

# Improving Batik Making Skills Through the Use of Simple Stamp Media in Junior High Schools

Ahyan Giri Pangestu<sup>1</sup>, Tantra Sakre<sup>2</sup>

<sup>1</sup> Universitas PGRI Adi Buana Surabaya, Indonesia; ahyangiripangestu98@gmail.com

<sup>2</sup> Universitas PGRI Adi Buana Surabaya, Indonesia; tantrasakre@unipasby.ac.id

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## ABSTRACT

This study aims to improve the stamping ability of class VIII E students of SMP Negeri 1 Wonosalam through the use of simple stamping media. The method used is Classroom Action Research (CAR) model John Elliot which is implemented in three cycles, including the initial stamping stage, improving stamping techniques, and coloring and rolling. Learning media is developed from simple materials that are easily obtained in the surrounding environment. The results of the study showed a significant increase in students' batik skills, with an average score increasing from 74.2 in cycle I to 77.6 in cycle II, and reaching 85 in cycle III. The application of simple stamping media has proven effective in increasing motivation, active involvement, and student learning outcomes in fine arts learning. This study recommends that fine arts teachers develop contextual learning media based on the environment in order to create a creative, innovative, and enjoyable learning process.

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## Corresponding Author:

Ahyan Giri Pangestu

Universitas PGRI Adi Buana Surabaya, Indonesia; ahyangiripangestu98@gmail.com

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## 1. INTRODUCTION

Education has a central role in forming superior human resources that are adaptive to the development of the times. In this context, art education has a strategic value because it not only forms technical skills, but also encourages the development of creativity, expression, and cultural appreciation (Setiawan, 2019). Education through art emphasizes the importance of art as a vehicle for character formation, not merely as a mastery of techniques. Therefore, art teaching in schools needs to be designed contextually, creatively, and fun, with the use of relevant learning media.

One of the challenges in learning fine arts in junior high schools is delivering material that is considered complicated by students, such as batik. Batik as one of Indonesia's cultural heritages recognized by UNESCO, has high aesthetic and philosophical values that need to be introduced to the younger generation from an early age (Prasetyo & Kurniawan, 2021). However, many students consider batik activities, especially stamping and writing techniques, as difficult and boring, especially if delivered conventionally without the support of media that supports the active learning process.

Based on these conditions, innovative efforts are needed in teaching fine arts that can bridge the complexity of the material and the active involvement of students. One relevant strategy is the use of simple but contextual learning media, such as stamp media that are easy to make from materials in the surrounding environment. The urgency of this research lies in the low motivation and skills of students in stamping batik at SMP Negeri 1 Wonosalam, which was identified through initial observations and previous learning outcomes. Batik activities that should be creative and fun learning experiences are often considered boring and difficult, especially due to limited media and approaches that tend to be conventional. Therefore, the researcher chose SMP Negeri 1 Wonosalam, especially class VIII E students, as the object of research because this school has the characteristics of students who are active in arts and culture activities, but have not been maximized in achieving batik practice. In addition, class VIII is the right phase of cognitive and psychomotor development to be given more complex visual experiences and hand skills. This selection is expected to be able to provide a real contribution to improving the quality of practice-based fine arts learning through simple stamp media. Learning media in teaching fine arts plays a very important role in helping students understand abstract and complex concepts to be more concrete and easy to practice (Sudjana, 2009). Learning media can increase learning motivation, clarify information, facilitate variations in teaching methods, and stimulate active student involvement in the learning process (Arsyad, 2015). In the context of batik, the use of simple stamp media that can be made with easily found materials is an effective alternative to simplify the teaching and learning process and increase student participation.

Previous studies have shown that the use of simple, practice-based media in fine arts learning can improve students' learning outcomes and creativity. For example, Wahyuni (2018) found that homemade media in learning batik tulis can improve students' batik skills and self-confidence. Rahmawati and Sutrisno (2020) showed the effectiveness of natural stamp media such as leaves and sponges in stimulating interest and understanding of batik motifs. A study by Mulyati (2017) examined the use of collage media in fine arts learning and found that practice-based activities can encourage creative exploration. Meanwhile, Putri & Nugroho (2019) emphasized the importance of using environment-based media as a means of internalizing local cultural values in learning batik tulis. However, most of these studies have not specifically examined the optimization of stamp batik techniques through simple stamp media made by students in a gradual classroom action approach that is measured through three cycles of improvement (initial stamp, technique refinement, coloring). The difference in this research lies in the lack of studies that systematically explore how simple stamp media—developed from local materials—can be used to overcome challenges in learning stamp batik for junior high school students, especially in the context of participatory, contextual, and practical skills-oriented learning.

Based on these thoughts, this study was conducted at SMP Negeri 1 Wonosalam, especially for students in class VIII E, to determine the extent to which simple stamp media can be used to improve students' stamp batik skills. Class VIII was chosen because at this stage of development students are already able to receive more complex practical learning experiences and show interest in visual creative activities. In addition, this school is known to be active in arts and culture activities and has good academic achievements, making it an interesting context for research.

This study aims to comprehensively analyze the planning, implementation, and learning outcomes of stamped batik using simple stamp media in the classroom. Through the Classroom Action Research (CAR) approach, this study is expected to provide practical contributions in the innovation of fine arts learning, while strengthening the internalization of local wisdom values in the context of formal education.

## 2. METHOD

This research was conducted at State Junior High School 1 Wonosalam with class VIII E students as subjects, who were chosen because they were in accordance with the focus of the study, namely the development and application of simple stamped batik learning media. This class is considered to have good potential in learning fine arts practices, but still shows limitations in mastering stamped batik

techniques. The type of research used is Classroom Action Research (CAR) with a cycle model consisting of planning, action, observation, and reflection stages, which are carried out repeatedly to improve the learning process gradually. Data collection techniques in this study include direct observation to observe student activities and the learning process, questionnaires to determine student responses and interests, structured interviews to deepen information from students and teachers, and literature studies as a reference in developing a theoretical framework and comparing findings. All data were analyzed descriptively qualitatively supported by percentage calculations to describe changes and improvements in students' batik abilities from each learning cycle implemented.

### 3. FINDINGS AND DISCUSSION

#### Findings

Table 1 Students' Initial Test Results Values in Class VIII E

No.	Interval Mark	Amount Student	Percentage (%)
1.	40-49	5	18.4
2.	50-59	15	44.7
3.	60-69	12	36.8
AMOUNT		32	100

#### Cycle 1

Table 2. Results of The Classification of The Evaluation Values of Batik Printing Learning in Class VIII E

No.	Interval Mark	Category	Amount Student	Percentage (%)	Mark
1.	56-65	Low	6	21.1	D
2.	66-75	Currently	16	47.4	C
3.	76-85	Tall	8	26.3	B
4.	86-95	Very high	2	5.2	A
AMOUNT			32	100	-

From the results above, data was obtained that those who got a score with a low category (D) score of 56-65 were a small portion, as many as 6 students (21.1%), those who got a medium score, with an interval of 66-75 were almost half as many as 16 students (47.4%), those who got a score of 76-85 with a high category were almost half, namely 8 people (26.3%), and those who got a very high score were almost only 2 people, namely a score of 86-95 (5.2%). The overall score results were 2,842 with an average of 74.2. If seen from Table 2, many students got medium scores and also looking at the results of student scores, then researchers must pay attention to the scores in cycle 2 for improvement.

#### Cycle 2

Table 3. Classification Results of Experimental Values 2 of Stamping Learning in Class VIII E

No.	Interval Mark	Category	Amount Student	Percentage (%)	Mark
1.	56-65	Low	1	2.63	D
2.	66-75	Currently	18	55.26	C
3.	76-85	Tall	12	39.47	B
4.	86-95	Very high	1	2.63	A
AMOUNT			32	100	-

From Table 3, the results obtained are clearer because they have been classified. The data obtained for students who got a score of 56-65 in the low category is almost there, namely one student (2.63%), the most students are in the medium category or with a score of 66-75 are very large (55.26%), and students who got a score of 76-85 or with a high score are as many as

12 people, almost half of them are students (39.47%), while those who get high scores or 86-95 are one student (2.63%). The total score is 2,950 with an average of 77.6. The results of cycle 2 are greater than cycle 1, which is 74.2, but there are still students who are in the low and medium categories and need improvement in further actions.

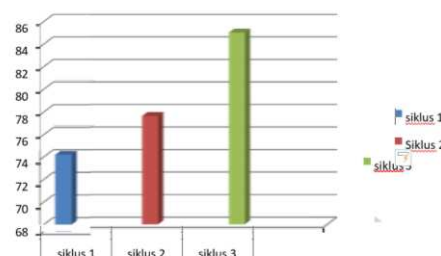
### Cycle 3

Table 4. Results of Accumulated Coloring Values of Class VIII E Students

No	Value Interval	Category	Number of Students	Percentage (%)	Mark
1.	56-65	Low	-	-	D
2.	66-75	Currently	-	-	C
3.	76-85	Tall	22	71.0	B
4.	86-95	Very high	8	29.0	A
AMOUNT			32	100	-

From the data above, it can be seen the results obtained by students in carrying out the coloring process, no students got low and medium scores. Very many students got high scores, namely 22 people (71%) and almost half of them were in the very high category (29%).

The learning outcomes from cycles 1, 2, to 3 can be described in the average values in Graph 4.1 below:



Graph 1 Average Value of Cycles 1, 2, and 3

So it can be seen from the data above in the results of cycles 1, 2, and 3 there is an increase, namely in cycle 1 the average is 74.2, cycle 2 the average is 77.6, in cycle 3 the average is 85.

## Learning Plan Using Simple Stamp Media

### Cycle 1

In the initial description, the researcher has identified problems that are obstacles in learning at the school. One of the main problems is the lack of learning media and limited costs, which are obstacles especially in learning fine arts with batik material. Problems related to learning media are used as a basis for finding solutions, by considering that teaching media does not have to be expensive and require large costs. Learning media can be made from materials available around with the creativity and innovation of teachers.

In cycle 1, the researcher prepared learning media made from simple materials. The researcher conducted research on the materials used during the implementation of learning. The media made generally come from simple materials that can be found in the surrounding environment. Learning

media for stamped batik were tested to measure their level of success, and the results were nine types of motifs that would be used in learning, with two motifs for each motif.

The media made has a simple form, easy to shape, and practical when used by students. There is no media made of wood, because during the trial of making media from this material, researchers found it difficult and always failed when tested.

To find out whether the learning that was carried out achieved the objectives, the researcher involved colleagues in this study, as well as distributing questionnaires and recording student observations to find out how optimal the learning outcomes that had been carried out were. After the media was made, the next step was to prepare a Learning Implementation Plan (RPP). This RPP is a guideline for teachers during the implementation of learning, and to ensure that the material delivered is on time, not too early or too late. The learning time allocated is 2x40 minutes (2 teaching hours), so researchers must be careful in determining the learning scenario, because this learning is practical and requires quite a long time. The right learning method is also very important. The researcher chose the demonstration-experimental method so that learning objectives can be achieved optimally.

### *Cycle 2*

In cycle 2, the researcher identified unresolved issues from cycle 1. The main focus in this cycle was how to guide students in applying batik stamps. The media used in cycle 2 were still the same as in cycle 1, but the fabric used was different, because the fabric in cycle 1 was not suitable for the batik process. The researcher again involved colleagues, questionnaires, and student notes to determine the effectiveness of learning. The preparation of the lesson plan in cycle 2 was carried out in the same way as in cycle 1, by paying attention to the time and learning steps so that the material was delivered properly. In cycle 2, the learning method still used the demonstration-experiment method, because the obstacles that emerged in cycles 1 and 2 did not come from the teaching method.

### *Cycle 3*

Learning in cycle 3 is a continuation of cycles 1 and 2. If in cycles 1 and 2 the focus is on batik printing, then in cycle 3 students carry out the batik coloring process. Researchers need to know the shortcomings of cycles 1 and 2 to improve learning in cycle 3. After knowing the points that need to be improved, researchers design a more perfect learning plan.

In cycle 3, learning remains practice-based. The researcher designs learning steps and chooses a suitable place for practice, considering that this process cannot be done in the classroom. The teaching media used in cycle 3 is naphthol dye for batik. A total of 32 students participated in the coloring practice, and the researcher prepared a place large enough to accommodate all students. The method used remains the demonstration-experiment method, because the problems that emerged in cycles 1 and 2 were not related to the teaching method.

In cycle 3, the color removal process was also carried out as a continuation of the coloring process. The researcher prepared relevant materials to introduce the concept to students before the learning began. This learning is in line with the objectives of Classroom Action Research (CAR) which aims to improve learning gradually and sustainably.

In cycle 1, the researcher has identified problems from the initial survey, which includes the lack of learning media. Based on this, the researcher developed teaching media from simple materials, in accordance with the opinion of Yunus (1942:78) who stated that teaching media has a great influence on students' senses and helps understanding.

Researchers also consider the importance of appropriate media, which does not have to be expensive, but can use used materials or other materials available in the surrounding environment. Simple media are expected to solve problems faced during learning.

Researchers also consider the principles in choosing learning media, such as teaching objectives, support for materials, ease of obtaining media, teacher skills in using media, and time availability. In the stage of making simple stamp media, researchers follow established procedures, starting from selecting materials, making media, to testing the media.

Before the research began, the researcher prepared a lesson plan to facilitate the learning process. At this stage, there were no significant obstacles, only needing to adjust the steps with limited time for the practicum.

According to Tarjo (2004:80), learning must have clear and planned goals, as well as limited time to achieve these goals. The researcher also chose the demonstration-experimental method as the right method for the material to be taught. Learning in cycle 1 focused on batik stamping, using a canting tool shaped like a pencil, as explained by Hamzuri (1981:1).

Planning for cycle 3 must fix the problems that emerged in the previous cycle. According to Arikunto (2007:3), classroom action research is an observation of learning activities carried out together in the classroom. Thus, the problems found in each cycle must be resolved thoroughly.

Learning in cycle 3 focuses on coloring batik with naphthol paint, which is known to be fast and strong. In addition, learning is carried out outdoors to avoid damage to the classroom due to water use.

## **Implementation of Learning Using Simple Stamp Media**

### ***Cycle 1***

Cycle 1 research was conducted on May 4, 2023. In this cycle, stamping practice was carried out. Before carrying out the stamping practice, the teacher delivered material relevant to the practice to be carried out.

During the delivery of the material, according to colleagues, the teacher's voice was somewhat unclear and the delivery was less systematic. This was caused by the students' lack of discipline when viewing the media brought by the teacher. Learning was carried out for 2x40 minutes, which is 2 lesson hours.

The method used by the teacher was in accordance with what was planned, namely the demonstration-experiment method, where the teacher gave examples before students did the practice. When the teacher delivered the material, students paid attention orderly and neatly, but when doing the practice, some students were less orderly and some did not want to queue when doing the stamping technique. From the results of the questionnaire and student notes, students seemed happy and enthusiastic when doing the practice. During the delivery of the material, the teacher taught batik stamping techniques, namely to the left or right, either horizontally, vertically, or diagonally. The difficulty experienced by students was when the stamp had not been heated perfectly, so that the wax could not be absorbed properly into the fabric fibers.

### ***Cycle 2***

In cycle 2, which was held on May 25, 2023, learning was more active compared to cycle 1. The material presented to students was the same as the learning in cycle 1, so that students remembered and understood the material presented better. In cycle 2 learning, the teacher provided the same material as cycle 1, and students understood the material presented better. Students' attitudes in cycle 2 learning were much more orderly compared to cycle 1. Students were able to queue orderly and practice stamping neatly, although there were still some students who stamped disorderly. Students have started to pay attention to all the instructions given by the teacher and have started to be active in learning. Several students began to express their opinions in cycle 2 learning. The results of student stamping were neater and more focused compared to the stamping technique in cycle 1 learning, because in cycle 1 learning the teacher did not guide students intensively, while in cycle 2 the teacher directed and guided students in stamping. From the questionnaires and observation sheets given, students were still happy and enthusiastic about the learning carried out and wanted to continue to the next cycle of learning.

### ***Cycle 3***

In cycle 3, the learning carried out was coloring. Learning was very conducive, students paid attention to all the introductory materials delivered by the teacher. Supporting materials relevant to the coloring practice process, contained fabric coloring techniques.

Coloring was done using naphthol dye, and was done 2 times with 2 stages of coloring. Based on data provided by colleagues, the class was orderly and all students paid attention to the stages explained by the teacher. During the practice, because the teacher still used the same method as cycles 1 and 2, namely the demonstration-experiment method, the teacher gave an example before the students carried out the coloring practicum. Students did the coloring orderly and according to the material explained previously, although there were 5 students who accidentally dipped the cloth into a dye that did not match the dye pair, so that the resulting color was a new color.

From the questionnaire data obtained, most students understood the theory of coloring when practicing directly compared to just the teacher's explanation. When practicing, students were more orderly and no students dipped the cloth carelessly. Students dipped the cloth according to the dye pair, so that the resulting color was as desired. The coloring process took place until students felt that the work they had made was optimal and according to their wishes. Students dipped 2 to 3 times.

In cycle 3, the wax removal process or "melorod" was also carried out. This process begins with the delivery of techniques and methods of melorod as well as relevant theories before the practicum was carried out. Most students already understand how to melorod, because for them this process is familiar, even though it has never been done before. Almost all students answered the questions asked by the teacher. During the practice, students did it orderly and neatly. Students understand the melorod technique carried out during the practice, namely that the cloth that was diloroded will turn white (the original color of the cloth).

Cycle 1 which was carried out on May 4, 2023, showed that when delivering the introductory material, the material delivered was less systematic and the teacher's voice was less clear and not loud. This contradicts the opinion of Tarjo (2004: 80) who states that in teaching and learning there are planned, systematic, and relevant procedures to achieve learning objectives. According to observer records, the teacher delivered the material unsystematically, which contradicts the opinion of Mujana (2004: 34), who states that learning is the main vehicle for education that must be well organized.

During the practice, students carried out the practicum in a less orderly manner, this was because the students were very enthusiastic about learning that had never been done before, which contradicts the opinion of Tarjo (2004: 80) who stated that in teaching and learning activities there must be discipline and rules that must be a guideline for teachers and students.

The difficulty experienced by students when stamping is that the stamp used is not yet perfectly hot, so the wax does not absorb well into the fabric. This is in line with Susanto's opinion, who explained that stamping requires a proper heating process for batik wax so that the stamp can print well.

In cycle 1, the fabric used for batik making was not as it should be, namely *mori* fabric (original cotton), as explained in the *Classic Batik* book. This caused the color not to stick well to the fabric.

Cycle 2 continued on May 25, 2023, with a more orderly condition. In cycle 2 learning, the results of the students' stamping were more focused and neat because they received direction from the teacher. Some stamping techniques carried out by students include: the "tumbukan", "ondo-ende", "parang", and "mubeng" systems. The practicum carried out outside the classroom made students more enthusiastic, and they better understood the stages of coloring correctly. In cycle 2, the coloring was carried out orderly, and the coloring results were more satisfying. In cycle 3, the wax removal process was carried out neatly, and students began to understand the batik process, especially stamped batik.

## Learning Outcomes Using Simple Stamp Media

### Cycle 1

In cycle 1, students' scores increased compared to the initial picture because they already had an understanding of the practicum material that would be implemented. However, in the results of students' work, the stamp patterns produced still seemed random. Some of the students' stamping results were less neat or did not absorb well into the fabric, which was caused by the night temperature not being optimal or the fabric not being hot enough. The average student score in cycle 1 was recorded at 74.2, which shows that despite some challenges, the learning media used showed potential to be further developed in subsequent cycles.

### **Cycle 2**

In cycle 2, learning was carried out with a focus on improving stamping techniques, with students being asked to make more focused and non-random stamps. Although there were still students who stamped in a more expressive style, the stamping results in this cycle showed significant improvement compared to cycle 1. The average student score increased to 76.6, indicating progress in the application of more structured techniques. Cycle 2 learning showed the effectiveness of simple stamp media in improving the quality of students' work.

### **Cycle 3**

In cycle 3, the results of student stamping improved with an average score reaching 85, which showed a significant increase compared to cycle 1 (74.2) and cycle 2 (76.6). One of the significant improvements in cycle 3 was in the coloring technique, which previously failed in cycle 1 due to the color not being absorbed properly into the fabric. In cycle 3, coloring was done twice with optimal results, so that the color was absorbed more into the fabric and the results were more satisfying. The color removal process ("dilorod") was also carried out to produce better quality batik cloth.

### **The Importance of Simple Learning Media**

Learning with simple stamp media has proven effective in improving students' work results. This media not only allows students to develop practical skills, but also introduces them to the potential of the surrounding environment that can be used as raw materials for learning. Setiawan (2008) stated that the use of simple media can support the achievement of creative education goals, where students are involved in the development and use of media from used materials in their environment.

Overall, the application of simple stamp media provides opportunities for students to improve their practical skills, as well as to develop creativity and imagination through the exploration of various techniques in making batik.

### **Discussion**

The results of the study showed that the use of simple stamp media in stages in three learning cycles had a positive impact on improving students' stamp batik skills. In the first cycle, various obstacles were still found in the stamping process, such as the stamp media that was not optimal and students who were not yet familiar with the technique. However, after improvements were made in the second and third cycles, the results showed a significant increase in aspects of technical skills, accuracy, and aesthetics of the work. This is in accordance with the views of Sudjana (2009) and Arsyad (2015) that concrete and contextual learning media can bridge abstract material so that it is easier for students to understand. This finding also strengthens the research results of Wahyuni (2018) and Rahmawati & Sutrisno (2020) which show that media based on direct practice can improve students' psychomotor skills and self-confidence in learning fine arts.

Learning improvement through the Classroom Action Research model provides space for teachers to continuously reflect and adjust strategies, which has proven effective in creating learning that is more responsive to student needs. This is in line with Mulyasa's (2009) view that the classroom action model allows teachers to play an active role as innovators in improving the quality of learning. The use of stamp media from simple materials such as sponges, foam, and used wood also supports the principles of environment-based learning as stated by Setiawan (2009) and Tarjo (2004), which emphasize the importance of teacher creativity in designing media that is appropriate to the local context. Putri & Nugroho's (2019) research even emphasizes that the integration of local cultural values in the learning process can strengthen students' identity and appreciation of art.

The results achieved in the third cycle, namely an increase in the average score to 85, indicate that the simple media approach is not only effective in terms of technique but also increases student motivation and engagement. This is reinforced by the constructivist learning theory which states that direct experience and active involvement will form a deeper understanding (Sanjaya, 2006). In addition,

practice-based learning allows for the transfer of skills from theory to real action, as explained by Daryanto (2010). These results are also reinforced by research by Jasper & Pirngadie (2006) which highlights the importance of visual and kinesthetic experiences in mastering art skills, as well as Haryono's study (2020) which shows that the direct practice method can significantly improve student learning outcomes in fine arts learning.

The use of simple stamp media in learning also supports the development of affective aspects, such as perseverance, independence, and an attitude of appreciating the process. According to Hamzuri (1981), the batik process requires perseverance and attention to detail, so it is suitable as a means to instill character values. This is in line with the view of Wardhani et al. (2008) that art learning plays an important role in developing students' character. The findings in this study also confirm the study of Mulyati (2017) which states that direct involvement of students in the art process can increase responsibility, appreciation, and self-expression. In addition, by utilizing materials available in the surrounding environment, students are also trained to think critically and creatively in solving learning problems, as emphasized by Siregar (2021) and Sobandi (2011).

Overall, the innovation of learning fine arts through simple stamp media has proven to be able to answer the challenges of conventional learning, especially in the aspect of stamp batik skills which have been considered difficult and boring by students. This study presents novelty in the form of integration between local media, practice-based approaches, and continuous reflective learning models. These results support the theory of active learning according to Sumantri (2007) and the principles of thematic and contextual learning according to Lu (1989) and Fraser (1989). Thus, these findings are not only relevant to be applied in SMP Negeri 1 Wonosalam, but can also be replicated in other schools with similar characteristics. This study confirms that a simple approach, if designed properly, can produce meaningful, enjoyable fine arts learning that has a real impact on student competence.

#### 4. CONCLUSIONS

Based on the results of the study on efforts to improve students' stamp batik skills in class VIII using simple stamp media, it can be concluded that learning planning before and after using simple stamp media is almost the same. The steps taken include analyzing Standard Competencies and Basic Competencies, identifying problems, analyzing student needs, preparing lesson plans for each cycle, and planning and developing media. In implementing learning using the Elliot PTK Model, previous batik learning only relied on drawing practices without using media. However, with the use of simple stamp media, learning is carried out through the stage of introducing the material, as well as stamping practices which are carried out in three cycles. Students' enthusiasm in learning is very good because the media has never been used before in schools. The learning outcomes show a significant increase, with an average value that continues to increase from cycle 1 (74.2) to cycle 2 (77.6), and cycle 3 (85), indicating that simple stamp media has succeeded in improving students' abilities in batik, compared to learning carried out before using the media.

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