

## Learning Motivation as a Predictor of Creativity in Fifth Grade Elementary School Students

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### Abstrak

*Creativity plays a crucial role for students because it provides various benefits that support their overall development, both in academic and personal aspects. This study aims to: 1) determine the learning motivation of fifth-grade elementary school students, 2) determine the creativity of fifth-grade elementary school students, and 3) determine the influence of learning motivation on the creativity of fifth-grade elementary school students. This research method uses a quantitative method with an ex-post facto design. Data collection was carried out through a learning motivation questionnaire and creativity observation sheet. The questionnaire instrument is used to obtain data on students' learning motivation. Observation sheets are used to determine students' creativity. Data were collected through a learning motivation questionnaire and a creativity observation sheet. Data analysis techniques consist of prerequisite tests and hypothesis tests. The prerequisite tests consist of normality tests and homogeneity tests. Hypothesis testing uses a t-test with the help of the IBM SPSS Statistics 22 program. The results of this study indicate the influence of learning motivation on the creativity of fifth-grade elementary school students in batik making with a p-value of  $0.000 < 0.05$ . The conclusion of this study confirms that learning motivation has a significant influence on the creativity of fifth-grade elementary school students.*

**Keywords:** creativity, learning motivation, students, elementary school

### Abstrak

Kreativitas berperan penting bagi siswa karena memberikan berbagai manfaat yang mendukung perkembangan mereka secara menyeluruh, baik dalam aspek akademik maupun pribadi. Penelitian ini bertujuan untuk: 1) mengetahui motivasi belajar siswa kelas V sekolah dasar, 2) mengetahui kreativitas siswa kelas V sekolah dasar, dan 3) mengetahui pengaruh motivasi belajar terhadap kreativitas siswa kelas V sekolah dasar. Metode penelitian ini menggunakan pendekatan kuantitatif dengan desain ex-post facto. Pengumpulan data dilakukan melalui angket motivasi belajar dan lembar observasi kreativitas. Instrumen angket digunakan untuk memperoleh data mengenai motivasi belajar siswa, sedangkan lembar observasi digunakan untuk mengetahui kreativitas siswa. Teknik analisis data meliputi uji prasyarat dan uji hipotesis. Uji prasyarat terdiri atas uji normalitas dan uji homogenitas. Uji hipotesis menggunakan uji t dengan bantuan program IBM SPSS Statistics 22. Hasil penelitian ini menunjukkan adanya pengaruh motivasi belajar terhadap kreativitas siswa kelas V sekolah dasar dalam pembuatan batik dengan nilai p-value  $0.000 < 0.05$ . Kesimpulan penelitian ini menegaskan bahwa motivasi belajar memiliki pengaruh signifikan terhadap kreativitas siswa kelas V sekolah dasar.

**Kata kunci:** kreativitas, motivasi belajar, siswa, sekolah dasar

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## INTRODUCTION

The Indonesian government has established the Merdeka Curriculum as the national curriculum, effective from the 2022/2023 academic year. This curriculum is designed to be flexible, with a primary focus on developing students' character, competence, and creativity (Mulyasa, H.E., 2023). The Merdeka Curriculum encourages student-centered learning, where teachers act as facilitators, and students are expected to be active, creative, confident, and responsible participants in the learning process. This approach aims to nurture students' creative potential from an early age.

Despite these progressive educational policies, field conditions indicate that student creativity, especially at the elementary school level, remains relatively low. Studies by Nuryati & Yuniarwati (2019) and Vera & Astuti (2019) reveal that fifth-grade elementary students face challenges in developing their creativity. This issue contradicts the educational goal of fostering critical and creative thinking abilities necessary for students to thrive in contemporary and future challenges.

One of the main factors contributing to low creativity is the lack of student learning motivation and teaching methods that do not adequately support creativity development. Many teachers still implement teacher-centered approaches that emphasize rote memorization and focus primarily on cognitive aspects. This restricts opportunities for students to explore and cultivate their creative potential. Learning motivation plays a critical role in fostering creativity. According to Darniyanti & Saputra (2021), student motivation is influenced by two primary factors: (1) internal factors, including physiological and psychological aspects such as talent, interest, attention, intelligence, and cognitive abilities; and (2) external factors, such as social environment and learning methods. Students with higher motivation tend to be more enthusiastic, persistent, and engaged in exploratory and creative learning activities. Muhammad (2017) highlights that internal drive is the engine pushing individuals toward achieving optimal learning outcomes.

Furthermore, Hoffmann et al. (2025) state that valuing creativity and having the courage to present one's work despite potential criticism are essential preconditions for creative behavior. However, in a school environment that often evaluates strictly, creative behaviors can be misunderstood as disruptive. Active learning, pattern recognition, information integration, and decision-making skills are crucial for nurturing creativity. Recent research by Asbari & Chiam (2023) emphasizes recognizing and appreciating the unique potentials and characteristics of each student to support their creative development.

Arts and cultural learning activities, particularly those involving the ecoprint batik technique, present a promising approach to enhance creativity. Ecoprint batik is a method of batik-making using natural materials such as leaves and flowers to create patterns on fabric (Suarta et al., 2021). This process stimulates various aspects of student development, including creativity, while being environmentally friendly due to the use of natural plants (Utami et al., 2022). Ecoprint batik hones students' fine motor skills and encourages them to explore shapes and colors of flowers and leaves to design unique batik patterns (Endang Yuswatiningsih, 2017). According to Mansyur (2022), learning art in elementary schools impacts cognitive, socio-emotional, and psychomotor development. Particularly in fine arts, it covers cognitive, affective, and psychomotor domains (Syafii, 1989:2), making it central to fostering children's creativity.

The advantages of ecoprint batik activities include: 1) encouraging creativity by exploring natural motifs and colors, 2) Minimizing negative environmental impacts through the use of natural materials, 3) Making learning more engaging, educational, and sustainable for students. By involving students in exploratory, contextually relevant, and environmentally friendly activities, ecoprint batik aligns well with the

principles of the Merdeka Curriculum, offering a meaningful way to develop creativity through art.

Previous research has shown that batik making can improve creativity and fine motor skills (Roostin, 2020), and that valuing students' individual potential can enhance creativity (Asbari & Chiam, 2023), there is still a lack of research that focuses on integrating ecoprint batik techniques in arts and culture learning in elementary schools, especially with comprehensive measurements of creativity dimensions.

This research is novel in applying the ecoprint batik technique as a medium to increase the creativity of elementary students by combining the art approach with motivation-driven exploratory learning, which is environmentally conscious and contextually relevant. Moreover, it emphasizes creativity assessment based on the four indicators identified by Harianja, Silaen, and Siregar (2024): fluency, flexibility, originality, and elaboration. These dimensions are rarely studied together within elementary arts education.

This study aims to determine the influence of learning motivation on the creativity of fifth grade elementary school students. Identify the aspects of creativity (e.g., originality, flexibility, fluency, elaboration) that are most influenced by each batik technique. The purpose of this study is to empirically determine the influence of learning motivation on ecoprint batik creativity of fifth grade elementary school students.

## METHOD

This research uses a quantitative approach with an ex-post facto research design. According to Sugiyono (2016), ex-post facto research is research used to examine or trace back the factors or causes of the events studied where the events or incidents have been experienced by the respondents. The research population is all fifth grade elementary school students in Cepogo District, Boyolali Regency during arts and culture learning activities. The implementation of this research was carried out from November 2024 to June 2025. The research sample uses a classter random sampling technique consisting of Randu State Elementary School, Tumang 2 State Elementary School, Jelok 1 State Elementary School, and Karangtalun State Elementary School, the study consists of 64 students from the population.

The technique in collecting data through a motivation questionnaire and a batik creativity assessment rubric. The questionnaire instrument is used to distinguish the learning motivation of students, namely low and high. The indicators used in the learning motivation questionnaire instrument are the drive for the need to learn, the desire to succeed, hopes for the future, and appreciation in learning (Listiani, 2017). The batik creativity assessment rubric is used to obtain creativity data, Measurement of batik creativity based on indicators of fluency, flexibility, originality, and elaboration using a scale of 1-5. The technique in obtaining data through a motivation questionnaire and batik creativity assessment. Before using the instrument in the study, the researcher conducted an instrument validation test first. The validation of the learning motivation questionnaire instrument and the observation of batik creativity was tested using content validity. Content validity is met if the instrument has statement items or questions that can measure what should be measured. This content validation test was conducted by five expert validators, namely lecturers who are experts in their fields and senior teachers. The calculation of this content validation test uses the Aiken formula (1985). The results of the content validation of the learning motivation questionnaire instrument consisting of 20 statement items showed that all were valid. The learning motivation questionnaire instrument was declared valid because the calculated  $V$  of each statement item was greater than or equal to the  $V$  table (0.87). The results of the content validation of the batik creativity observation instrument showed that 5 existing questions were also valid. The batik creativity observation

instrument was declared valid because the calculated  $V$  of each question item was greater than or equal to the  $V$  table (0.87). The batik creativity assessment rubric consists of indicators of fluency, flexibility, originality, and elaboration. The motivation questionnaire and batik creativity assessment before being tested were tested for validity and reliability.

### Validity Test

The researcher conducted an instrument validity test before using the instrument in the study. The validation of the batik work rubric instrument was tested by means of content validation (content validity) and reliability. The content validation test was conducted using the opinions or assessments of experts (expert judgment), namely lecturers who are experts in their fields and senior teachers. Sugiyono (2017: 121) states that validity is one of the instruments that can be used to measure what must be measured. Validity describes the accuracy between the data that actually occurs in the object being studied and the data that can be collected by the researcher at a certain time. Based on the validation, data obtained that the 5 criteria for batik creativity are valid because the calculated  $V$  is greater than the  $V$  table or 0.87. The calculation of data validity from each criterion for batik creativity assessment is valid because  $V$  is more than 0.87, then continued with a reliability test.

### Reliability Test

Reliability testing was calculated using a proven valid rubric and obtained a Cronbach's Alpha value above 0.70. Based on the reliability test, the instrument reliability coefficient was obtained at 0.811, which exceeds the standard value of 0.70. This indicates that the instrument has high reliability, making it valid and suitable for use in data collection. The collected data were then tested for prerequisites using a normality test to ensure normal distribution and a homogeneity test to check the equality of population variances. Next, hypothesis testing was carried out using the t-test statistical technique with the IBM SPSS Statistics 22 program.

## RESULTS AND DISCUSSION

### Result

The study was conducted on fifth-grade students from four elementary schools in Cepogo District: Randu State Elementary School, Tumang 2 State Elementary School, Jelok 1 State Elementary School, and Karangtalun State Elementary School. Samples were randomly selected using a classifier random sampling technique. A total of 64 students were sampled across the four elementary schools, with 16 students from each school. The following table presents the sample distribution data.

**Tabel 1. Sample Distribution**

| No. | School                | Respondents |
|-----|-----------------------|-------------|
| 1.  | SD Negeri Randu       | 16          |
| 2.  | SD Negeri 2 Tumang    | 16          |
| 3.  | SD Negeri 1 Jelok     | 16          |
| 4.  | SD Negeri Karangtalun | 16          |

The descriptive data from this study provide insight into students' learning motivation and creativity scores. A motivation questionnaire was used to categorize students with high and low motivation based on average scores. High motivation was defined as above average, and low motivation was defined as below average. The following descriptive analysis table presents the following:

**Tabel 2. batik creativity test**

|                | High learning motivation | Low learning motivation |
|----------------|--------------------------|-------------------------|
| N              | 32                       | 32                      |
| Mean           | 84.69                    | 77.97                   |
| Median         | 85                       | 77.50                   |
| Std. Deviation | 5.948                    | 6.203                   |
| Minimum        | 70                       | 65                      |
| Maximum        | 95                       | 90                      |

**Normality Test**

A normality test is performed as a prerequisite before using research data in hypothesis testing. The basis for determining the decision in the Shapiro-Wilk normality test is that if the significance value is greater than 0.05, the research data is considered normally distributed. Conversely, if the significance value is less than 0.05, the data is considered non-normally distributed. The test results can be seen in the table below.

**Table 3. Normality Test Results**

|                                  | Shapiro-Wilk |    |       |
|----------------------------------|--------------|----|-------|
|                                  | Statistic    | df | Sig.  |
| Creativity Under High Motivation | 0.934        | 32 | 0.052 |
| Creativity in Low Motivation     | 0.940        | 32 | 0.075 |

The table above shows that the data tested for normality using the Shapiro-Wilk test had a significance value greater than 0.05. The creativity score data for both high and low motivation were normally distributed, thus meeting the normality requirements.

**Homogeneity Test**

The homogeneity test is conducted as a prerequisite test in addition to the normality test before the research data is used for hypothesis testing. The homogeneity test uses SPSS 22 with the Levene test at  $\alpha = 0.05$ . The basis for decision-making in the homogeneity test is that if the significance value is greater than 0.05, the research data variance is said to be the same or homogeneous. Meanwhile, if the significance value is less than 0.05, the data variance is said to be unequal or inhomogeneous. The results of the homogeneity test calculation can be seen in the following table:

**Table 4. Results of Homogeneity Test**

| Hasil Belajar                        | Levene Statistic | df1 | df2    | Sig.  |
|--------------------------------------|------------------|-----|--------|-------|
| Based on Mean                        | 0.580            | 1   | 62     | 0.449 |
| Based on Median                      | 0.724            | 1   | 62     | 0.398 |
| Based on Median and with adjusted df | 0.724            | 1   | 60.352 | 0.398 |
| Based on trimmed mean                | 0.646            | 1   | 62     | 0.425 |

Based on the homogeneity test results in the table, a significance value greater than 0.05 was obtained. This indicates that the data has homogeneous variance. Thus, the prerequisites for analysis of variance have been met, allowing the analysis to proceed to determine the effect of batik-making activities on student creativity.

### **Hypothesis Testing**

The significance and influence of ecoprint batik activities on the creativity of fifth grade students in Cepogo District, it is necessary to conduct an Independent-Samples t-test hypothesis test using IBM SPSS 22. The basis for decision making if the significance value (2-tailed) obtained is  $<0.05$  then  $H_0$  is rejected or means there is a significant influence between ecoprint batik activities on students' creativity. Meanwhile, if the significance value (2-tailed) obtained is  $>0.05$  then  $H_0$  is accepted which means there is no significant influence between ecoprint batik activities on students' creativity. The following are the results of the Independent-Samples t-test hypothesis test obtained:

**Table 5. Independent Samples Test**

|                  |                                      | Levene's<br>Test for<br>Equality<br>of<br>Variances |       | t-test for<br>Equality<br>of Means |        |                 |
|------------------|--------------------------------------|---|-------|------------------------------------|--------|-----------------|
|                  |                                      | F   | Sig.  | t                                  | df     | Sig. (2-tailed) |
| Hasil<br>belajar | Equal<br>variances<br>assumed        | 0.580   | 0.449 | 4.422                              | 62     | 0.000           |
|                  | Equal<br>variances<br>not<br>assumed |   |       | 4.422                              | 61.891 | 0.000           |

Based on the table data above, the results of the hypothesis test Sig (2-tailed) were obtained at 0.000, which means the value is smaller than  $<0.05$ . The results obtained indicate that there is a significant influence between learning motivation activities on students' batik creativity.

### **Discussion**

Based on the results of the independent samples t-test on the learning motivation data on ecoprint batik activities of fifth-grade students in Cepogo District, a t-value of 4.422 was obtained with a significance (Sig. 2-tailed) of 0.000. The significance value is smaller than 0.05, so it can be concluded that the null hypothesis ( $H_0$ ) is rejected and the alternative hypothesis ( $H_1$ ) is accepted. This conclusion can be interpreted that learning motivation has a significant effect on the creativity of fifth-grade students in ecoprint batik. The average value of high creativity with high motivation is 84.69, while the average value of motivation in low creativity with low motivation is 75.73. This shows that high creativity with high motivation has a significant effect on fifth grade elementary school students.

The average value of high creativity with high motivation is 84.69, while the average value of motivation in low creativity with low motivation is 75.73. This shows that high creativity with high motivation has a significant effect on fifth grade elementary

school students. This is in accordance with the concept of Sari, Nugroho, and Purnama (2021) state that every child has creative potential. Saedah (2018) defines creativity in art as the ability to discover, create, redesign, and integrate ideas into works of art with the support of existing skills. Fransisko Harianja et al (2024), there are four indicators of creative thinking: fluency, flexibility, originality, and elaboration. Eren (2021) explains that creativity includes the ability to identify problems, formulate solutions, generate new ideas, and synthesize ideas into new theories. Hoffmann et al. (2025), the belief that creativity has value and is worth pursuing despite the risks is a prerequisite for the emergence of creative behavior, including the courage to present work despite the potential for criticism.

## CONCLUSION

The implementation of the Independent Curriculum emphasizes the importance of flexible learning with a focus on developing students' character, competency, and creativity. However, elementary school students' creativity is still relatively low due to the dominant teacher-centered and memorization-based learning methods. This study shows that learning motivation has a significant influence on increasing student creativity, particularly through ecoprint batik arts and culture activities. Hypothesis testing used a t-test with the help of the IBM SPSS Statistics 22 program. The results of this study indicate that there is an influence of learning motivation on the creativity of fifth grade elementary school students in batik making with a p-value of 0.000 < 0.05. The conclusion of this study confirms that learning motivation has a significant influence on the creativity of fifth grade elementary school students. Ecoprint batik activities have proven effective in honing aspects of fluency, flexibility, originality, and elaboration, and are able to facilitate students' creative potential with an environmentally friendly and contextual approach. Thus, integrating ecoprint techniques into arts and culture learning can be an alternative strategy to support the principles of the Independent Curriculum, while optimally enhancing the learning motivation and creativity of elementary school students.

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