

## Online Mini Workshop on Recycled Cardboard Craft with Batik Pattern for Junior High School Students

Irena V Gunawan<sup>1</sup>

<sup>1</sup>Bachelor Program in Interior Design, Faculty of Art and Design, Universitas Kristen Maranatha,  
Bandung, Indonesia

irena.vgf@art.maranatha.edu

Erwin Ardianto Halim<sup>2\*</sup>

<sup>2</sup>Bachelor Program in Interior Design, Faculty of Art and Design, Universitas Kristen Maranatha,  
Bandung, Indonesia

erwin.ardianto@art.maranatha.edu

(Received January 29, 2022, accepted May 20, 2022)

### Abstract

*Paper is one kind of waste which are abundantly available. Although the use of writing or printing paper is significantly reduced since many writing activities have moved to digital means, however other paper products such as cardboards are significantly increasing. This is a result of the increase in online shopping activities where most of the goods are being delivered in cardboard packages. One of the craft topics for Level 7 of Junior High School from the Indonesian Ministry of Education and Culture includes the recycled paper or other paper products to be transformed into other functions. Hence, cardboard is very suitable to be used as a learning object. As cardboard also has a certain structure which consists of 3 layers of cardboard, the middle is corrugated paper, hence the students could learn to manipulate cardboard into an interesting product. As the workshop was being conducted online there were some techniques that had to be adjusted in terms of material delivery strategies and teaching methods. The workshop method conducted by a community service team consists of university lecturer and university students who gave a mini-workshop session for the 7-grade school students. The students were invited to employ their crafting skills using commonly available recycled cardboard material.*

**Keywords:** batik; cardboard; junior high school; online craft education

## Introduction

Although the use of paper has decreased significantly as people change to digital media both for producing documents and literature resources, cardboard waste, on the other hand, tends to increase in households, especially during the presence of the Covid-19 pandemic. Online shopping through the internet has become a new norm as people avoid physical shopping. Cardboxes, another form of paper product, are mostly used as packaging material for shopping goods delivery.

A corrugated board is a kind of paper made of two outside linerboards which sandwiched a corrugated medium in the middle. It is a sub-category of the paperboard industry and is widely used for packaging (M.C. Kaushal, V.K.Sirohiya and R.K.Rathore, 2021). The structure of the cardboard makes it potential to be explored for craft projects.

An online workshop was conducted as a response to the Covid-19 pandemic, which affects the development of the children who got circumscribed and home-bound, affecting their physical, social, moral, and emotional development. (Tiwari, S., Khan, N., 2021). Hence educators working hard in this dramatic change and universal shift in the system of imparting education and giving new ways and meanings to it. This workshop was being developed with this condition as consideration, to introduce an activity for students at home, not only as part of an academic task, but hopefully they will continue to do as part of their chosen activities at home. As the source is available easily, hopefully the activity could be done in a continuous matter to support student's practical activities (Kong, Q., 2020).

Usually, the workshop is conducted in onsite mode where instructors are meeting face to face with the students and could direct the students in form of crafting techniques. However as the pandemic forces the teaching and learning process to be conducted online, means an adjustment in the process is unavoidable and efforts need to be made immediately so that the delivery of learning content can be carried out optimally (Gunawan, I.V, Halim, E.A., Djakaria, E., Nathanael, I.N, 2021).

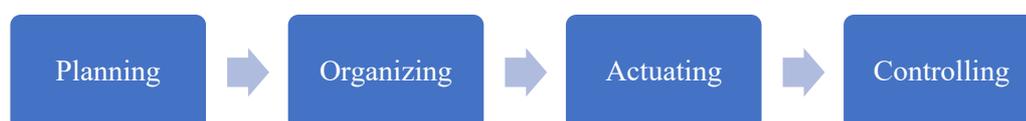
Because the workshop activities are carried out online where the trainer can only provide direction and cannot directly help the students, a method is prepared to help students create works by printing the same batik motifs for all students and focusing more on time in

directing them to do cardboard manipulation and decoration. Understanding the target students who are 7th graders with motor skills that are still developing, is very important for the success of any virtual school or program (Oliver, K., Kellogg, S., Townsend, L., & Brady, K., 2010). Each student may have a different speed in understanding and processing their work (Edwards, C. & Rule, A., 2013), so lecturers need to prepare video recordings of teaching sessions to share with students. Lecturers also agreed with school teachers to provide a deadline for submitting assignments a week after the workshop so that students have time to explore the process and be creative with their work, rather than having to produce work that is forced in a limited time.

## Methods

This community service activity used a common method in project management for a design or an architectural project called the Critical Path Method (CPM) which aims for participants to complete all works properly and on time. CPM is basically a time-oriented method (Banjarnahor, 2018).

As can be seen in Figure 1, the CPM method has the following stages:



(source: personal documentation)

Fig. 1. Schematic of CPM method

### 1. Planning

The first stage of this activity was coordination with the Trimulia Hits Vocational School team regarding the time, activity targets, and schedule of events to be carried out. In addition to coordinating with the school, the community service team arranged some planning to implement the service activity:

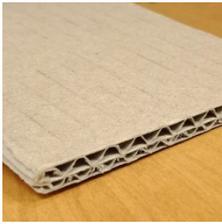
- a. Prepared a rundown of community service activities.
- b. Prepared material both theory and explanation of the stages of making the work.
- c. Created Job Descriptions for both lecturers and students

## 2. Organizing

The organizing stage was the second stage of the service activity, that is by preparing subject materials that would be used by the service team, such as: digital presentation files for delivery of theory and digital documentation forms for participant attendance list.

The following Table 1 shows the prepared material used for this training.

Table 1. The prepared materials used in the training

Material Image	Material Name	Description
	Corrugated paper	A thick paper board used for packaging goods. Corrugated paper is made of two or three layers that are curved and tapered in an alternating pattern to create a harder and stronger paper material.
	Cutter	A kind of cutter for craft works
	Batik pattern on A4 paper	The batik motif used is "Batik Parang" which is a very famous machete motif with damaged machete patterns. This motif was very popular with the king and nobles since that machete motif can only be used by the king and his relatives. This machete motif is then to be carried and pursued by several agents of change in art, for a broader scope, that is the global community as a motif that carries Indonesian identity (Kurniawan, 2017). The community service team wants to indirectly introduce "Parang Batik" to the younger generation
	Paper Clips	Paper clips are useful for attaching batik pattern to corrugated paper
	Glitter Gel Pen	Used to decorate batik with the aim of giving a modern impression to the work made by the participants

(source: personal documentation)

### 3. Actuating

This stage was the implementation stage which was carried out online via internet meeting which was attended by 91 students and their school teachers. This implementation stage was divided into 2 activities:

- a. The activity of delivering lecture material by the head of community service team
- b. The training activity that was accompanied by lecturers and assistants from service team

The techniques used for processing paper materials usually require tools for cutting, engraving, etc. Because the teaching process was carried out online, it was thought that processing techniques with simple equipment and press carving techniques were quite easy and safe to be carried out independently by students at home.

### 4. Controlling

This stage was part of the community service process to measure the quality and evaluate activities implemented. This controlling activity was carried out by the assistants from the service team, by calling and identifying the participants who took part in this activity, and then this activity was reported through a final report to the LPPM of Maranatha Christian University.

With this method, the community service activities were known to be running well and orderly. Participants could understand the flow and instructions given by the head of the community service team.

## Results and Discussions

The online manner also changes the school's way of conducting a workshop. Usually, in an onsite manner the workshop is done per class, one hour for each class, hence one lecturer is assisted by 2 university students who conducted the workshop alternately for 3 classes. Taking 3 hours in total. However, in an online manner, the school change the system to one hour for 3 classes in parallel. Hence the training is changed into two lecturers assisted by 4 university students. One lecturer was doing a step by step demonstration, the second lecturer was explaining and answering students' questions, and asking the first lecturer to repeat a step whenever necessary, the team of 4 university students each monitoring 1 class, checking the school students' work one by one by calling their name and asking them to

show their work. They assist the school student who has difficulties and when the school student could finish a step then they were allowed to do the next step.

The workshop was conducted online using Zoom application. In this workshop, the school students made aesthetic elements using used cardboard that would be manipulated on the surface. The cardboard has 3 layers with the middle layer in the form of corrugated paper. The school students were asked to prepare:

1. 20 cm x 25 cm used cardboard.
2. A cutter
3. Assorted color marker

While the instructor prepared items to be given to the students which were:

1. Batik pattern on A4 paper
2. 4 paper clips, to attach the batik pattern to the corrugated paper
3. 2 glitter gel pens

The instructor had prepared the above items in individual packages for each school student and had them sent to the coordinator teacher at school. The students or their parents took the packages from the school in a drive-through procedure. The teacher prepared a table with packages in the driveway area of the school and the parents pick them up without getting off the car to avoid close contact during Covid-19 pandemic.



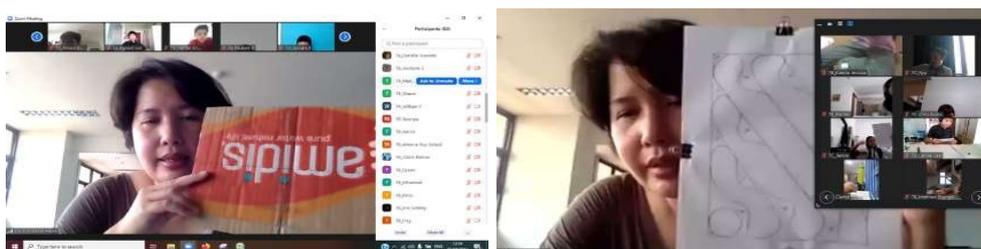
(source: personal documentation)

Fig. 2. The main sample

The workshop participants were from 4 classes of Junior High School Students from level 7 for a total of 91 students. The workshop was delivered by two instructors and 4 assistants for each class. The students were asked to put the alphabet of their class designation in front of their Zoom account profile name, hence the assistants could identify the students from which class.

The job description was described as the following:

- a. the First instructor was doing the step-by-step demonstration
- b. The second instructor helped to explain and answer questions along the process
- c. Each assistant was responsible for one class, they were calling students one by one, asking the students to show the work in progress, and checking whether they did it right. If it was right the student was allowed to continue, when there was a problem the assistant would help the students verbally to solve the problem



(source: personal documentation)

Fig.3. Lecturer gave online demonstration in a step by step manner

The workshop was done in two parts:

1. Cardboard surface manipulation. Done online synchronously, in one hour's time. The students were shown and guided to do the following step:
  - a. Attaching batik print to corrugated paper using paper clips. The batik print was using modified 'parang' motifs. This motif is one of the oldest motif in Indonesian batik, which is usually worn by royal family, has the meaning of never giving up, like ocean waves that never stop moving. Batik Parang also depicts a relationship that never breaks, both in terms of efforts to improve oneself, efforts to fight for prosperity, as well as forms of family ties. Besides the positive message it carries, the motif is also quite easy to copy and being decorated.

The paper with batik print was given marks to simplify the students to fit the pattern to the cardboard.

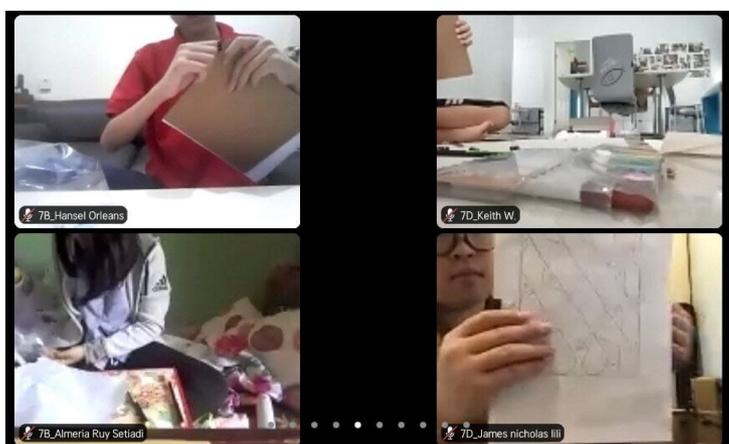
- b. Cutting the pattern and the first layer of the cardboard at the same time and peeling it to show the corrugated part. The cutting process had to be done carefully so the cutter only cuts the first layer and does not cut the whole cardboard. The peeling process also had to be done carefully since students were preparing their own cardboards using packaging available in their households, and several types of cardboard have glue that sticks strongly, making the peeling process harder and could rip the corrugated part as well.
2. Decorating the unpeeled part of the cardboard with assorted color markers in freehand style. The students were shown the finished example but were allowed to apply variations. The sample given by instructor was to decorate the unpeeled part with several variations of filler patterns (known as 'isen-isen') which are used in traditional batik motifs, for example: dots (known as 'cecek'), lines (known as 'sawut') or combination of both known as 'sawut cecek'. Students were also encouraged to develop their own filler pattern. The color marker used has to have a solid color in order to be able to be seen clearly, as the cardboard have a brown color and the paper would absorb the ink, making the color less visible. Hence, students also allowed to use acrylic paints or to explore other methods. This part was done independently as students were encouraged to experiment more and had to submit the finished product in one week time through the class' Google Classroom



(source : personal documentation)

Fig. 4. The students were asked to put their mobile phones or laptop in a certain position so the trainers could monitor their working process

Students were required to take a Zoom session where they could review the process while doing their art, to help them step by step at their own pace. During this online session, students had prepared and obtained the equipment to be used. participants followed every instruction that had been explained in the methods section.



(source : personal documentation)

Fig.5 Participants were creating their works

Figure 5 shows that this activity took place according to the planned steps, the participants also made their work well and in accordance with the given stages. To make sure that all participants keep doing well then assistant instructor involved in this activity also paid close attention to each participant by calling the name of the participant to show whether the work results were correct according to the existing process.

After a week, students turned in their work. All students have done very well in terms of applying the skills given in the lesson into their work. They also showed their creativity in decorating batik motifs in various colors and techniques. Some of them also used paints and other coloring methods and the pictures also showed students showing their work with proud faces.

The final result was finished in one week time. From the total of 91 students, all of them were able to make aesthetic elements using used cardboard. They were also able to come out with various pattern and color and has been able to train their freehand shadowing skill on the cardboard surface.



(source: personal documentation)

Fig.6. Result art work

This kind of online workshop has been done for level 9 students. However, at the time the participant is only in 2 classes (Gunawan, I.V., Halim, E.A., 2020) Although the structure of the instructor was the same consisting of 2 instructors and 2 assistants for each class. This workshop was held for level 7 students who were younger participants with different motoric skills.

During the online workshop, the most common problem was the internet connection, which resulted in the students could not hear the instruction clearly. But this was solved as the workshop was recorded and the students could review the lessons asynchronously.

The school teachers were impressed by the role of university students who helped as lecturer's assistants who diligently checked on the students one by one. This helped the students to follow the instruction at pace and finish the first part of the craft in time.

## Conclusion

The mini-workshop is regarded as a success by Trimulia High School teachers. In an onsite workshop most of the time the students couldn't finish the task at a given time, since they used to talk and discuss among themselves in the process. However, with an online class, it has the advantage as students are focused on doing the work step by step within a given time.

Through this workshop students also got variation in skills and they developed a new appreciation for recycling cardboard available in their households. The school teachers received knowledge about more variations in craft teachings topic at school in the future.

## Acknowledgments

Acknowledgments to the Directorate of Research and Community Service, LPPM Maranatha Christian University and Miss. Lisye as a Teacher SMP Trimulia Hits who have coordinated well.

## References

- Banjarnahor, W. W. D. dan P. (2018). Analisis Pelaksanaan Proyek Perumahan dengan Metode CPM (Critical Path Method) Dan PERT (Project Evaluation And Review Technique) (Studi Kasus Proyek Perumahan Citra Turi). *Pelita Informatika*.  
[Craft\\_Centered\\_Design\\_Pedagogy?from=cover\\_page](#)
- Edwards, C. & Rule, A. (2013). Attitudes of Middle School Students: Learning Online Compared to Face to Face. *Journal of Computers in Mathematics and Science Teaching*, 32(1), 49-66.
- Gunawan, I.V., Halim, E.A., (2020) Pelatihan Pembuatan Clay Stamp untuk Clay Stamping Bagi Guru dan Siswa SMPK Trimulia HITS secara luring maupun daring.
- Gunawan, I.V., Halim, E.A., Djakaria, E., (2021) Ragam Pemikiran dalam Bidang Seni dan Desain: Telaah Filosofis, Pengembangan Kajian, dan Praksis.
- Kong, Q. (2020). Practical Exploration of Home Study Guidance for Students during the COVID-19 Pandemic: A Case Study of Hangzhou Liuxia Elementary School in Zhejiang Province, China. *Science Insights Education Frontiers*, 5(2), 557–561.  
<https://doi.org/10.15354/sief.20.rp026>
- Kurniawan, R. (2017). Batik Motif Parang Dari Court Art Menuju Global Trend. *Jurnal Rupa*, 1(1), 25–39. <https://doi.org/10.25124/rupa.v1i1.734>
- Louwrens, N., & Hartnett, M. (2015). Student and teacher perceptions of online student engagement in an online middle school. *Journal of Open, Flexible and Distance Learning*, 19(1), 27–44.  
<https://search.informit.org/doi/10.3316/informit.280169486254026>
- M.C. Kaushal, V.K.Sirohiya and R.K.Rathore, (2015). Corrugated Board Structure : A Review, *International Journal of Application of Engineering and Technology*, Volume 2 No. 3. <http://ijaetech.com/files/documents/200.pdf>
- Sweet, T. (2013) Instilling an Awareness of Phenomenology through a Craft Centered Pedagogy, *International Journal of Education*,

[https://www.academia.edu/2568321/Instilling\\_an\\_Awareness\\_of\\_Phenomenology\\_through\\_a\\_Craft\\_Centered\\_Design\\_Pedagogy?from=cover\\_page](https://www.academia.edu/2568321/Instilling_an_Awareness_of_Phenomenology_through_a_Craft_Centered_Design_Pedagogy?from=cover_page)

Tiwari, S., Khan, N., (2021) Forced Home Schooling in Covid-19 Pandemic, RESEARCH REVIEW International Journal of Multidisciplinary 2021; 6(2):85-92 ISSN: 2455-3085 (Online) <https://doi.org/10.31305/rrijm.2021.v06.i02.015>

Waynesville, NC USA: Association for the Advancement of Computing in Education (AACE). Retrieved October 25, 2021 from <https://www.learntechlib.org/primary/p/40411/>.

Zhou, Longjun and Li, Fangmei, (2020) A Review of the Largest Online Teaching in China for Elementary and Middle School Students During the COVID-19 Pandemic. Best Evid Chin Edu 2020; 5(1):549-567, Available at SSRN: <https://ssrn.com/abstract=3607628>