



# Training on making handicrafts from natural materials and plastic waste for child activists and educators

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ARTICLE INFO	ABSTRACT
<p><b>Article history</b>            Received: 2023-06-26            Revised: 2023-09-09            Accepted: 2023-09-14            Published: 2023-09-19</p> <p><b>Keywords</b>            Descriptive quantitative            Evaluation            Stone blocks            Synthetic dyes            Webinar</p>	<p><i>Ecobrick and ecoprint are one of several solutions that can be used to reduce plastic waste through making crafts resembling stone blocks and synthetic dyes. The aims of the training on handicrafts of natural materials and plastic waste are participant can understand the content and purpose of this webinar, able to provide an evaluation for the entire webinar activity as part of the role of humans who are the crown of God's creation in carrying out cultural mandates, able to increase commitment participants in contributing to share this webinar activity with the public, and also to participate in supporting the SDGs program especially on minimizing the disposal of chemicals and hazardous materials and increasing recycling such as recycling single-use plastics into Ecobricks. Activities are carried out in five stages, observation and problem identification, preparation, work, webinar, and evaluation. The analysis method used is descriptive quantitative. The evaluation results were given to participants after the event and calculated using Ms. Excel. The evaluation is carried out by providing nine questions that will be answered by training participants. The results of the evaluation show that participants become more educated about the use of natural materials and used plastics to be used as handicrafts. The results were 5% neutral answers, 25% answered affirmatively, and 70% answered strongly agreed about the success of the activity.</i></p>
<p><b>Kata Kunci</b>            Balok batu            Evaluasi            Kuantitatif deskriptif            Pewarna sintetis            Webinar</p>	<p><b>Pelatihan pembuatan kerajinan dari bahan alam dan sampah plastik untuk pegiat anak dan pendidik.</b> Ecobrick dan ecoprint adalah satu dari beberapa solusi yang dapat digunakan untuk mengurangi sampah plastik melalui pembuatan kerajinan menyerupai balok batu dan pewarna sintetis. Tujuan dari pelatihan kerajinan bahan alam dan sampah plastik adalah peserta dapat memahami isi dan tujuan webinar ini, mampu memberikan evaluasi untuk seluruh kegiatan webinar sebagai bagian dari peran manusia yang merupakan mahkota ciptaan Tuhan dalam menjalankan mandat budaya, mampu meningkatkan komitmen Peserta dalam berkontribusi berbagi kegiatan webinar ini kepada publik serta ikut berpartisipasi dalam program SDGs khususnya dalam meminimalisir pembuangan bahan kimia dan materi berbahaya dan meningkatkan kegiatan daur ulang seperti daur ulang sampah sekali pakai menjadi Ecobrick. Kegiatan dilakukan dalam lima tahap, observasi dan identifikasi masalah, persiapan, pekerjaan, webinar, dan evaluasi. Metode analisis yang digunakan adalah kuantitatif deskriptif. Hasil evaluasi diberikan kepada peserta setelah acara dan dihitung menggunakan Ms. Excel. Evaluasi dilakukan dengan memberikan sembilan pertanyaan yang akan dijawab oleh peserta pelatihan. Hasil evaluasi menunjukkan bahwa peserta menjadi lebih teredukasi tentang penggunaan bahan alam dan plastik bekas untuk dijadikan kerajinan tangan. Hasilnya 5% jawaban netral, 25% menjawab setuju, dan 70% menjawab sangat setuju tentang keberhasilan kegiatan.</p> <p style="text-align: right;">Copyright © 2023, Bermuli et al            This is an open access article under the <a href="#">CC-BY-SA</a></p> <div style="text-align: right;">  </div>

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## INTRODUCTION

Nature is a place for humans and other living things to live and carry out various activities. Nature and man are two inseparable components. Nature can provide various sources of needs for humans, while humans who have been given a mandate by God are required to be able to manage the earth and everything in it. For example, natural materials, that is, something derived from plants (Kusumaningrum et al., 2021). Natural materials can be processed into a handicraft. Hotima (2019) explained that craft is an activity to produce a product related to hand skills. This statement is in line with the opinion of Sumanto and Sukamti (2018) that handicraft or commonly referred to as *kria* art is an activity related to hand skills in producing a product or item. The materials used to make crafts can be obtained anywhere, one of which is from nature.

Nature plays an important role in the sustainability of living things and is a source of inspiration in developing creative skills or works. Inspiration in designing a fashion product is one of them by utilizing natural wealth, such as making ecoprint products. Ecoprint comes from two syllables, namely *eco* means nature and *print* means printing (Asmara, 2020). Ecoprint has long been known and in demand by the public. The increasing public interest is caused by its production which is considered easy and economically valuable (Irmayanti et al., 2020). The ecoprint method is generally done by tracing or transferring the original color and shape of plants as coloring materials to the media used directly (Kusumaningrum et al., 2021). The ecoprint method utilizes many natural elements to support the best results so that the type of waste generated from the ecoprint process also includes waste that does not harm the environment because it comes from nature (Octaviano & Hartanto, 2022). The most waste produced from the ecoprint method is liquid natural dyes from plants. In addition, there are also chemicals such as aluminum sulfate and lime in good quantities (Salim, 2021). The application of ecoprint is very good because the waste does not harm the environment, unlike textile waste derived from the dyeing process which has a high potential to pollute the environment because it contains chemical compounds that are toxic, carcinogenic, and mutagenic (Haryono et al., 2018).

Apart from natural materials, crafts can also utilize plastic waste produced by humans. One way to use it is by ecobrick. Ecobrick is one way to process plastic waste that has been troubling and has become the most waste in the world. The nature of plastic that is not easily decomposed is a problem that needs to be overcome by every human being. Plastic waste deposits in Indonesia are counted as the third largest country in the world. Plastic has long been known by the public (Ramadani, 2019), because it is cheap and has characteristics that are considered good, such as efficient, flexible, lightweight, compact, cheap, and waterproof (Putra & Yuriandala, 2010). These things have an impact on increasing the number of requests from the community, until finally now it has become a pile that worries every circle.

Various treatments have been taken to overcome this problem. Not a few activities have been promoted around us, one of which is reducing the use of single-use plastic waste by using your own shopping bags when shopping or plastic that is now paid (Ekawati, 2016). However, this method looks less effective. Until finally ideas emerged in plastic waste management, one of which was ecobrick. Ecobrick comes from the word "eco" which means nature and "brick" which means brick (stone). Thus, ecobrick can be interpreted as an arrangement of bricks (stones) that come from nature. In addition, ecobrick can also be defined as the packaging of used plastics that are clean and compacted in bottles (containers) to a certain density, which can then be used as building materials by forming ecobrick such as stone blocks. (Ramadani, 2019). Ecoprint and ecobricks can be a solution to reduce craft waste and reduce plastic waste in the surrounding environment. In addition, it is hoped that each participant can understand how to manage and process things in the surrounding environment including waste and reduce the waste generated.

Following the discussion with the Abar Foundation, the priority problem being faced by the Abar Indonesia Foundation is the limitation to still be able to provide education to child activists and education, especially during the post-pandemic period which is still not possible to gather people and conduct seminars offline as usual. Therefore, these activities need to be shifted to online to reduce the risk of spreading Covid-19. Webinar activities held online can increase participants' interest in participating in activities, foster a desire to learn, and add knowledge that leads to business opportunities (Saefullah et al., 2023). In addition, the advantage of implementing online activities is that it facilitates mobilization, only requires a small committee, and can be attended from various places (Kusumadinata et al., 2023). The Foundation needs assistance in the form of media that can be used for education and manpower to help prepare and implement education. Not only that, but the Abar Foundation also has difficulty in finding suitable speakers because in the online education held, speakers who are experts in certain fields are needed. Speakers or resource persons must have sufficient knowledge and experience to share information related to the topics discussed (Sinaga et al., 2023).

Based on the problems that exist at the Abar Foundation, a collaboration was carried out between the Biology Education Study Program, Faculty of Education, Universitas Pelita Harapan (UPH) to hold community service activities in the form of training on crafts from natural materials and plastic waste for child activists and educators. In the context of the problems that have been presented in the partner problems section, the Biology Education Study Program, UPH Faculty of Education can be one of the right partners for the Abar Foundation because it has an aligned vision and mission. The vision and mission of UPH Faculty of Education is to develop transformative and holistic learning based on Biblical Christian Insight, by producing reflective, responsive, and responsible Christian teachers with international standards, who can teach in the context of Indonesian culture, as well as have a transformative understanding and holistic based on Biblical Christian Insight. The vision of FIP UPH is the basis of the vision and mission of the Biology Education Study

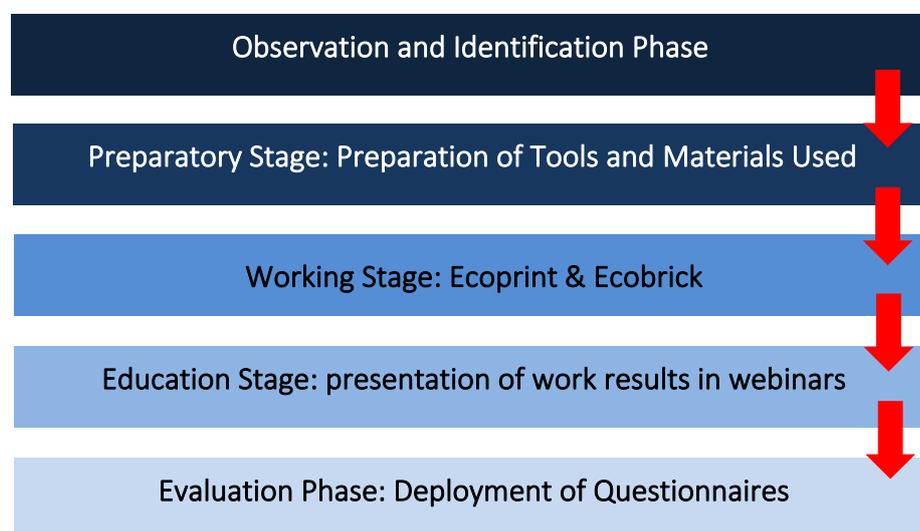
Program to produce prospective teachers with graduate profiles who have the character of an adult Christian, have a vocation as a Christian teacher, especially in the field of biology, have international standard competencies, and have concern for the community where they are in the context of society, nation and state (Universitas Pelita Harapan, 2023).

The aims in this training activity are (1) Through the presentation of the material, each participant was able to understand the content and purpose of the material given by the speaker regarding handicrafts from natural materials and plastic waste; (2) Each participant was able to provide an evaluation for the entire webinar activity carried out as part of the role of humans who are God's crown creation in carrying out cultural mandates; and (3) Through the presentation of the material, he was able to increase his commitment in contributing to sharing this webinar activity with the public.

Hopefully, through training activities in the form of webinars can help each participant to understand their role in this world, namely protecting and preserving nature and its surroundings and to participate in supporting the SDGs program point no. 6 on clean water and sanitation, especially on minimizing the disposal of chemicals and hazardous materials and increasing recycling such as recycling single-use plastics into Ecobricks.

## METHOD

This activity is carried out online or in a network that utilizes the *Zoom Meeting* platform. The Community Service (PkM) activities are carried out in five stages (Figure 1), namely: 1) the observation stage and problem identification. At this stage, a screening process is carried out through literature study activities, observation, and identification of problems that exist in the environment around the residence (Aryana et al., 2023). 2) the preparatory stage which includes the preparation of materials and tools used to work on ecoprint and ecobrick as crafts from natural materials research as well as from used plastic. Preparation includes preparing the things needed to be used to make products (Purwanty et al., 2023). 3) The work stage is the process of implementing activities using materials and tools prepared in advance (Sine et al., 2023). This activity is divided into the process of working on ecoprint and ecobrick. 4) The education stage is the provision of socialization to others online (Pasalina et al., 2023). In this case, education is carried out by presenting the results of handicrafts of natural materials and used plastics to all webinar participants who have registered. At the education stage, there is also a question-and-answer session that can be used to facilitate the curiosity of webinar participants. 5) The evaluation stage is carried out by distributing an evaluation questionnaire containing 9 questions and 1 question to fill out criticism and suggestions for webinar activities through the disseminated link. The analysis method used is quantitative descriptive which is carried out using the results of the evaluation. The evaluation results were given to participants after the event and calculated using Ms. Excel. Evaluation is an effort to measure the achievement of activity targets using surveys (Karliani et al., 2023).



**Figure 1.** Stages in carrying out Community Service's activities for Natural Material Crafts and Plastic Waste for Child Activists and Educators.

Based on Figure 1, community service's activities with the topic of "Natural Material Crafts and Plastic Waste for Child Activists and Educators" were carried out in five stages. The five stages will be described as follows:

### Observation and Identification Phase

The observation and identification phase of the problem is an important first step in the problem-solving process. At this stage, the main goal is to observe the situation or problem that is happening carefully by collecting data and information relevant to the problem. After that, the data and information will be analyzed to identify the root of the

problem that is happening. The first stage is carried out by observing the environment around the high place (Budiana et al., 2023).

#### **Preparatory Stage: Preparation of Tools and Materials Used**

The preparatory stage in an activity is very important to ensure that everything is ready to be used properly and appropriately. This also applies to the preparation of tools and materials used in various types of activities, including ecoprint and ecobrick. Preparation in ecoprint is done by choosing the type of plant to be used, choosing the type of fabric or print media, selecting the fixation stage, fixation material and the concentration of fixation material used (Tsabbita et al., 2022). Preparation in making ecobricks is preparing the necessary tools and materials, such as scissors, plastic waste, plastic bottles, and bamboo or wood (Suidarma & Antini, 2023). The preparation stage of tools and materials that are carried out properly is expected to facilitate the implementation of activities and avoid errors that can interfere with the quality of the result.

#### **Working Stage: Ecoprint and Ecobrick**

##### ***Ecoprint***

The ecoprint stage starts from Mordanting or soaking the cloth into a solution of alum water and / or lime so that the color given is more visible. The process of soaking water is carried out for 12 hours. After that, the soaked cloth is dried by aerating it until the moisture content absorbed in the fabric decreases. Then, dyes are removed from plants and plants by placing them on cloth and coated with cloth, then beaten with a beating tool. The cloth that has been beaten is aerated until it dries enough. Fixation is carried out using alum and chalk.

##### ***Ecobrick***

Ecobricks are one way that can be done to reduce the amount of plastic waste that does not decompose in the environment. The steps in ecobrick are quite simple and easy to do. First, collect used plastic bottles of the same brand and filling tools such as sticks or wood. Then, clean the plastic bottle of any dirt and cut off the label or sticker if any. Cut the plastic into small sizes and place it in a plastic bottle until the bottle is fully filled and tight. Be sure to press each piece of plastic firmly and tightly so that there are no empty gaps in the bottle. Weigh bottles to ensure ecobricks reach minimum standards. Close and close the bottle tightly and write identification tags on the bottle such as ecobrick weight, date of manufacture, type of plastic, and name of maker. Finally, store ecobricks in a dry place away from direct sunlight (Ramadani, 2019).

#### **Education Stage: Presentation of work results in webinars**

The education stage in the webinar is the stage of providing or delivering information to participants about the topics discussed in the webinar, namely crafts from natural materials and plastic waste. This stage is very important because the purpose of the webinar is to provide useful information or knowledge for participants, especially child activists and educators. Webinars that are held for dissemination of information using digital media are Zoom Meeting which has the advantage of making it easier for participants to access webinars, is not limited by distance, and can be followed in all situations with an adequate internet network (Ifroh & Alamsyah, 2021).

#### **Evaluation Phase: Questionnaire dissemination**

The evaluation stage in an event is the stage when participants are asked to provide feedback or assessment about the webinar has participated in, aims to find out participants' understanding of the material (Susanto & Kusumaningrum, 2021) that has been delivered, participants' assessment of event coordination, explanation of the material provided by the speaker, to find out the advantages and disadvantages of the event. One method to conduct an evaluation is to use questionnaires. This questionnaire can contain questions related to the topic that has been delivered, the use of media, clarity of presentation, as well as the performance of the facilitator or speaker to see the success rate of the program (Pateda et al., 2020).

## **RESULTS AND DISCUSSION**

Based on the draft problems and plans, community service activities entitled "Training on Crafts from Natural Materials and Plastic Waste for Child Activists and Educators" were carried out with the following activity details:

#### **Observation and Identification Phase**

Observation activities and requests for willingness to collaborate with these partners were carried out in July 2022 to coordinate the implementation of community service activities. This coordination process is followed up by a willingness to cooperate with partners as a forum for implementing service activities. While the observation activity aims to identify the needs and constraints faced in the utilization of plastic waste and the use of natural materials as handicrafts.

### Preparatory Stage: Preparation of Tools and Materials Used

Tools that need to be prepared to work on ecoprint are plastic basins as a container for soaking fabric, strong beating tools to remove dyes from plants, such as hammers, clear plastic to coat fabrics when beating wild plant organs or ornamental plants so that the pattern can be printed properly. The materials needed to be prepared before ecoprint work are water to soak fabrics, natural fiber fabrics, such as *blacu*, linen, cotton, or silk, wild plants or ornamental plants which include plant parts that will be transferred dyes to fabrics, such as leaves, stems, and flowers, and fixators, namely alum and lime.

### Working Stage

#### *Ecoprint*

Ecoprint is one way to print living materials onto a medium. Examples of media that can be used are *blacu* cloth and tote bags while for living material that can be used, for example leaves, plant stems and flowers from a plant (Figure 2). There are two techniques that can be used to make ecoprint, namely steaming and pounding (Arif & Marsudi, 2019). The technique used in this ecoprint work is the pounding technique. The pounding technique applied to ecoprint manufacturing consists of the following steps: (1) Mordanting is cleaning the cloth of dirt by soaking the cloth in a mixture of water and alum or chalk for 12 hours; (2) The mordanted fabric is then aerated until the moisture content inside the fabric decreases and becomes damp; (3) Plant parts are arranged on fabric media according to the desired pattern; (4) Plant parts are beaten using a bat or hammer until the dye on the desired plant part sticks to the fabric; (5) The plant parts are removed slowly and then the cloth that already contains dye plant parts is dried by aerating at room temperature for 12 hours; (6) The color of the plant is tied to the fabric through a fixation process carried out by blowing the cloth into a mixture of 4 L of water and 20 grams of lime or alum for 15 minutes; and (7) Fabrics that have been fixed are dried by aerating in a place that is protected from sunlight.



Figure 2. The final result of making Ecoprint.

#### *Ecobrick*

Ecobricks are an alternative to reducing plastic pollution by cutting plastic packaging into small pieces and putting it into a plastic bottle of drinking water (Figure 3). Ecobricks are often used to make equipment such as furniture or as a substitute for bricks to make buildings (Ramadani, 2019). Ecobrick consists of several steps, which are as follows: (1) Tools and materials are prepared, namely scissors, plastic bottles, and plastic waste that has been cleaned. Plastics that can be

used include crackled plastic bags, food wrappers, plastic straws, and non-degradable waste, such as Styrofoam; (2) Cleaned plastic is confirmed to be dry; (3) Plastic waste is cut to a small size; (4) The cutouts from the plastic are put into the bottle and closed until there is no empty space on the bottle; and (5) Plastic waste can be compacted into bottles using bamboo or wood by pressing (Suidarma & Antini, 2023).



**Figure 3.** The plastic pieces of packaging have been compacted into mineral water bottles and become Ecobricks.

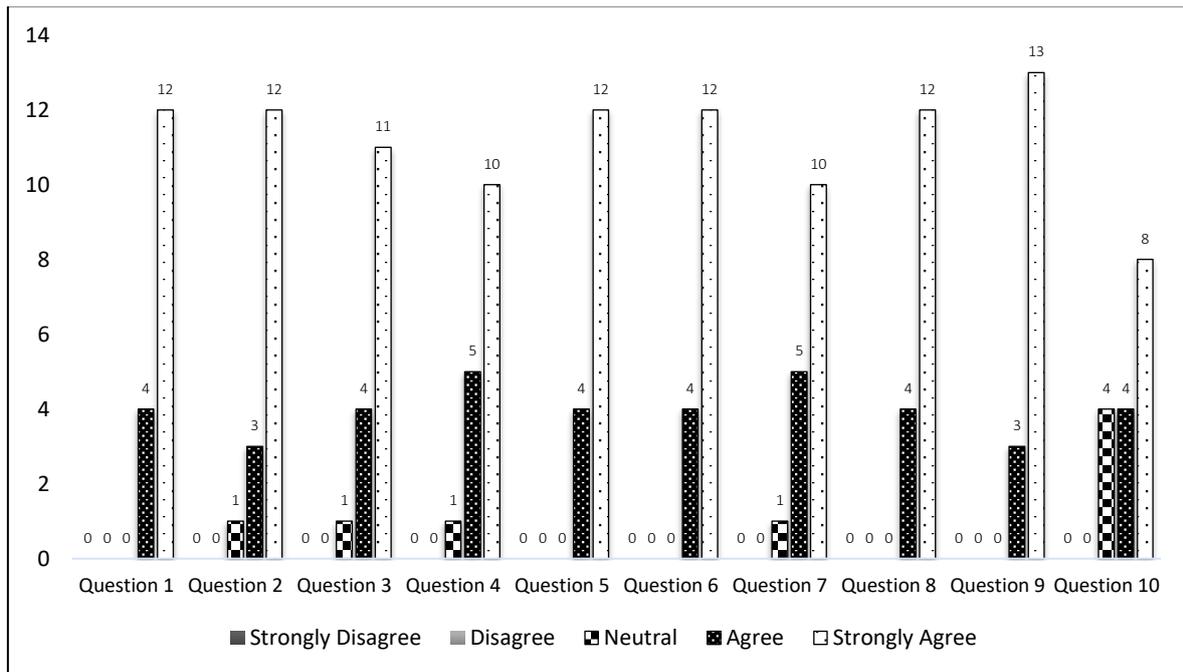
#### **Education Stage: Presentation of Work Results in Webinars**

After initiation and discussion on partner's problem, steps were prepared to overcome needs and constraints, as well as the implementation of the formulation of activities in the form of craft training from natural materials and plastic waste for child activists and educators. The webinar activity was held on Monday, October 3, 2022, at 19.00 – 21.00 WIB online through the Zoom Meeting platform (Figure 4). Through the webinar, participants were explained and directed about crafts from natural materials and plastic waste. Participants were also explained about the tools, materials, and work steps of the ecoprint and ecobrick manufacturing process. In making ecoprint, participants were also explained about the types of natural materials and organs from plants that can be used to make ecoprint. During the presentation session, participants were also explained about how to use ecobrick and register ecobricks with official bodies to label ecobrick that have been made. Thus, through this webinar activity, participants get information that can be applied and developed for daily activities and generate love to protect the surrounding ecosystem by designing a handicraft product made from natural materials and plastic waste.

#### **Event Evaluation**

The participants who attended this activity amounted to 16 people. Participants consisted of three male participants and thirteen female participants. To evaluate the activities that have been carried out, participants are given 10 questions that must be answered. Questions 1-9 are answered using a Likert scale of 1-5 to facilitate the mapping of participants' opinions from each question item given, while the 10th question is a fill-in question regarding criticism and suggestions for training activities in the form of this webinar (Table 1). The number 1 on the Likert scale expresses "strongly disagree" with the question given; number 2 expresses "disagree" with the question given; number 3 states "neutral" or ordinary to the question given; number 4 states "agree" to the question given; and number 5 states "strongly agree" with the question given.





**Figure 5.** Participants' answers to questions number 1-9 use a Likert Scale to evaluate training activities for crafts from natural materials and plastic waste for child activists and educators.

The results of the second question, namely 6.25% of participants answered neutrally, 18.75% of participants answered agreed, and 75% of participants answered strongly agreed (Figure 5). The percentage of the results can show that the target of the program implemented is right on target in accordance with the objectives and topics presented to participants. Inside is a determinant of the effectiveness of a program that can be seen from the suitability of targets that have been set based on agreed rules or criteria (Princess et al., 2021). Based on the purpose of this webinar, training in the form of this webinar is categorized as having fulfilled the first goal, namely "through the presentation of the material, each participant is able to understand the content and purpose of the material given by the speaker about handicrafts from natural materials and plastic waste". This can be seen from the responses of participants who answered questions 1 and 2 respectively as much as 25% and 18.75% "agreed" and 75% and 75% "strongly agreed" regarding the webinar material was well received by participants and the webinar was right in achieving the program targets.

The results obtained for the third question, namely 6.25% of participants answered neutrally, 25% of participants answered agreed, and 68.75% of participants answered strongly agreed (Figure 5). The differences of opinion expressed by participants indicated a difference in the duration of receiving information to each participant. A student can maximally absorb information with a duration of about 20 minutes (Utami, 2016) while in this webinar activity, the presenter provides explanations to participants for a maximum of 50 minutes. The difference in duration in absorbing information can be the basis for variations in answers given by participants. However, if calculated as a whole, based on the results of affirmative and strongly agreed answers from participants with a total of 93.75%, it can be interpreted that the use of time during the webinar has taken place is quite good.

Figure 5 shows the results of the answer to question number 4 with a percentage of 6.25% of participants answering neutrally, 31.25% of participants answering agreed, and 62.50% of participants answering strongly agreed. This training is conducted online or online. Considering that activities were carried out during a pandemic, training and material delivery were quite limited. In delivering information, it can be done orally (presentations, discussions), visuals (images, graphics, films), and practice (demonstrations, simulations, role plays). The choice of delivery method also needs to be adjusted to the type of event, the number of participants, the purpose of the event, and the context of the event. All selection of event concepts to the delivery of information need to be considered more clearly so that the event can run well and give meaning to each participant. In this training activity, based on existing data, the webinar method used is considered to be good enough. Thus, regarding the use of time and webinar methods, overall it has been able to achieve good activity standards according to the feedback from each participant.

In questions number 5 and number 6, statements are addressed to the speaker. Speakers are evaluated based on their ability to master, deliver material, and answer questions from participants (Figure 5). There is question number 5, showing results of 25% of participants answering agreed and 75% of participants answering strongly agreed about the speaker's ability to master and deliver material. In an event, this condition shows that the speaker can convey and master the material delivered well. A good speaker is a speaker who has the ability to say words in order to convey or state the message needed

by the listener so that what is conveyed can interpret the message (Basuki et al., 2019). Correspondingly, the speaker is said to have to understand the message to be conveyed or communicated in order to be understood by every participant listening (Yanti et al., 2018). Based on these two theories and connected with the results of the evaluation filled in by the participants, it can be concluded that the speaker has been able to master and deliver material about crafts from natural materials and plastic waste well.

The results of the gymnastics evaluation questions showed that 25% of participants answered in the agreed and 75% of participants answered strongly agreed (Figure 5). This result informs that all participants agree that each question can be answered by the speaker properly during the activity. In an information delivery activity, participants can respond to the speaker as a reaction to the message that has been given by the speaker (Yanti et al., 2018). Giving responses from participants to speakers is generally in the form of questions or in the form of appreciation. Good answering ability is shown through the suitability of the answers given with the questions asked by the party asking (Rohita, 2021). Thus, it can be concluded that the speaker has been able to answer the question well from the questions given based on the percentage of affirmative and strongly agreed answers.

The seventh question discusses the ability of the MC to host the event. Based on Figure 5, 6.25% of participants answered neutrally, 31.25% of participants agreed, and 62.50% of participants answered strongly agreed. This means that the MC or wara is quite capable of guiding the event well during the activity based on the responses given by the participants. In everyday life, the ability to speak is an ability that everyone needs to have (Kulsum, 2017). The MC also needs to improve their public speaking skills as a way to develop their abilities. The role of a journalist's speaking ability can be an ability that supports his self-development, influences the world around him, to improve his career (Kulsum, 2017). During the event, the MC has been seen to have good mastery of the event as seen from the smoothness of the MC in leading the course of the event and interacting with participants and speakers. In addition, wara also needs to pay attention to activities related to verbal communication, especially those related to giving messages through the media and the message can be received by listeners (Basuki et al., 2019).

The committee's response when serving participants can be observed in the evaluation results on the seventh question. Figure 5 shows the results regarding the response of participants with a total of 18.75% of participants agreed and 81.25% of participants answering strongly agreed. These results show that the committee's performance is classified as good, because the committee is able to respond well to every participant who will participate in training activities through the implementation of webinars. A good committee is a committee that serves participants to get in touch with the webinar program and is shown through the committee that can receive suggestions, opinions, and ideas from participants. (Saputri et al., 2022) This means that the training committee in this webinar is in accordance with the criteria mentioned by Saputri et al. (2022) because the committee has responded well to proposals from participants by agreeing if the program is possible to do.

Question 10 is a question that needs to be answered by participants directly by writing the answer in the column provided. The results shown in Figure 5 are results that have been classified based on the answers from participants, namely 25% of participants provide input for adding media when explaining so that the explanation is better understood (classified as answering neutrally with point 3), 25% of participants answer that the provision of material is very good and useful for listeners or classified into point 4, namely agreed, and 50% answered the webinar was very useful and hope that there is further practice onsite and classified into point 5. This is a very good condition because most or almost all participants recommend this activity to be held regularly. When the participant recommends that the program be held again regularly, it shows that the program has been implemented successfully and shows the level of satisfaction from the participants. In addition, based on the answers from the participants who recommend the implementation of a program regularly, it shows curiosity about the topics discussed based on the answers on the evaluation sheet and is also supported by questions related to the material presented during the question and answer session. The responses given by participants showed that participants had fulfilled the objectives of this activity, namely through the presentation of material were able to increase their commitment in contributing to sharing this webinar activity with the public.

Questions 1-10 on the evaluation sheet showed excellent results and satisfied responses from participants. Overall, the evaluation given by participants shows that this webinar activity has been able to meet three activity objectives, namely: (1) Through the presentation of the material, each participant was able to understand the content and purpose of the material given by the speaker regarding handicrafts from natural materials and plastic waste; (2) Each participant was able to provide an evaluation for the entire webinar activity carried out as part of the role of humans who are God's crown creation in carrying out cultural mandates; and (3) Through the presentation of the material, he was able to increase his commitment in contributing to sharing this webinar activity with the public. Thus, training activities through this webinar have run well and on target.

## CONCLUSION

The conclusion obtained from PKM activities that have been carried out is that education for child activists and education in the post-pandemic period can be carried out online on October 3, 2022. Based on the evaluation given by participants regarding training activities through this webinar, overall results were obtained 5% answered neutrally, 25%

agreed, and 70% answered strongly agreed about the success of the activity. Participants became more interested in the use of natural materials and used plastics to be used as handicrafts that are useful and have selling value as seen from the success in fulfilling all formulations of objectives of the activities carried out.

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