

## Research Article

# Pagelaran Pottery Village: Culture-Education Resin-Concrete Souvenir in Industrial Tourism

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## Abstract.

This implementation aims to develop resin-concrete souvenirs as a superior product for the pottery industry tourism in Pagelaran Village, with the aim of promoting cultural education and enhancing the visitor experience. Pagelaran Village, renowned for its heritage in pottery production and traditional cultural practices, faces challenges in preserving its cultural identity and attracting tourists amid changing consumer preferences. Consequently, this activity explores the concept of resin-concrete souvenirs as a method to convey the cultural identity of Pagelaran Village pottery according to tourist preferences. Implementation of this activity employed a mixed approach, combining qualitative interviews with local artisans and quantitative surveys of tourists, to gather insights into the village's cultural heritage and visitor preferences. The resin-concrete souvenir prototype in the form of merchandise was designed by amalgamating traditional pottery motifs and cultural elements unique Pagelaran Village. Subsequently, it underwent user tests and feedback sessions to ensure their aesthetic appeal, durability, and ability to evoke cultural narratives. The resin-concrete souvenir prototype has significant potential as a superior product in industrial tourism. The integration of traditional pottery with modern materials enables the creation of products that are both visually appealing and culturally relevant. Additionally, tourist responses show high interest in souvenirs characterized by authentic and narrative cultural experiences. This implementation contributes to the development of souvenirs in the context of industrial tourism, emphasizing the significance of education and preservation of cultural heritage. Besides bolstering the economy of Pagelaran Village, resin-concrete souvenirs can educate visitors about the village's cultural heritage, thereby encouraging sustainable tourism practices.

**Keywords:** resin, concrete, souvenir, pottery, pagelaran

## 1. Introduction

Pottery Village has a wealth of traditional knowledge in making pottery which can be used as an educational tourism attraction. However, the people in Gerabah Village face various obstacles in developing educational tourism, such as a lack of supporting facilities, knowledge of tourism marketing, and mastery of digital technology (Abdullah, 2019; Afandi, n.d.; Mahfuzh & Cahyono, 2017). The development of educational tourism is not only beneficial in terms of increasing income, but also in preserving traditional

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culture and knowledge (Andriani, 2022; Lestari, 2021). Pottery Village is the guardian of the cultural heritage and ancient knowledge in pottery making, which has so far been passed down from generation to generation. The implementation of this activity will also focus on empowering local communities. Through the training and assistance provided in the development of educational tourism infrastructure, the people of Gerabah Village will have the skills and knowledge needed to manage tourism businesses effectively and sustainably.

## 2. Method

The Asset Based Community Development or (ABCD) method is an approach with a group of potential and wealth holders that is strengthened and becomes a goal.

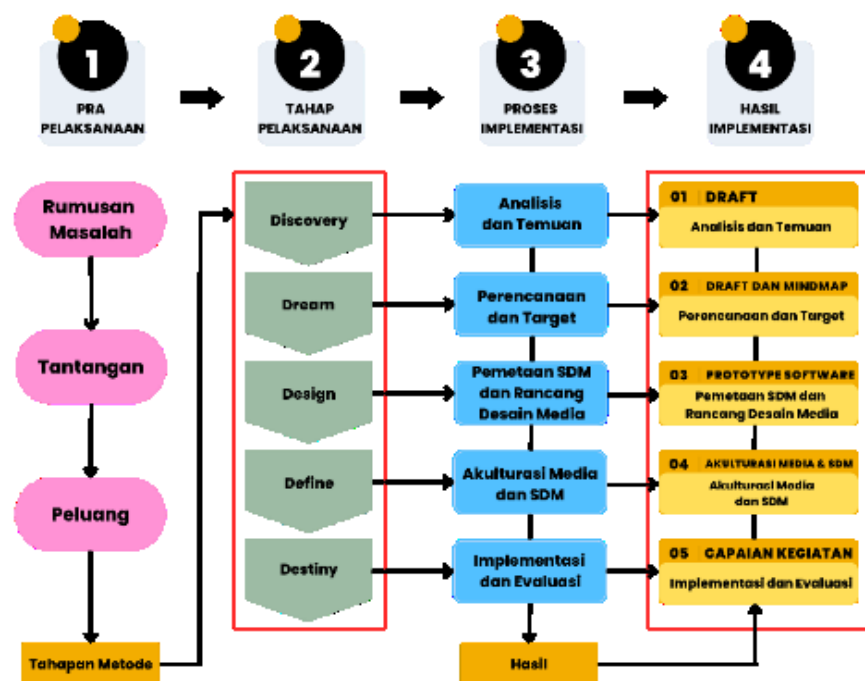


Figure 1: Implementation Procedure

There are five steps of the ABCD Method to fulfill the stages as research assistance: (1) Discovery: identification of potential and assets in the group. (2) Dream: having visions and dreams for the desired future. (3) Design: Designing a concrete step and strategy in a dream. (4) Define: Choose actions and set priorities to be taken. (5) Destiny: Implementation of program determination, evaluation, and community capacity building. The ABCD method assists groups in utilizing resources to achieve independence and growth (Al-Kautsari, 2019; García, 2020; Harrison et al., 2019).

## 2.1. Data Collection and Analysis

In this process, interviews, questionnaires, and documentation were used to collect data. The type of data collected is quantitative for number-based validation tests and practicality tests, and qualitative for needs analysis and expert validators (Arimbawa et al., 2022).

## 2.2. Data Analysis

### 2.2.1. Practicality Test

The practicality test data was obtained by filling out an assessment instrument consisting of 10 statement items. Practicality data is analyzed by percentage using the following formula:

$$\text{Practicality Score} = \frac{\text{Total score obtained}}{\text{Maximum total score}} \times 100\%$$

After the practicality percentage is obtained, the practicality level assessment criteria is based on if the practicality value range is 86% - 100% then it is at a very practical level, the range is 76% - 85% at the practical level, the range is 60% - 75% at the level is quite practical, the range is 55% - 59% is not practical, and if the practicality value is less than 54% then it is at a very impractical level (Prasetyo et al., 2021).

### 2.2.2. Test of Understanding of Merchandise Production

An understanding test of merchandise production was carried out through a paired sample test. Before conducting the paired t-test, the Kolmogorov-Smirnov normality test was first performed. The hypothesis put forward is that  $H_0$  there is no difference in learning outcomes before and after implementing the media and  $H_a$  there are differences in learning outcomes before and after implementing the media. Decision making is based on the probability value if probability  $> 0.05$  then  $H_0$  is accepted and if probability  $< 0.05$  then  $H_a$  is accepted.

### 3. Results and Discussion

#### 3.1. Product Visualization

The product form consists of interior decoration with medium scale sizes as follows:



**Figure 2:** Product Development.

The choice of concrete material in construction is very important because of its extraordinary strength and durability (Bos et al., 2016). When building structures such as buildings, bridges or other infrastructure, concrete is the first choice because of its carrying capacity that can withstand heavy loads. With the right mixture of cement, water, coarse aggregate and fine aggregate, concrete provides solid structural strength, as well as resistance to pressure and external forces (Shi et al., 2015) In addition, concrete also has good weather resistance. and extreme environments, making it the right choice for durable and long-lived construction.

Meanwhile, the selection of resins in various industries is based on their properties which are resistant to heat, chemistry, and wear. Resins are used as adhesives, coatings, or protective coatings on the surface of various materials (Buswell et al., 2018; Singh et al., 2015) The advantage of resin lies in its ability to provide protection against corrosion, wear, UV exposure, and environmental factors. other. In addition, resin is also used in casting and moulding processes to print various products with high strength, durability and detail. In repair or restoration, resin is the choice of filler material to fill and bond cracks or damage to various materials such as wood, stone or concrete. With its various

applications, resins provide effective and efficient solutions in various industrial and manufacturing applications.

### 3.2. Analysis Test Results

#### 3.2.1. Media Practicality Test

Based on the results of the practicality assessment analysis, an overall average result of 92% was obtained. When referring to the table of practicality criteria, it can be said that the practicality of the media is at a very practical level. The results of the practicality questionnaire analysis are presented in the following table:

TABLE 1: Practicality Data.

Aspect	Practicality Score (100%)	Criteria
Ease of Use	93,3	Very Practical
Durability	96,6	Very Practical
Aesthetics	86,6	Very Practical
Functionality	93,3	Very Practical
Safety	90	Very Practical
Average	92	Very Practical

#### 3.2.2. Test of Understanding of Merchandise Production

The results of the Kolmogorov-Smirnov normality test using SPSS for Windows obtained a significance value of 0.118 so that it is greater than 0.05 or  $0.118 > 0.05$ , so the data distribution is normal. Furthermore, the effectiveness test using the paired t-test produced output in the form of (1) paired samples statistics which showed that the average value of the 100 population before using the media was 57 while the average value after using the media was 87.72. Based on the results of the statistical analysis, it can be concluded that there is an increase in learning outcomes. The results of the paired samples statistical analysis are presented in the following table.

TABLE 2: Paired Samples Statistic.

Paired Samples Statistics					
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pretest	57	100	4.496	.450
	Posttest	87.72	100	6.532	.653

Furthermore, the results of the effectiveness test using the paired t test show that the value of Sig. (2 – tailed) of 0.000 is less than 0.05 or  $0.000 < 0.05$  then  $H_0$  is rejected and  $H_a$  is accepted. Based on the results of the statistical analysis, it can be seen that there is a significant difference between the value before using the media and the value after using the media. The results of the statistical analysis of the paired samples test can be seen in table b.

TABLE 3: Paired Samples Test.

		Paired Samples Test					t	df	Sig. (2-tailed)
		Paired Differences							
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Pretest Posttest	-30.240	7.678	.768	-31.763	-28.717	-39.385	99	.000

#### 4. Conclusion

Concrete is the best option as a culture-based educational tourism infrastructure. Concrete can be a unique merchandise for the rapid development and dissemination of the promotion of the Pottery Exhibition Culture Village. That is the explanation that we can give, we thank the implementing partners of the activities and the main source of non-APBN funding at the State University of Malang in 2023, as well as all implementing activities that aim to carry out this community service.

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