

Regeneration Strategy of Indonesian Wayang Kulit Artisans

Jaka Rianto; Ranang Agung Sugihartono*; Tatik Harpawati; Sri Marwati; Andi Wicaksono; Suwondo

Institut Seni Indonesia Surakarta, Indonesia

Jl. Ki Hadjar Dewantara No.19 Surakarta, Jawa Tengah, Indonesia 57126

*E-mail the corresponding author: ranang@isi-ska.ac.id

Abstract

Since a long time ago, Butuh Hamlet has become a center for the wayang industry, which is the mainstay of Klaten Regency. However, currently, the wayang kulit (shadow puppet) craft home industry is experiencing many setbacks. The younger generation tends to choose to work in factories with a fixed salary rather than being a wayang craftsman with an irregular income. Children are also reluctant to learn *tatah* (carving) and *sungging* (painting). The problem that arises and needs to be solved is how to regenerate the wayang kulit craft industry, which has less and less interest among the younger generation. The research results and development with the 4-D Model produced iconic puppets, puppet learning modules, and puppet craftsman regeneration strategies. The new creation of an iconic puppet named Joko Tingkir represents of the closeness, spirit, and pride of the artisans in Butuh. The YouTube-based wayang learning module is a medium for transforming wayang skills from young artisans to anyone. The regeneration strategy for wayang kulit artisans was carried out through Seeding, Insight, and Empowerment activities aimed at preparing prospective successors so that the continuation of the puppet craft can be maintained.

Keywords: Regeneration, craft, youth, sustainability, wayang kulit

DOI: 10.7176/ADS/103-6

Publication date: February 28th 2023

1. Introduction

Besides being known for producing famous puppeteers, Klaten is also famous for having a high-quality wayang craft industry. Wayang is one of the elements of culture that was owned by the Indonesian nation before the arrival of the influence of Indian culture (Brandes, 1889) (Haryono, 2008). Wayang kulit is a traditional craft art, namely the creativity and collective art activity of a society that has become a habit and passed down for generations to produce distinctive objects by relying on manual skills (Sudana, 2021). Butuh Hamlet is one of the village centers for the wayang industry, which is the mainstay of Klaten Regency. It is said that the initial carving artisan in this village was the carving artisan of the Surakarta Palace. At that time, the person holding power was Paku Buwono X. According to Subroto, the role of artisans and craftsmen during this period then quite large, especially as a buffer for the existence of a kingdom, they have a fairly good position, and belong to the group of people in the palace (*watek i jro*) (Subroto, 2007).

Then, around the 1970s, Mr. Kasimo, a resident of Butuh Hamlet, was an elder who started the wayang carving painting activity in the village. Then, famous puppeteers from Klaten emerged, one of them being Ki Anom Suroto. Finally, Butuh Hamlet developed into a cottage industry that produced shadow puppets based on the orders of the puppeteers. The puppets made by the artisans of Butuh Hamlet are known for their good quality and can answer the needs of actors or lovers of wayang art.

The condition of wayang crafts in Butuh Hamlet is experiencing setbacks. Romi Hasyim (Interview, 24/08/2021) said that now the younger generation prefers working in factories with a steady income, while the income from pursuing wayang carving and painting is uncertain. Currently, the leather puppet craft market has shifted to Solo, Yogyakarta, and Wonogiri. The popularity of Butuh Hamlet as a center for the puppet industry has also receded. This is unfortunate given its strategic role in supporting the cultural city of Solo. In fact, when the capacity in traditional handicraft businesses is well developed as a micro business, it is a very reliable source of sustainable income (Adom, et al., 2021).

In the past, 20 young people learned how to make wayang until they were independent and had a wayang craft business, but now there are fewer (Romi Hasyim, interview, 24 August 2021). Now the conditions have changed. Young people are interested in something other than learning wayang. Saiman said, "Now that I come home

from school, I use my cell phone. Even though elementary school is the right age for children to learn to carve because their hands are still flexible. I even lure the children to carve (material) puppets. Only for one or two times and that's it" (Pradipha, 2020). Mamik Raharjo said, "There are only about 40 artisans in his village because the others are old and can no longer carve" (Pradipha, 2020). If this is not paid attention to, then the regeneration of wayang artisans will not occur, and in the end, the wayang craft will become a memory.

Based on the reality above, this research was conducted with the formulation of the problem, namely how to regenerate the shadow puppet craft industry, which has less and less interest among the younger generation of Butuh Hamlet. The specific objective of this research was to motivate the young generation of Butuh Hamlet to pursue the art of wayang kulit. The continuity of Butuh Hamlet as a wayang kulit production village is also related to the improvement of community welfare and the image of Klaten Regency (Klaten *Bersinar/Clean, Healthy, Safe, and Tidy*).

If Butuh Hamlet disappears with the flow of time because the wayang craft dies, the community's economic vibrancy in the wayang industry sector will disappear. The image of Klaten Regency in the wayang arts and crafts will also be affected. The continuity of wayang art and culture is also affected, especially the availability of good quality wayang.

2. Methods

This research used the Four-D Model approach (4D Model), which is a type of Research and Development developed by S. Thiagarajan, Dorothy S. Semmel, and Melvyn I. Semmel, as written that "We have called our systems-approach the Four -D Model because it divides the instructional development process into the four stages of Define, Design, Develop, and Disseminate" (Thiagarajan, et al., 1974). This 4D model method includes Define, Design, Develop, and Disseminate. This type is considered suitable for this research, because it can be used to create regeneration models for wayang kulit crafts through induction training.

This research was carried out in stages: first, Define, is the stage of determining needs through gathering information and analyzing the data. The needs of artisans can be formulated, including the availability of iconic character puppets, concepts and models of artisan regeneration, and supporting modules in the framework of realizing the sustainability of wayang kulit in Butuh Hamlet in the future.

Second, Design, in which the initial design of wayang iconic figures is carried out, the preparation of the regeneration concept of wayang kulit craft, and the design of modules (media) for learning *tatah sungging*. The media selection and the formulation of an ongoing training format are suitable for the young generation of Butuh Hamlet. This design also includes all structured learning activity plans starting from the preparation to the exhibition of the participants' work.

Third, Develop is the stage for producing a product that includes two activities: expert appraisal accompanied by corrections/inputs and developmental testing. The designs of iconic figures, regeneration models, and leather puppet craft modules were assessed by experts from the Quality Assurance Unit and the ISI Surakarta Craft Department to get input or corrections. After making improvements (revisions), the model was tested on one of the trial partners in Butuh Hamlet.

Finally, Disseminate includes validation testing, packaging, diffusion and adoption. In the validation testing phase, the regeneration model is implemented on the actual target or target in Butuh Hamlet, which consists of many participants from artisan groups. At this stage, measurement of the achievement of objectives is also carried out to determine the effectiveness of the developed model. Packaging, as well as diffusion and adoption activities, are carried out by packaging the regeneration model and styling guide into published books with ISBNs, and publishing audio-visual modules to the YouTube channel, which are then disseminated so that they can be absorbed (diffusion) or understood and adopted (adoption) by others. The model for the development of the wayang kulit craft regeneration system can be used as a reference for communities in other regions.

3. Discussion Results

Traditional craft arts can be developed with various strategies according to the goals to be achieved (Sudana, 2021), including wayang kulit crafts. This research produced three things: iconic puppets, puppet learning modules, and a model for developing the regeneration of puppet artisans. All three are intended to strive for the regeneration of wayang artisans in Butuh Hamlet.

3.1. Butuh Hamlet Iconic Puppet

The artisans Butuh Hamlet have produced countless thousands of wayang from time to time, but they do not yet have an icon that unites the hearts and minds of the artisans that represents the unique culture they practice. Apart from that, regarding the spirit that innovation is a logical consequence and can be used as a solution to solving problems and used as a basis for trying to offer new innovative wayang by giving a new touch (Santoso, 2020), then the artisans in Butuh Hamlet need to create new wayang creations.

Through this research, a new wayang kulit creation in the form of the character Joko Tingkir has been created as an icon of Butuh Hamlet. The making of this iconic figure is based on the closeness of the people of Butuh with local figures in the past, namely Joko Tingkir. It is hoped that the closeness (intimacy) with this character in the minds of the people of Butuh, manifested in the form of wayang is expected to foster enthusiasm and pride in their souls to continue to pursue work as wayang kulit makers.



Figure 1. The iconic figure of Butuh Hamlet named Joko Tingkir
Size: 45cm high and 26cm wide
(Source: Romi Hasyim, 2022)

According to Romi Hasyim (Interview, 27/11/2022), the character Joko Tingkir is a figure that is familiar to the public, especially in the Central Java region, and is a figure very familiar to the people in the village. Joko Tingkir is a person who has a very good character. From the stories of the elders in the Butuh area, it was once one of Joko Tingkir's stopover places, so until now people are no strangers to that name. This gave rise to the idea of making a Joko Tingkir character in the form of wayang kulit purwa, as one of the identities and works of wayang created by artisans in the region, especially in Butuh Sidowarno.

The wayang kulit character Joko Tingkir is a new creation by the artisans of Butuh Hamlet. "Indeed, Jaka Tingkir is a new figure after the end of the Islamic Mataram. The idea is good and creative to make a new innovative wayang, which does not leave the standard. This wayang pattern is correct with reference to the wayang kulit purwa bambangan, similar to Panji in wayang klitik and wayang beber", the response given by Agus Ahmadi, a lecturer at the Department of Crafts ISI Surakarta (Interview, 31/12/2022). The making of wayang by the character of Joko Tingkir which imitates the wayang purwa bambangan, including by means of *Mutrani (Nunggak Semi)*, i.e. imitating standards, but processing techniques and materials in accordance with current needs (Dharsono, 2020). *Mutrani* in traditional art is not a taboo subject but can be used as a form of appreciation for previous works and can even be used as a concept for preserving traditional art so that it is sustainable.

The embodiment of Joko Tingkir's wayang kulit has a good *tatahan*, still preserving the *tatahan* style of wayang kulit purwa. The dotted *tatahan kerawangan* is a characteristic of wayang purwa which needs to be maintained. (Agus Ahmadi, interview 31/12/2022). Another response from the perspective of the world of puppetry, according to the emerging famous young puppeteer, Ki Catur Nugroho (interview, 1/1/2023), as a whole, the forms including *bedahan*, *kapangan*, and *wanda* wayang are appropriate to reflect Joko Tingkir's character, the coloring of clothes (sekadi) *sunggingan* also follows the characterization of the Joko Tingkir character. The figure that has been compiled already represents the characteristics of Joko Tingkir who is authoritative, calm, and powerful. The quality of the embodiment and characterization of Joko Tingkir's wayang kulit shows the skill

of the Butuh Hamlet's artisans. This new creation has also obtained a Copyright certificate from the Indonesian Ministry of Law and Human Rights.

3.2. *Wayang Learning Module on YouTube*

Artisans' daily work making wayang kulit holds a lot of knowledge and experience. Those treasures, if only preserved in the memory of the artisans, would be a real shame. For this reason, it needs to be accommodated in a video recording and uploaded to the YouTube channel so that it is recorded and documented properly and is more useful. YouTube as a video-sharing site is a new platform for producing audio-visual content (Aji, 2022). In order for wayang learning to occur continuously, anytime, and from anywhere, appropriate audio-visual teaching media is needed, and YouTube media is the solution.

The younger generation of Butuh Hamlet residents has been trained by the research team on making videos for social media content that contain tutorials on wayang kulit production, starting from preparing the leather material to coloring the wayang. From the training in mid-2022, the artisans have produced various short videos containing tutorials on wayang kulit production. In fact, it has also been developed by local youths into informational videos on wayang tour packages and shadow puppet crafts.

The tutorial video that has been uploaded on the YouTube channel entitled Wayang Tourism of Butuh Hamlet, which is managed by Kube BIMA, functions as a learning medium so that wayang production can be imitated by anyone and anywhere, such as the comment, "This show is also a learning strategy so that it can be accessed by everyone any group ... we are waiting for the next show," said Aisyah Fitri Salsabila's account. Flexibility in accessing content anytime and anywhere makes the existence of this site an option for finding sources of information and entertainment (Aji, 2022). Other netizens also felt the benefits of the video, "It is very useful to add insight to young people who like wayang art," said Aurelia Fitri Salsabila's account.

The existence of these video tutorials can attract netizens' interest in learning wayang. "Cool! So I miss learning how to paint puppets," said Alvito Ryantama Darmawan's account. "Awesome, when can we go to Sidowarno Village to learn about wayang from scratch," commented Aqila Dy's account. In fact, there are also school accounts from other areas that are interested in making it a destination for outing classes, "great, suitable for outing classes for students and santri," said the TPQ MTA Al Furqon Wonosari 1 account.

YouTube, as a site for various videos, is part of the daily life of people in Indonesia, both for content creators and viewers (Aji, 2022). The Wayang Tourism Village YouTube channel has been visited by many netizens and expressed their interest. The large number of people who become interested in learning wayang, especially from other regions, means there will be more and more learners and prospective future generations. In fact, Butuh Village can be a destination and reference for students from other regions. This will certainly inspire local youth in Butuh Hamlet to learn and pursue the art of wayang again. Thus, regeneration can continue to occur, as the hope stated by Tri Hartati Ningsih's account that "keep the spirit of reviving traditional wayang arts for the next generation, Success as always my wayang!"

Furthermore, the video can also be used as promotional media for wayang kulit produced by Butuh Hamlet artisans. Pak Lurahbest's account said, "We, as residents of Butuh, please jointly become marketing for Omah Wayang tourism objects, become mutual referral engines, to jointly recommend products/brands to other people... so that the work of the Butuh Hamlet community is increasingly recognized throughout the world...". When wayang crafts sell well in the market, the welfare of the artisans will increase, and the puppets will also be sustainable.



Figure 2. Production of a wayang making tutorial video
(Photo : R.A. Sugihartono, 2022)

3.3. Artisans' Regeneration Strategy

After designing, compiling, and implementing, a creative industry regeneration strategy for wayang kulit was finally produced. The regeneration strategy includes Seeding, Insight, and Empowerment, abbreviated as SIE, with the following explanation.

3.3.1. Seeding

The knowledge and skills of carving and painting wayang owned by artisans are compiled into a book and video tutorials, both of which are then used as learning media for wayang production. Furthermore, artisans who can transform the experience for others are made into wayang-making training instructors coordinated by the Kube BIMA community leaders. They were prepared to become instructors for the Kube BIMA community. Apart from that, local children still studying at the elementary and junior high school levels were also recorded to be recruited as participants in the leather w-wayang-making training. This is actually intended to create conditions that allow the community to mobilize existing resources to overcome the problems they face (Muslim, 2017).

Training on making wayang kulit was held with participants consisting of local children with instructors from artisans as well as residents of Butuh Hamlet. The week-long training activities were attended by 14 children. The training produced 14 wayang kulit with various characters, including Semar, Gareng, Petruk, and Bagong. The puppets were exhibited at the Joglo Omah Wayang yard in Butuh Hamlet on June 13 2022 attended by officials from ASTRA International (Jakarta) and the Dean of the Faculty of Performing Arts ISI Surakarta.

This training was conceived as a medium for sowing the seeds of puppet-making skills from parents to local children. This puppet-making skills seeding activity is intended to: (1) foster a sense of responsibility in sharing his skills with the surrounding children; (2) foster a sense of pride for artisans to act as instructors; (3) create a closer interaction between the artisans and surrounding children. That way, the process of regenerating artisans and their skills in Butuh Hamlet will roll naturally from today to the next day.



Figure 3. Artisans were training young people around them
(Photo: Ulil Absor, 2022)

Children became the target of this nursery because it was considered quite strategic. As Lynn Tett mentioned, young people are a 'stimulating arena' to learn informally and carry out their role as citizens through community participation and involvement and ensure that success is realized (Tett, 2010). Children are considered the holders of the "staff" (successor) to continue the wayang kulit craft in the future.

3.3.2. Insight

Kube BIMA routine meetings every month, which contain social gathering and coordination meetings, were developed to increase knowledge for its members through additional events, namely workshops. This activity was carried out by bringing in resource persons from outside the community, who can be academics or experts who can share knowledge, experiences, tips and tricks, promotion and marketing strategies, and motivation for developing wayang crafts in Butuh Hamlet. This is in line with the results of research, which recommends that artisans need to gain increased ability and insight into the repertoire of traditional art (Sugihartono, 2006).



Figure 4. Wayang kulit craft meeting
(Photo: R.A. Sugihartono, 2022)

On Tuesday evening, 31 May 2022, at 20.00-23.00 WIB, a workshop was held for the first time by presenting a resource person, Bambang Suwarno, who is known as a puppeteer and wayang kulit maker from Surakarta. The development of wayang kulit and challenges in the future are the topics presented by Bambang Suwarno.

As a *dalang*, Bambang Suwarno presents material beautifully because it is interspersed with philosophical Javanese songs. The artisans were also enthusiastic about the questions and saw directly the wayang created by Bambang Suwarno, so they were enlightened and inspired to work even better. The inclusion of a workshop at the routine meeting is the first step for the Kube BIMA management to organize it again at subsequent meetings. This is consistent with the statement that community involvement allows them to have a sense of responsibility and *handarbeni* (sense of belonging) (Muslim, 2017).

3.3.3. Empowerment

The existence of wayang crafts in Butuh Hamlet has been going on for a long time and has been passed down from generation to generation and is quite well known. This existence is a potential that can be used to empower the surrounding environment, both armed with experience, habits, and culture. The environment that has the potential to become a partner is SDN 2 Sidowarno (elementary school). Artisans who are members of the Kube BIMA collaborate with the school to provide students with extra-curricular materials with carving and painting. Kube BIMA said, "Parents and guardian teachers also supported this activity" (Pradipta, 2020). Giving a role to Kube BIMA can make it a subject in efforts to preserve wayang crafts in their environment, which is in line with the idea that society should not only be positioned as an object but should be made a subject (Muslim, 2017).



Figure 5. Introduction to wayang for children
(Source: RA. Sugihartono & Sunardi Baron, 2022)

Artisans' activities entering school get encouraging responses from teachers and students and support from students' parents. *Tatah sungging* learning given at the school makes the transformation of the skills of wayang artisans to children more structured. Furthermore, it can make the school have characteristics or advantages that are different from other schools. Furthermore, it is hoped that the activity can formally be included in the elementary school curriculum as local content because there are rarely villages that have wayang craft centers.

Apart from elementary school, even lower level, Kindergarten, is also targeted. The introduction of the names of wayang characters is given to kindergarten children using wayang made of cheap paper, so that children can play with them freely, without fear of damage. In this way, the world of wayang is getting closer to the children and it is hoped that they will like it. Moreover, one day, when they are teenagers, some of them will be interested in pursuing the puppet craft. Thus, the process of regeneration of puppet artisans can take place simultaneously.

The relationship built by Kube BIMA with elementary schools and kindergartens in developing human resources is a strategic step to prepare candidates for the successors of wayang crafts. Moreover, wayang has been packaged as a tourism destination by Kube BIMA. This is in line with research results indicating that project management, financial resources, and human resource management are key indicators for the success of partnerships in art, tourism, and cultural projects (Abdullah, et al., 2015). Cultural tourism is a sector that is highly relied on today (Haryono, 2008).

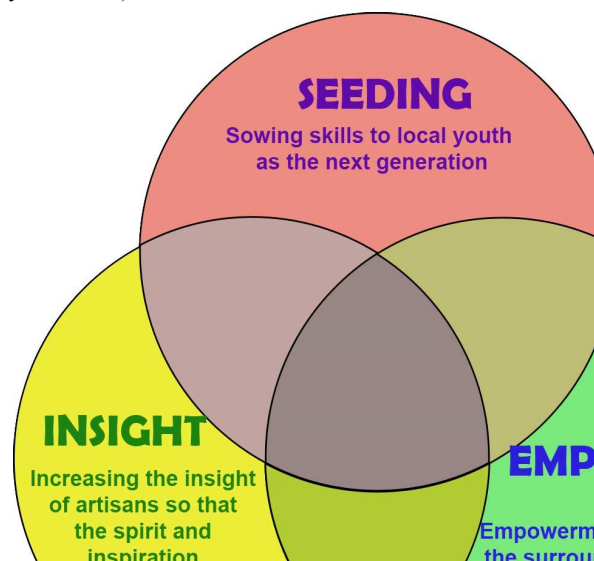


Chart 1. Regeneration strategy for craft artisans
(Design: RA. Sugihartono, 2022)

Craft development using the SIE (Seeding, Insight, and Empowerment) Approach is intended to enable the regeneration process of artisans from the older generation to the younger generation. We need to provide opportunities for the younger generation to develop their potential in the field of arts and culture, especially crafts/shapes (Suryahadi, 2007). The transformation of traditional crafts from generation to generation needs to be designed and carried out so traditional arts can be adaptive and remain sustainable. The efforts made by Kube BIMA Butuh Hamlet are a response to the rise of children who are addicted to gadgets and social media. Positive enthusiasm and hope grow in traditional art groups to always be up to date so that traditional art full of noble values can be accepted by the millennial generation (Sugihartono, et al., 2021).

4. Closing

For a long time, shadow puppets in Butuh Hamlet, Sidowarno Village, Klaten Regency have become a support for the existence of wayang kulit performing arts in Solo – Yogya and its surroundings. However, the number of artisans continues to decline and the tendency of children not interested in learning wayang. Several attempts have been made independently by artisans, but have not resulted in progress.

Research and development with this 4D model produce iconic wayang, wayang learning modules, and strategies for regenerating wayang artisans. First, the iconic wayang named Joko Tingkir that was created represents the people's closeness to the story of the character, the spirit, and the pride of the artisans to preserve wayang by pursuing it as a source of livelihood. Second, the YouTube-based wayang learning module is a medium for transforming the skills of wayang artisans to anyone and anywhere, including the residents themselves. Young artisans are enthusiastic about producing audio-visual modules, which are published through social media.

Third, the regeneration strategy for wayang kulit artisans was carried out through Seeding, Insight, and Empowerment activities, abbreviated as SIE. The sowing of the seeds of wayang artisans, in this case, children, was carried out through regular training by senior artisans and the results were exhibited. Artisans need to be called upon to train local children in the skills that make up the village's livelihood. Insights need to be given to artisans to open their minds and generate new ideas and the willingness to move forward through workshops, training, discussions, or comparative studies. Empowerment of the surrounding partners, especially kindergartens and elementary schools, was carried out to introduce wayang and train the skills of *tatah sungging*

to children. The three strategic activities aimed at preparing potential successor artisans in Butuh Hamlet so that the continuity of the wayang craft can be maintained.

References

- Abdullah, Q. D. L., & Hamid, S. A. (2015). *Bridging the Arts, Tourism, and Cultural Sector through Public-Private Partnership Collaborations*. 4th International Conference of Applied and Creative Arts. Faculty of Applied & Creative Arts, UNIMAS Malaysia.
- Adom, D., Nyadu-Addo, R. & Kquofi, S. 2021. "Capacity Building in Cultural and Traditional Craft Enterprises for Ecotourism Development in the Sekyere Kumawu District of Ghana". *Journal of Urban Culture Research*, Volume 23, p.44-78.
- Aji, Fajar. (2022). "Content Stilistics on Indonesian YouTuber Vlog". *CAPTURE: Jurnal Seni Media Rekam*, 13(2), 132-147, DOI:10.33153/capture.v13i2.4088.
- Brandes, J. L. A. (1889). *Een Jayapatra of Acte van Eene Rechterlijke Uitspraak van Saka 889*". TBG 78.
- Dharsono. (2020). "Kris Nusantara: Kris as a Bond of Socio-Cultural Values Shifts into Individual-Cultural Bonds and as Assets in Business Alternatives". *ARTISTIC : International Journal of Creation and Innovation*. Vol. 1 No. 1 April 202. DOI: 10.33153/artistic.v1i1.3004.
- Haryono, Timbul. (2008). *Seni Pertunjukan dan Seni Rupa dalam Perspektif Arkeologi Seni*. Surakarta: ISI Press.
- Muslim, A. (2017). *Pendekatan Partisipatif dalam Pemberdayaan Masyarakat*. <http://digilib.uin-suka.ac.id/>.
- Pradipha, Facundo Chrynsna. (2020). *Semangat Perjuangan Warga Dukuh Butuh Lestarkan Wayang Kulit untuk Indonesia*. <https://www.tribunnews.com/regional/2020/12/31/semangat-perjuangan-warga-dukuh-butuh-lestarkan-wayang-kulit-untuk-indonesia?page=all>
- Santoso, Trisno. 2020. "Wayang Golek Ringan Pemanfaatan Limbah sebagai Pengembangan Boneka Wayang Golek". *Gelar : Jurnal Seni Budaya*. Volume 18 Nomor 1, Juli 2020, p. 23- 34.
- Subroto, Ph. (2007). *Jenis-Jenis Pertukangan dan Kerajinan pada Masa Klasik di Jawa. Kriyamika : Melacak Akar dan Perkembangan Kriya*. Yogyakarta: Jurusan Arkeologi FIB UGM Yogyakarta, p.37-61.
- Sudana, I Wayan. (2021). "Komoditisasi Seni Kriya Tradisional melalui Kreativitas dan Inovasi". *SANGGIT : Ngudi Kasampurnan*. Surakarta: ISI Press. P.375- 396.
- Sugihartono, R. A., Rianto, J., & Harpawati, T. (2021). "Pergelaran Vicolming Wayang Beber 4 Kota sebagai Solusi Dampak Covid-19". *ACINTYA Jurnal Penelitian Seni Budaya* Vol. 13 No. 1, p.72-83, DOI: <https://doi.org/10.33153/acy.v13i1.3823>
- Sugihartono, Ranang Agung. (2006). "Potensi dan Keterbatasan Kriya Wayang Krucil Malangan". *Jurnal Ornamen* Vol 3, No 2, p.29-49. DOI: <https://doi.org/10.33153/ornamen.v3i2.859>.
- Suryahadi, A. A. (2007). *Seni Kriya Masa Lalu, Masa Kini, dan Masa Mendatang. Kriyamika : Melacak Akar dan Perkembangan Kriya*. Yogyakarta: Jurusan Arkeologi FIB UGM Yogyakarta, p.87-96.
- Tett, Lynn. (2010). *Community Education, Learning and Development*. Edinburgh: Dunedin Academic Press Ltd.
- Thiagarajan, S., Sammel, D. S., dan Semmel, M. I. (1974). *Instructional Development for Training Teachers of Exceptional Children: A Sourcebook*. Minnesota: Indiana University. Available from: <https://files.eric.ed.gov/fulltext/ED090725.pdf>