

## THE USE OF BAMBOO AS THE ARTWORK MEDIA FOR THE STUDENTS AT SENIOR HIGH SCHOOL

**Tirza Paula Pantow<sup>1</sup>, Ruly Rantung<sup>2</sup>, Jans G. Mangare<sup>3</sup>**

*Arts and Music Department, Faculty of Language and Arts*

*Universitas Negeri Manado, Tondano, Indonesia.*

*E-mail:* [tirzapantow023@gmail.com](mailto:tirzapantow023@gmail.com)

**Abstract:** : One aspect that is considered a sign of a school's progress is its ability to adapt to technological developments. SMA Negeri 1 Kumelembuai is an example of a school that has successfully adapted to technological developments. Even though adequate technological learning facilities are available, it is not certain that students can become creative individuals without the guidance of teachers who also have high creativity. This has proven important in developing students' potential through creative and innovative learning approaches. The present study aims at describing the the fine arts learning at SMA Negeri 1 Kumelembuai where the the students used bamboo as the artwork media. This research employed a qualitative approach as a research method. The reason for choosing a qualitative approach is because this approach allows researchers and research subjects to interact during the research process, which allows changes and development of the research design. The results of this research show that the use of bamboo waste as a medium for creating art by class X at SMA Negeri 1 Kumelembuai is a new innovation, with the potential to produce works of art that can be developed into a home industry.

**Keywords** : *Bamboo, media, art crafts, traditional.*

### INTRODUCTION

Development programs in the education sector not only include types of learning activities, but also contain the concept of success criteria in improving the quality of education. The quality and effectiveness of education is a complex challenge and has various dimensions. Therefore, to realize quality national education, learning programs are needed that are more than just reading, writing and memorizing activities in the classroom. As stated by Tilaar (2000), education is not only about teaching, but is also related to all aspects of human life in society. Therefore, the quality and relevance of education will be reflected in students' future contributions to society.

Implementation of the concept above refers to the importance of education that is relevant to the world of work, not just piling up theories and definitions from experts. More than that, education must

provide students with basic skills or life skills that are useful in everyday life. One effort to realize this idea is to use bamboo as a medium for creating handicrafts in arts and culture learning for class X students at SMA Negeri 1 Kumelembuai, Kumelembuai District.

Based on the background above, the problem in this research can be formulated as follows, How do class X students of SMA Negeri I Kumelembuai use bamboo as a medium for creating art? So, the aim of this study is to describe the extent to which bamboo is used as a medium for creating art, describe the extent to which the students use bamboo to create art. It also aims at describing the extent of freedom for for the students to create art using bamboo media.

### **Bamboo plants**

Bamboo plays a very important role in land restoration efforts in several ways, such as the adaptability of various types of

bamboo plants, landscape planning approaches, and its contribution to sustainable ecosystems. In a social context, bamboo is a natural resource that is closely related to the lives of Indonesian people and cannot be separated from their daily lives. Economically, the use of bamboo in Indonesia is still largely limited to simple processing, such as for making fences, roofs and walls. Therefore, in its development, community empowerment is a very important aspect.

From China's successful experience, it is hoped that the sustainable bamboo forest development model that involves communities, both inside and outside the forest area, can provide clear direction and strong resilience in efforts to build the bamboo industry in Indonesia.

In terms of the benefits of various parts of the bamboo plant, as stated by Duryatmo (2002), it can be explained as follows:

1. Bamboo roots have an important role in overcoming several environmental problems. They can be used as erosion barriers to reduce the risk of flooding, and are also able to deal with toxic waste such as mercury by filtering water through their root fibers (Berlin and Estu, 2005).
2. Bamboo stems, both young and mature, have a variety of different uses. However, it should be remembered that not all types of bamboo are suitable for use (Berlin and Estu, 2005).
3. Bamboo leaves can function as wrappers, for example in packaging food such as uli wajik. Apart from that, in traditional medicine, bamboo leaves can be used to treat fever in children because they have cooling properties (Berlin and Estu, 2005).
4. Bamboo shoots, which are young bamboo shoots that grow from the ground through rhizome roots or bamboo nodes, are a type of vegetable that can be consumed. These bamboo

shoots are young bamboo shoots and can be used as food (Berlin and Estu, 2005).

In Indonesia, there are various types of bamboo that grow abundantly, and North Sulawesi, including Minahasa Regency, is no exception. One type of bamboo that can be found in Minahasa is "Ater Bamboo."



**Picture 1.** Ater Bamboo

Ater bamboo, which has the Latin name *Gigantochloa atter*, has various uses in construction, such as as a material for house frames, walls, stairs, and many other uses. Among the Minahasan people, this bamboo is often referred to as "fur fence" and is widely used to make fences for home gardens and home gardens.

#### **Bamboo Preservation**

It is important to pay attention to the preservation of bamboo when used as a material in crafts. There are two preservation methods that can be used, namely traditional methods and chemical methods.

1. Traditional method: Before use, bamboo is soaked in water for one month. The water that can be used for soaking can be fresh water, brackish water, or calm or flowing sea water. This soaking process aims to dissolve the starch contained in the bamboo. It is best to dry bamboo vertically in the shade before soaking. After that, the bamboo is completely soaked in water.

Bamboo that has been soaked properly will have a pale color and a distinctive sour aroma. In addition, the inside of the bamboo segment will not have hair. This is a traditional method used to preserve the durability of bamboo before it is used in various crafts.

2. Chemically there are two ways:
  - a. Preservation Method with Leftover Leaves, After felling (when the bamboo is still wet), there is no need to remove the bamboo leaves. This is used as a guide during the curing stage. Then, the bamboo is soaked vertically in a preservative solution (diesel). On the second or third day, the bamboo leaves still retain their green color as before the process started. However, when the bamboo leaves turn yellowish, this indicates that the preservation process has been completed.
  - b. Preservation method with leaves removed. After felling (when the bamboo is still wet), all bamboo leaves are removed. The bamboo is then placed horizontally with the base higher than the tip. The base of the bamboo is doused with a preservative on the part that has lost some of its segments. At first, the water dripping from the tip of the bamboo was colorless (just like the water from the bamboo itself). Slowly, the dripping water will turn yellowish, indicating that the preservative has been absorbed by the bamboo and the preservation process has been completed.

### **Arts and Crafts**

The term craft can be explained as an activity that involves manual work using special skills. These hand skills not only include the ability to process and shape raw materials, but also involve the use of various tools. Craft arts are part of cultural heritage which is closely related to human life. Initially, many craft products had a traditional or sacred function in people's

lives, but as time went by, these products began to have a secular function as everyday items that were used in greater quantities than their spiritual function. This reflects the shift from traditional crafts to the arts and crafts industry, the development of which is influenced by the views of society that supports it over time

### **RESEARCH METHOD**

This research adopts a qualitative approach. The decision to use a qualitative approach is based on the consideration that the research design develops as the research process progresses, and there is interaction between the researcher and the research subjects (Sudjana, 1995: 7). Qualitative research methods, also known as naturalistic research, aim to understand the phenomena that occur in connection with the use of bamboo waste in making arts and crafts. This research also aims to provide empirical data regarding each condition and situation, especially related to teacher readiness and the motivation given to students in using processed bamboo waste to make handicraft works of art.

### **FINDINGS AND DISCUSSION**

In the context of this research, the main focus is to describe how to use media, especially bamboo materials, and how its development can be carried out through learning craft arts in class X SMA Negeri 1 Kumelembuai. This lesson aims to guide students in changing bamboo materials into works of art that have high aesthetic value and can be appreciated by the public.

This craft material is something new for students, because it has never been taught by a teacher before. This is caused by students' limited access to bamboo raw materials, which are not abundant in their living environment. Therefore, teachers cannot require students to bring these materials on time or according to the specified day. However, bamboo materials used in this learning practice can still be found in several places, as discovered through interviews with subject teachers.

The price of bamboo material itself is not expensive, however, students in this village do not always find it easy to get this material, even though bamboo grows widely in villages or plantation areas. Therefore, to ensure that students can master this material which is considered new, researchers have designed a step-based learning program, so that students can learn how to select and process materials and how to make arts and crafts from bamboo waste.

One type of craft that was tested in this research was making crafts from unused bamboo pieces. This process is carried out collaboratively in groups, allowing students to divide tasks, such as collecting materials and selecting materials. During the learning process, researchers always provide guidance to students to avoid wasting prepared raw materials, even though the materials used only come from remaining pieces or bamboo waste, as seen in the picture below



**Picture 2.** Waste material ready to be created

There are many basic models that can be used in making craft arts using bamboo as a medium. However, if we look at its function, this type of work is usually more suitable for use as decoration or display. This is due to the miniature size of these works, which allows them to be well placed in various places. However, these works may not be suitable for use as disposable art or as room dividers.

In this research, the type of bamboo that will be used as a practice medium by class X students is Ater type bamboo (as explained previously). To maximize the use of available materials, one class will be divided into three groups.



**Picture 3.** Students are processing waste.

The work process begins with the stage of processing raw materials as a medium for the work. This stage relies heavily on guidance from the teacher. If students are left without guidance, there will likely be damage to many materials, which ultimately cannot be reused. Therefore, teacher guidance is very important at this stage to ensure that the materials used can be utilized efficiently and with quality in the process of making arts and crafts.



**Picture 4.** Work process

At the stage of work, students follow the researcher's instructions. While the researcher demonstrated how to glue pieces of bamboo that had been processed using adhesive, the students watched carefully.



**Picture 5.** The Procseesed bamboo



**Picture 6.** The End Result

Stage of placing pieces Student work results. In picture 6 above is one of the results of students' work in groups. This work has been combined with plastic flowers that were not purchased but brought from home that had not been used for a long time. This work can function as a wall decoration.

### **Discussion**

The use of bamboo in Minahasa is predominantly limited to practical purposes such as crafting fences, poles, and "sabuah" or tents. While some areas may engage in bamboo crafts, it's not widely embraced. Many villagers view bamboo as merely a substitute for firewood or fuel oil, and convincing children to explore artistic possibilities with bamboo remains a challenge.

Research conducted at SMA Negeri 1 Kumelembuai indicates a lack of implementation of bamboo waste in

artistic crafts. The reluctance stems from the intentions and efforts of teachers, students, and parents. However, if teachers take on the role of facilitators, presenting processed bamboo waste as learning materials, the issue of material scarcity could be mitigated.

Interviews with students reveal financial constraints, with parents prioritizing essential needs over art supplies. One student expressed, "Mama and Papa think they're too big, so they buy food for the house." Teachers emphasize the potential of utilizing natural materials like bamboo for artistic expression, freeing students from the burden of buying materials.

A teacher noted, "Creating art does not solely depend on store-bought materials; natural resources like bamboo, palm fiber, and banana fiber can be used for experimentation." The school principal echoes this sentiment, suggesting that using inexpensive materials like paper and thread is common, but exploring alternatives like bamboo waste should be encouraged.

In conclusion, fostering creativity and innovation among students requires a shared commitment from both educators and parents. If parents understand the value of using natural materials, a shift towards more sustainable and cost-effective artistic practices can occur. The positive impact of creating crafts from bamboo waste is evident in students' increased motivation, as seen in their joyous reactions to the tangible results of their work.

The process of crafting with bamboo waste involves collaborative preparation of materials by students, step-by-step instruction, and group work, simplifying the manufacturing process. The immediate usability of the crafted works positively influences children's motivation to continue exploring bamboo as a creative medium. Students express enthusiasm for

future projects, showcasing a growing interest in becoming artisan craftsmen.

The public's perception of art as something bought from professionals or shops is challenged by the high quality of student-made bamboo crafts. Encouraging children to acquire skills early on provides them with essential life skills for the future. By offering insights into the craft-making process, children can better understand and appreciate the potential for future employment opportunities in creative fields.

### CONCLUSION

The use of bamboo waste as a medium for creating art for class X SMA Negeri 1 Kumelembuai is basically considered something new because it has never been implemented at all. The implementation of fine arts lessons with the subject of skills/crafts is still limited to the use of materials such as rattan and bamboo because bamboo is one of the raw materials for making building supports or building poles, apart from that, people use it as a material for fences. Meanwhile, the implementation of arts and crafts education learning must explore various media so that students are equipped with skills and are able to use various media to fill their creative time in the future. Education is the responsibility of schools, government and society, so in an effort to improve the quality of education at various strata, especially the quality of education at SMA Negeri 1 Kumelembuai, the role of the three components above must be clear so that the implementation of education will be better.

### REFERENCES

- Abdoh, S. A. (2022). Art and sustainability: can digital technologies achieve sustainability?. *Journal of Cultural Heritage Management and Sustainable Development*.
- Berlin, N. V. A., & Estu, R. (1995). *Jenis dan Prospek Bisnis Bambu*. Jakarta: BPS Penebar Swadaya.
- Bogdan, C. R., & Biklen, S. K. (1990). *Reset Kualitatif untuk Pendidikan: Pengantar ke Teori dan Metode* (Terjemahan Manandri). Jakarta: Depdiknas.
- Budiyono. (1988). *Sikat dan Alat Pemintalannya*. Balai Pustaka, Depdikbud.
- Depdiknas. (1996). *Pedoman Teknis Pelaksanaan PSG Pada SMK*. Jakarta: Direktorat Pendidikan Menengah Kejuruan, Direktorat Jenderal Pendidikan Dasar dan Menengah, Depdikbud.
- Garha, O. (1990). *Seni Kerajinan Bambu*. Bandung: Penerbit Angkasa.
- Gong, X., & de Divitiis, B. (2023). The landscape theme of Han bamboo carving art. *Arte, Individuo y Sociedad*, 35(3), 823.
- Mangoensong, H. R. B., & Yanuartuti, S. (2020, December). Art as the Medium for Cultural Preservation Across Cultures. In *International Joint Conference on Arts and Humanities (IJCAH 2020)* (pp. 838-841). Atlantis Press.
- Midding. (1977). *Ensiklopedia Indonesia*. Bandung: Vahone Bandung's Gravanhage.
- Miles, B. M., & Huberman, A. M. (1992). *Analisis Data Kualitatif – Buku Sumber Tentang Metode-Metode Baru* (Terjemahan Tjetjep Rohendi Rohidi). Jakarta: UI Press.
- Moleong, L. (1988). *Riset Kualitatif*. Pascasarjana IKIP Jakarta.
- Nawawi, H. (1993). *Penelitian Kualitatif*. Bandung: Remaja Rosdakarya.
- Nolker, H., & Schoenfeldt, E. (1983). *Pendidikan Kejuruan (Pengajaran, Kurikulum, perencanaan)*. Jakarta: PT. Gramedia.
- Novitasari, E., & Masyitoh, I. S. (2022, January). The Effort to Preserve the Art of Reyog Kendang as a Local Wisdom in Tulungagung Regency. In *Annual Civic Education Conference (ACEC 2021)* (pp. 83-86). Atlantis Press.

- Nugraha, O., Dkk. (1984). *Seni Rupa SMTA*. Bandung: Angkasa.
- Oktari, V. M. (2017). Penggunaan Media Bahan Alam Dalam Pembelajaran Di Taman Kanak-Kanak Kartika I-63 Padang. *PAUD Lectura: Jurnal Pendidikan Anak Usia Dini*, 1(1), 49-57.
- Perdana, F., Sunarto, S., & Utomo, U. (2017). Kesenian Rampak Kenthong sebagai Media Ekspresi Estetik Masyarakat Desa Kalirejo Kabupaten Pekalongan. *Catharsis*, 6(1), 1-8.
- Poerwoko, W. (2019). Eco Art: Bamboo and Silat Spirituality in the Integrated Space Design. *Journal of Urban Society's Arts*, 6(1), 63-80.
- Pulungan, A. (1977). *Seni Rupa SLTA*. Jakarta: F.A. Hasamar.
- Rahman. (1998). *Kerajinan Anyam*. Jakarta: Depdikbud.
- Read, H. (1985). *Education Throught Art*. New York: Pantheon Books Inc.
- Saraswati. (1991). *Kerajinan Makrame*. Jakarta: Bina Ilmu.
- Soehadji, M. (1981). *Seni dan Kerajinan*. Yogyakarta: Asri.
- Sudjana N., & Rivai A. (2001). *Media Pengajaran*. Bandung: Sinar Baru Algensindo.
- Sutrisno, Mudji & Verhaak. (1994). *Estetika: Filsafat Keindahan*. Yogyakarta: Penerbit Kanisius.
- Widjaja, E. A. (2001). *Jenis-jenis bambu di Jawa*. Jakarta: Puslitbang Biologi-LIPI.
- Widjaja, W. S. (1995). *Perilaku Mekanika Batang Struktur Komposit Lamina Bambu dan Phenol Formaldehida*. Tesis, Program Pascasarjana Universitas Gadjah Mada, Yogyakarta (unpublished).