (pre-test) before the treatment showed that the students' initial abilities were not yet successful in making batik with the gorga motif. Therefore, it can be concluded that the students' initial abilities were still less than satisfactory in the lesson of making batik with the gorga motif. Based on the results of this initial test, the researcher concluded that the students' initial abilities were still less than satisfactory in making batik. Therefore, the researcher decided to proceed to the next stage.

2. Post Test

The learning outcomes above show that students improved in batik making after implementing the demonstration method. Twenty-five students, or 75.75 percent, achieved a good grade (B), and eight students, or 24.24 percent, achieved a very good grade (A).

Table 4. Percentage Distribution of Post Test Learning Outcomes

No.	Description	Number of Students	Percentage
1	Very Good (A)	8	24,24%
2	Good (B)	25	75,75%
3	Fair (C)	0	0%
4	Not Good (D)	0	0%
Amount		33	100%

From the description above, it can be seen that the learning completion rate is 100%, which means that classical learning completion is at maximum.

The enhancement in learning outcomes following the implementation of the demonstration method was attributed to its ability to provide a tangible, coherent learning experience that could be directly replicated by students. Prior to the implementation, learning primarily consisted of assignments and theoretical explanations devoid of explicit practical examples, resulting in students' difficulties in comprehending design, canting, and coloring techniques. The primary limitation of the previous learning approach was the absence of visualization of work steps and minimal direct guidance, which led to numerous students failing to attain the KKM. With the demonstration, the instructor meticulously demonstrated each stage of creating Gorga batik motifs, commencing from sketching, holding and controlling the canting, to the coloring technique. This provided students with appropriate skill models to emulate.

Students' grades improved as the demonstrations facilitated their comprehension of the process procedurally and minimized errors that were previously prevalent. Direct guidance during practice enabled students to enhance their techniques swiftly, resulting in more refined design quality, more stable wax lines, more even colors, and increased student independence due to their heightened confidence in completing their work. By addressing previous learning shortcomings and providing real-world examples to follow, the demonstration method demonstrated its effectiveness in improving learning outcomes, practical skills, and students' proficiency in producing Gorga motif batik that met the assessment criteria.

The enhancement in student learning outcomes following the implementation of the demonstration method was attributed to fundamental alterations in the learning process, which had previously been theoretical and lacked direction. Initially, the teacher solely provided verbal explanations and assignments without exhibiting direct examples, resulting in students lacking a concrete comprehension of design, canting, and coloring techniques. As elucidated by [Djamarah et al. \(2020\)](#), student errors in practice frequently arise when teachers exclusively provide verbal explanations without offering direct examples. This condition aligns with the findings of pre-action research, wherein 11th-grade students encountered difficulties in design, canting, and coloring due to their previous learning being theoretical.

Subsequently, the learning process becomes more transparent, structured, and comprehensible. The demonstration method enables students to directly observe the steps involved in creating the Gorga batik motif, encompassing pattern creation, holding the canting, and applying the color. The teacher demonstrates the technique gradually, facilitating students' precise grasp of the procedure, thereby mitigating technical errors and enhancing their fine motor skills.

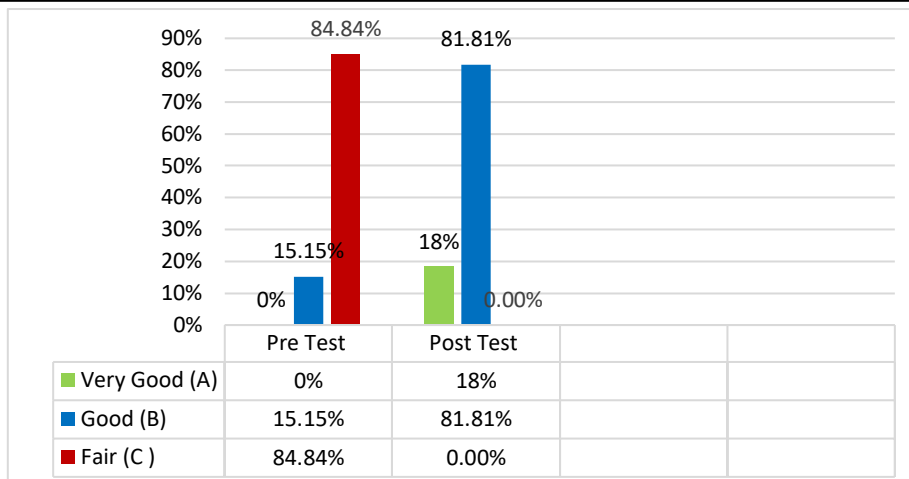
Furthermore, demonstrations provide an opportunity for immediate correction. Any student errors can be promptly rectified, facilitating improvement during practice. As articulated by [Arikunto et al. \(2019\)](#), the essence of classroom action lies in continuous improvement through direct action and feedback, thereby elevating the quality of learning from one cycle to the next. This approach fosters students' confidence and independence in completing their work, as they comprehend the work steps clearly and purposefully.

To see the percentage increase in student learning outcomes, please see the table below.

Table 5. Percentage Data of Learning Outcomes in Pres Test and Post Test

No.	Test	Very Good (A)	Good (B)	Fair (C)	Not Good (D)	Amount
1	Pre Test	0%	15,15%	84,84%	0%	100%
2	Post Test	18,18%	81.81%	0%	0%	100%

The improvement in students' mastery results in making batik with the gorga motif can be seen in the graph below.



Figures 1. Percentage Graph of Learning Outcomes for Pre-Test and Post-Test
 (source: Muhammad Hasyim Azhari)

Based on the results of the recapitulation of scores, the demonstration method improved students' learning completion. Only 5 students (15.15%) in the pre-test stage achieved the Minimum Competency (KKM), while 28 students (84.84%) had not yet completed it. In the post-test, all 33 students successfully achieved completion. 8 students (18.18%) obtained the excellent (A) category and 25 students (81.81%) obtained the excellent (B) category. These results indicate that the demonstration technique is effective in improving students' learning outcomes in learning Gorga batik craft.

Based on the results of the pre and post test scores, it can be concluded that the pre-test stage of learning has not been successful because students have not met the completion standard of 15.15% of the total number of students (Afandi et al., n.d.). However, students are still not serious about following the lesson on making batik and some are still hesitant or not confident in doing it.

Eleventh-grade students at SMA N 1 Batang Kuis, Batang Kuis District, Deli Serdang Regency, created batik with a gorga motif, according to the results of field research. Researchers will explain each piece of data they collected. Of the 33 students who participated in the study, only selected works were given the highest, lowest, and median scores. This was done because these three scores were sufficient to provide a general overview of student learning outcomes. The lowest score indicates the student's poorest ability, allowing for identification of any remaining problems or weaknesses. The highest score indicates the student's maximum achievable performance, indicating the potential for learning success. The median score, also known as the median score, was used because it more fairly reflects the average student's ability and is less susceptible to being influenced by scores that are too high or too low.

CONCLUSION

The results of the study indicate that the implementation of the learning method significantly improved students' abilities compared to the initial conditions before the intervention. This improvement occurred because the learning process became more focused, provided students with opportunities to actively experiment, and teachers were able to provide direct guidance when needed. These findings also indicate that the research objective, which was to improve learning outcomes through systematically designed interventions, was achieved.

This study demonstrates that the use of appropriate methods can help students learn more independently and understand the material more deeply. However, this study still has limitations because it was conducted in only one class and without a comparison, so the results cannot be widely generalized. For future research, it is recommended to involve more classes or use a comparison design to more robustly test the effectiveness of the method.

REFERENCES

- Afandi, M., Evi Chamalah, Mp., Oktarina Puspita Wardani, Mp., Pengantar, Mp., Gunarto, H., & Model Dan Metode Pembelajaran, Mh. (n.d.). ().
- AGUSTINAH, F. (2016). PENERAPAN METODE DEMONSTRASI UNTUK MENINGKATKAN KETRAMPILAN MEMBUATBATIK SEDERHANA BAGI SISWA TUNARUNGU. *Jurnal Pendidikan Khusus*, 8.
- Author's Guide. (1985). *Classical Batik*.
- Dan, Rasyimah Fakultas Ekonomi Universitas Malikussaleh Banda Aceh, H. (2008). *ANALISIS INDUSTRI BATIK DI INDONESIA*. 7(3), 124–135.
- Darmokusumo, & Murywati. (2015). . *Batik Yogyakarta dan Perjalanannya Dari Masa ke Masa*. Jakarta. KAKILANGIT KENCANA.
- Daryanto. (2009). *Belajar dan pembelajaran*. . Rineka Cipta.
- Djamarah, S. B, & Zain, A. (2020). *Strategi Belajar Mengajar*. Rineka Cipta.
- Emzir. (2021). *Metodologi Penelitian: Kuantitatif dan Kualitatif*. RajaGrafindo Persada.
- Endayani, T. B., R. C. , & Agustina, M. (2020). Metode demonstrasi untuk meningkatkan hasil belajar siswa. *Jurnal Ilmiah Pendidikan MI/SD*, 5(2), 150–158.
- Gafur, & Abdul. (2012). *Desain Pembelajaran: Konsep, Model, dan Aplikasinya dalam Perencanaan Pelaksanaan Pembelajaran*.
- Hakim, L. M. (2018). Batik sebagai warisan budaya bangsa dan nation brand indonesia. *Nation State: Journal of International Studies*, 1(1), 61–91.
- Hrp, N. A. , Masruro, Z. , & Saragih, S. (2022). *Buku Ajar Belajar dan Pembelajaran*.
- Informasi, J., Komunikasi, D., Perkantoran, A., Fajrin Rozania, Z., Murtini, W., Ninghardjanti, P., & Perkantoran, P. A. (n.d.). *PENGARUH PERSEPSI SISWA TENTANG METODE PEMBELAJARAN DAN PERHATIAN ORANG TUA TERHADAP HASIL BELAJAR SMK BATIK 1 SURAKARTA*.
- Lisbijanto, & Herry. (2013). *Batik*. Graha Ilmu.
- Mudhori, B., & Maulana, A. (n.d.). *PENERAPAN METODE DEMONSTRASI DALAM MENUMBUHKAN KEAKTIFAN SISWA PADA PEMBELAJARAN FIKIH KELAS X SMA MUHAMMADIYAH 08 CERME*.
- Multidisiplin, J. P., Rismawati, L., Arlian, D., Ariani, D., & Artikel, S. (2023). *BEGIBUNG: MENINGKATKAN HASIL BELAJAR MATEMATIKA DENGAN MENGGUNAKAN METODE DEMONSTRASI PADA SISWA KELAS IV SDN 3 SUKAMULIA* *Informasi Artikel*. 1(3), 103–112. <https://berugakbaca.org/index.php/begibung>
- Mutiara Puspitasari, F., & Hafidah, R. (n.d.). *PENERAPAN METODE DEMONSTRASI MELALUI KEGIATAN MEMBATIK UNTUK MENINGKATKAN KETERAMPILAN MOTORIK HALUS PADA ANAK KELOMPOK B TK BERINGIN, PURWOREJO TAHUN 2013/2014*.
- Ningrum, & Epon. (n.d.). *Penelitian Tindakan Kelas: Panduan Praktis dan Contoh*. Penerbit Ombak.
- Nonik, N. N. , Raga, I. G. , & Murda, I. N. (2013). Penerapan Metode Demonstrasi dengan Media Kartu Gambar untuk Meningkatkan Kemampuan Kognitif Anak Kelompok A di PAUD Widya Dharma Bondalem Tejakula. . *Jurnal Pendidikan Anak Usia Dini Undiksha*, 1(1).

- Rangkuti, D. , & Rangkuti, D. E. S. (2020). Penerapan Metode Demonstrasi Untuk Meningkatkan Kemampuan Kognitif Anak Mengenal Konsep Angka di TK/PAUD. . *Prosiding Seminar Nasional Hasil Penelitian* , 3(1), 77–85.
- Safitri, Mita, D., Nugroho, & Arya, S. . (2023). Penerapan Metode Demonstrasi Berbantu Media Jarimatika dan Paper Untuk Meningkatkan Hasil Belajar Siswa Kelas 2 Sekolah Dasar. *Jurnal Ilmiah Pendidikan Dasar* . , 8(1), 3102–31115.
- Saragi, Daulat. , Sinaga Osbert., & Tarigan, N. (2022). *Metode Penelitian Kesenirupaan*. . Unimed Press.
- Sdn, V. I., Rosideh, D., & Setyawan, A. (2022). *Jurnal Pendidikan Dasar | p-ISSN* (Vol. 4, Issue 1).
- Sugito., & Tarigan, Nelson. . (2020). *Statistik Pendidikan Kesenirupaan*. Unimed Press.
- Sugiyono. (2019). *Metode Penelitian Pendidikan Pendekatan Kualitatif, Kuantitatif dan R&D*. Alfabeta.
- Suharsimi, Arikunto, & Suhardjono. & Supardi. (2019). *Penelitian Tindakan* . Bumi Aksara.
- Sukamdinata, & Nanan Syaodih. (n.d.). *Metode Penelitian Pendidikan*. Remaja Rosdakarya.
- Suyono, & Hariyanto. (2014). *Teori dan konsep dasar*. PT Remaja Rosdakarya.
- TARIGAN, E., & MESRA, M. (2013). Upaya Meningkatkan Hasil Belajar Menganyam Dasar Dengan Menggunakan Metode Demonstrasi Di Kelas XI SMA Swasta Yayasan Perguruan Indonesia Membangun Namorambe Medan TA 2012/2013. . *Jurnal Bahas Unimed*, 85.
- Tim BBKB, & ANDI OFFSET. (2018). *Penuntun Batik- Praktik Dasar dan Teknik Batik Praktis Sehari-hari* .
- Umasugi, Rosmayanti, Syaranamual, Jusak, Souisa, & Mieke. (2023). Meningkatkan Hasil Belajar Servis Bawah Permainan Bola Voli Menggunakan Metode Demonstrasi Pada Siswa Kelas VII SMP Negeri 30 Buru. *Journal Phisical Education, Health and Recreation* . , 4(2), 56–59.