

Article



Culture Sustainability through Co-Curricular Learning Program: Learning Batik Cross Review

Sukadari Sukadari ^{1,*} and Miftachul Huda ^{2,*}

- ¹ Program Pascasarjana, Universitas PGRI Yogyakarta, Bantul 55182, Indonesia
- ² Jabatan Pengajian Islam, Fakulti Sains Kemanusiaan, Sultan Idris Education University, Tanjung Malim 35900, Malaysia
- * Correspondence: sukadariupy@gmail.com (S.S.); miftachul@fsk.upsi.edu.my (M.H.)

Abstract: As the application of colored designs on cloth using wax in certain areas in decorating items of clothing, Batik is made through several steps that come from drawing the pattern on the paper followed by imitating the pattern on fabric, which is called *ngeblat*. The next phase is followed by drawing the pattern using wax, which is called *mencanting*. The subsequent step is the process of coloring the pattern of Batik, called *pencoletan*, and then subsequently followed by color-locking on Batik through covering the Batik with wax, namely basic color dyeing. This process is called *menembok*. The final step is making the panting process through washing, called *nglorod*. This process should attempt to maintain Batik with cultural sustainability, as its process contains several values, such as discipline, creativity, independence, patriotism, responsibility, cooperation, and environmental care. Based on this background, this paper attempts to examine the Batik's cultural design and to explore its sustainability through co-curricular school program activities. This study focuses on examining the potential in the process of the application of colored design through elaborating the supporting and interfering factors in a co-curricular learning program of Batik. The analysis was made through several points, namely a co-curricular learning program of Batik for enhancing cultural sustainability, a co-curricular learning program of Batik for enhancing national culture and community responsibility, and co-curricular learning of Batik for sustainability and environmental accountability.

Keywords: culture sustainability; co-curricular learning program; Batik; culture; sustainability; national culture and community responsibility; sustainability and environmental accountability

1. Introduction

The call for cultural sustainability in the last decade has widely emerged, particularly in attempting to enhance its sufficiency into the national culture and identity. In particular, the notion of national culture focuses on empowering the foundation of national identity, expanding the character of life amidst the societal community [1]. In the nation context, the commitment to maintain cultural sustainability has to be engaged to enhance individual character among the people. Its main concern is aimed at providing clear direction on the way to achieve its cultural sustainability goal. It is determined as the standards that should be prioritized in enhancing the national identity and society, which turns into addressing the strategy to create a pathway of maintaining the cultural identity, which leads to cultural sustainability [2]. As a result, the nation should be committed to maintaining cultural identity with the orientation of promoting it among the society, as this will lead to enhancing the awareness and feeling of belonging within such a culture.

Consequently, sufficient knowledge and being aware of such cultural identity among society would give an insightful value to support the entire element at both an individual and social level. As such, it is important to have consistency in educating learners about the knowledge and understanding towards the cultural sustainability, as this would assist them in gaining the essential value with its significance for embedding cultural awareness



Citation: Sukadari, S.; Huda, M. Culture Sustainability through Co-Curricular Learning Program: Learning Batik Cross Review. *Educ. Sci.* **2021**, *11*, 736. https://doi.org/ 10.3390/educsci11110736

Academic Editor: Iris Alkaher

Received: 31 August 2021 Accepted: 1 November 2021 Published: 16 November 2021

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for sustainability. In this regard, the societal level should be initiated to advance awareness of national culture, so the need to embed this feature should be taken into consideration. Since society continues the national culture, its talents as a national asset would have a strategic opportunity to give an insightful value to nurture the competitive feeling in the global context [3]. In order to impart a sufficient comprehension about cultural sustainability to this generation, they must be well prepared and taught the potential worldview for recognizing the significance of the nation's future vision. In addressing the goal achievement plan, the global mindset should be accommodated in bringing values to offer society on being aware of competitive thinking and skills.

In addition, to gain the value of competitive thinking and skills for maintaining the national culture, society is required to have a sufficient ability to understand the significance of its maintenance. As a result of the paradigm shift in the globalization age, the important pathway of what to do is in line with the anticipation of the decrease of awareness about national culture; this should begin with enhancing the attempt to embed its processes into the younger generations [4]. In the context of the paradigm of planting on the Indonesian Batik, it is necessary to re-examine the national culture sustainability through a co-curricular learning program. This program is oriented on the critical insights from learning Batik, where the application of colored designs on cloth was adopted and made using wax. The following phase about embedding the Batik activity process should begin at a young age for children since the future culture identity of the nation relies on them, so it is important to expand the national culture sustainability [5]. With regards to the attempts on maintaining the nation culture of Batik, the continued support should begin at a young age, as this has an important value to increase awareness. Both the intensity and quality of the implementation of the Batik activity program should provide a strategic timeline with guidelines on conducting such a process through the government or a private sector arrangement [6]. The ultimate aim of a learning Batik program through the school co-curricular program serves to enhance the wider support of solidarity among the learners for being aware of the national spirit of unity amidst the diversity. When this could be achieved in a proper way, the outcome is that they would have a national spirit of culture identity in supporting and maintaining the Batik in their daily lives [7]. This requires enhancing cultural sustainability as a strategic pathway of driving a corrective way for reforming society to be implemented properly to achieve the goal.

Furthermore, this paper aims at examining the attempts of employing the cultural sustainability through implementing Batik's co-curricular learning program. The focus was made on examining the Batik's activity held in the school co-curricular program as an approach with the framework to advance the national culture sustainability. With this regard, the following phase serves to elaborate the elements of the cultural program and activities through adopting the participant observation approach [8]. The point of this research is ultimately accommodated to investigate the strategic pathway of cultural sustainability through learning Batik programs in order to supply and support their awareness of national culture amongst the public society. The following program comes from the framework based on the following phase. Those include the essence of cultural sustainability development, where detail is made through continuing the cultural sustainability development together with cultural sustainability for a sustainable nation. Moreover, creative and art education in co-curricular activities is also outlined with the essence of Batik art education. In the next phase, the main concern is addressed on looking into detail about a co-curricular program of learning Batik. In this view, the element of supporting and interfering factors for co-curricular program of learning Batik was discussed. Further elaboration is made through examining the co-curricular learning program of Batik as an attempt to enhance culture sustainability, national culture, community responsibility, and sustainability and environmental accountability.

2. Materials and Methodology

2.1. Towards Cultural Sustainability Development

As the set of morals and beliefs assigned into the method of human behavior in line with their life system, culture is indicated to be an accumulation of the knowledge understanding about the transmission process about a certain activity. The ultimate point of this arrangement is to transmit the culture message to be embedded among the society, as this would lead to the nation spirit culture amidst the next human generation [9]. The determination of knowledge and awareness should do with having a continued commitment of cultural sustainability. With this development arrangement, the cultural sustainability is taken through the pathway of preparing the ability to maintain its existence in order to ensure the consistency and spirit amidst the society. The value of implementing and continuing the culture activity program aims to govern the development and process of cultural sustainability [10]. With the conceptual determinations in logically intertwining both a political and social basis, the research domain in continuing the development of human values is becoming an emerging trend to comply with the national culture and spirit. With having a clear sustainability concept, it is important to take note that the essence of cultural sustainability requires a balance between proposing the practical opportunities and bringing stability on social policy. The ultimate appointment of this approach with a proper solution could provide a consistency to enhance the sustainable development.

Furthermore, the ultimate points of employing the cultural sustainability are accelerated to comprehend the basis of maintaining the cultural beliefs, cultural practices, heritage conservation, and culture as its own entity. The strategic value in developing sustainable goal achievement might be cooperated with the attempts to keep the cultural identity existence in the future context [11]. It indicated that the strategic means on supplying the proper answer towards the wide range of questions are focusing on how any sustained cultures might have a substantial existence to pursue the future context direction pathway. With this regard, the cultural heritage coexistence in the cultural and creative industries context is supposed to give insight in enabling the significant actors, namely both driver and enabler of the social, economic and environmental scopes to achieve sustainable development. Moreover, cultural sustainability is transmitted with having the recent advancement on growing significance in the political, social, environmental, and economic circumstance in order to enhance supplying the social elements of the sustainability pillar [12]. Through clear consideration on performing its pillar on the importance of cultural sustainability, the continued strategy and practice should come up with having consistency in managing the influential power over the people. With this regard, the strategic decisions on maintaining the national culture amidst the society orientation should include building the beliefs and practices at the stage of comprehensively balanced continuance.

Moreover, the commitment to having the arrangement of maintaining the cultural sustainability requires to address the fundamental issue about the cultural concern and sustainability. By driving the culture circumstance with precondition and situation, the development process on obtaining such a condition pathway refers to ensuring a sustainable nation with cultural development. In this view, the knowledge phase of conceptual and theoretical bases should be widely determined to provide a clear decision with a vision for sustainable development principle [13]. The attempts to strategize the basic element on achieving the sustainable nation with the culture development are required to have the comprehension sufficiency and consistency about cultural sustainability which is consequently managed and implemented in the environmental context. Both social and political policy, which play a role in culture, are to be practiced in ensuring the stability of culture sustainability. As a result, an effort to take into consideration towards the cultural sustainability should do with gaining a clear picture about the basic element of culture as a response towards the sustainable development context [14]. As such, the wide range of strategic approaches to cultural sustainability should have a critical analysis with a sufficient coordination in the pathway of managing the proper practices, mainly in empowering the culture into social and political policy [15]. The clear indication points out that the

achievement phase is to advance the practical manner by developing a strategic approach as an indicator to look into detail about the culture sustainability for the sustainable nation.

2.2. Cultural Sustainability for Sustainable Nation

The essence of cultural sustainability as the national identity points out a key instruction followed by the practical stability of achieving the sustainable development in the national context. The cultural sustainability is based on enhancing the broad discourse clearly combined with arranging and the implementation in the practical manner [16]. As an important element to look into the detailed comprehension of cultural sustainability, bringing the achievement plan is widely combined together with the sustainable practice and commitment to the nation identity. As such, the culture sustainability practice is determined to assist the implementation stage with the process on research practice and policy decision-making in order to lead to the sustainable nation. In this regard, the new norm of sustainable development practice on actualizing the goal achievement is simultaneously illustrated with a sufficient arrangement of ensuring the cultural identity [17]. It is of course the wider comprehension about the strategic pathway of sustainability with its points enlarged to deal with the scientific research practices and disciplines together with policy decision-making domains on cultural sustainability.

In addition, the attempts with the strategy on performing the Batik-culture-based national agenda aims at the cultural sustainability arranged with providing a proper manner. In this view, this might improve the society's belonging on Batik culture as the national identity ownership. The national discourses of cultural sustainability should be elaborated into bringing the practical step followed with the systematic planning and analytical approach in the way to underlie the ongoing process of sustainability development. As a result, it is an important medium with a necessary practice to enhance the explicit integration of culture in sustainability discourse [18]. In order to have a sufficient achievement of gaining the sustainability goal, the essential pathway of the individual accounts, actions, and behavior should be combined with a culturally embedded norm. As a result, attempts to take a chance together with considering the solving arrangement towards the challenge, the strategic cooperation of combining both culture and sustainability is potentially cultivated into an analytical framework in making useful tools in research through description or categorization [19]. Attempts to frame the culture sustainability of Batik arrangement with a clear comprehension and achievable vision are strategically enlarged into building the sustainable nation.

Furthermore, the recognizance on looking into the wide range of cultural sustainability requires to bring into the cultural diversity transformed into the nation culture sustainability. Moreover, the practical manner with having the capabilities with an ability to continue adopting the nation culture is stabilized to incorporate the socio-ecological system, in both process and approaches [20]. With regards to the specific arrangement of cultural planning, the harmonious circumstance amongst heritage, arts and changes arranged to transform into the values within the cultural industries is explicated via the anthropological method of intensive case studies. The valuable insights of cultural aspects of sustainability yielded a constant supplement to provide an explicit information in supporting the proper outcome on frame of sustainability interpretation. In particular, addressing the substantive incorporation of introducing the strategic frameworks with its concepts has to bring along with contemplating eco-arts in considering the human awareness [21]. In this view, the aspect of environmental sustainability within a culturally sensitive way is simultaneously linked to contribute to the national culture with sustainability discourses. Considering this, the theoretical framework and practical manner should be oriented to implement the phase on making culture explicitly and widely arranged with recognizing the cultural aspects to be easily fitted and adopted amidst the national context.

2.3. Creative and Art Education in School Co-Curricular Activities

As one of the co-curricular activities in the school, art education through Batik learning has been one the additional student self-development activities held at schools, representing one of the potential media for fostering the character of students. Co-curricular activities are educational activities outside of subjects to help students develop themselves according to their needs, potentials, talents, and interests through activities that are specifically organized by educators with the ability and authority in schools [22]. Through co-curricular activities, students are expected to develop the abilities together with the sense of social responsibility, as well as potential, competence, and achievement. Art co-curricular activities in elementary schools are activities that support the subjects of cultural arts and crafts, as well as to help develop students according to the needs, potentials, talents, and interests of elementary school students [23]. As such, the essence of art co-curricular activities can become a forum in the efforts to instill the culture of nation awareness together with belonging feeling among the students so that they can make their decision towards the nation culture into their life circumstance, with honesty, discipline, responsibility, and tolerance.

In addition, the implementation program of Batik's school co-curricular activities points out a unique scenario since the pattern of near-ancient craft in its process is generated into artists use fabric, wax, dye, and design. As this process leads to creating beautiful patterns and scenes on cloth, the cloth is then used as decoration or as clothing [24]. Such a technique has been widely invented in Indonesia's Java Island in which the art from the method has been crafted and implemented for centuries [25]. In particular, in attempts to bring the art form from the teacher style, for instance, the stage consists of a melting process followed by hot wax with a pattern of a unique form of a certain Batik style; this requires a focus in total effort in ensuring the outcome quality [26]. Moreover, the practical step of practicing the Batik' production activities should begin with elaborating the particular way on learning Batik in the classroom, as this process would lead to enhance clear and experienced instructions on the way to create Batik as a part of the co-curricular activities in the school setting.

In addition, the strategy on practicing the Batik should come up the pathway of making the clear comprehension about the style in the education setting through the adoption approach of both a printable and digital version. The continued practice on creative and art education has to bring the medium and instrumental tool with the proportional scale in enabling the running process of such co-curricular activities. With this regard, the attempts to try perform Batik art making processes should be followed by the guideline of preparing and supervising the partnership, mainly among the learners [27]. The important pathway of continuing this program activity is required to have such jointly partnered membership with a total attention to focus on completing the task. An engaging and fascinating circumstance as the strategic approach in advancing the learners' paid attention should be pointed out by supplying the relevant topic and theme of each drawing and painting process [28]. As such, the guideline with a clear instruction played a significant role in giving an insightful value of detailed picture amongst the learners in order to enable their practice on Batik. Through the attempts to carry out the hot wax arrangement, the practice of the Batik technique could be properly performed at the setting of a one-on-one basis transmission process. The sufficient combination of each process on Batik implementation would lead to enhance the experience that the learners gain, so that the skills and practice are advanced to develop the consistency and belonging feelings on the cultural identity of a nation.

2.4. Background of Implementing Batik Art Education

Being one of the co-curricular activities in the school program, learning Batik has been implemented with the approach of gaining an art education, in which the process is taken as a part of valuing the skills and practice. In terms of value education in the context of a national level, both the formation and development of a national agenda should come up with the cultural process which gave a rising concern in improving the human dignity [29]. Such an arrangement is followed with assisting the learners to develop their skills in particular, which can also gain their intellectual, moral, spiritual, and aesthetic dimensions that contain values [30]. Since Batik is one of the nation's products to be proud of, it is also the cultural heritage of the Indonesian nation that has been established by the United Nations institution for culture, science, and education (UNESCO).

In addition, Indonesian Batik is comprehended as a nation culture and heritage which points out the masterpieces of the intangible heritage of humanity (Sari, 2013). The global acknowledgement about Indonesian Batik as an original culture heritage indicated that the need to maintain it as a national culture should do with the total attention and focus to make its patent legally. From this point of view, an effort to protect and preserve Batik in order to truly become an authentic Indonesian cultural identity should be taken into consideration at the government and private level, mainly those involved in the tourism sector [31]. The need to strengthen the belonging feeling among the society requires to possess a continued consistency on adopting and using Batik in their daily life, so that the existence of this cultural heritage could become the local wisdom which leads to national sustainability. The attempts to maintain the Batik as a national culture should do with substantially giving an encouraging awareness in being proud of Batik [32]. As this is attempted to raise the awareness of the local community, the feeling of belonging on the cultural heritage ownership could be made through wearing it in the official event of government or private. The cultural tradition of this Batik is aimed to expanding the shared responsibility among the society in order to continue maintaining and developing Batik as a heritage of the Indonesian nation. The attempts to distribute this nation culture could be made through teaching it to learners, so that the installment of message and content of Batik theme could be achieved with the substantive point in existing it beyond the generation time.

In terms of enhancing Batik with the approach of an art education, the learners' creativity might arise explicitly with regards to the traditional Batik subjects. The practical arrangement of Batik in enhancing the creativity assurance should come up with having a sufficient comprehension of Batik art in enabling their desire to be proud of [33]. In the attempt to develop the learners' creativity on Batik, the learning approach with the particular attention on its entire process of making production should be taken into consideration between private and public institution, as this is important step in ensuring the Batik culture could be distributed and transmitted among the future generation. In order to achieve it, the Batik art education with an important step could be developed with the cultural sustainability in public schools, for instance, as this might assist shaping the individual knowledge, practice and skills [34]. In the attempts to implement Batik art education, the making process in increasing the creativity as an important element to face 21st century challenges, for instance, requires an attention with the stability to conduct the Batik creations and thus will lead to enhance the appreciation towards traditional Batik. In the implementation stage of Batik art education, the ultimate component of this program activity should come up with the school phase [35]. As a result, the practical step with the skills on Batik art education is configured into possessing the knowledge and detailed comprehension on it. Moreover, the facilities on practicing the Batik creation process should be prepared in following the step to do in line with an important part of its existence in the learning process. In this view, the advancement of making creativity between teachers and learners is progressively transformed into maintaining the existence trough elaborating the details of factors in its process of art education [36]. In particular, the creativity on practicing the Batik might arise in which the art form could be explored to enhance their creative thinking and skills. It is important to have a substantive appropriateness on the resulting art-based learning process. The appropriate component of gaining knowledge and skills is influenced and based on the learning system in which the critical exploration with creative art education could be performed in a well-managed circumstance, as this would lead to enhance their self-governance with having creative arts.

2.5. Research Aims and Focus

This paper is attempted at examining the Batik's culture design to explore its sustainability through co-curricular school program activities. This study is focusing on examining the potentials in the process of application of coloring design through elaborating the supporting and interfering factors on a co-curricular learning program of Batik. This research was conducted in the state elementary school in Indonesia. As one of the elementary schools in Indonesia, attempts to carry out co-curricular activities of learning Batik to maintain the cultural wisdom amongst the students were undertaken. Especially with a cultural model, the written Batik co-curricular activities in elementary school could be followed by all ages of student. The focus of this study is to examine the implementation of written Batik co-curricular activities in order to look in detail into cultural wisdom potentials. The implementation was enhanced in both supporting and inhibiting factors of written Batik co-curricular activities.

3. Methodology

3.1. Research Design and Approach

This study is conducted with a qualitative approach through the particular method of data collection, namely focus group discussion. Researchers examined the activities of students related to behavior change through the implementation of written Batik cocurricular activities in elementary school, Yogyakarta, Indonesia. Data collection was carried out by participant observation and documentation to obtain data about the cocurricular activities of written Batik. This qualitative approach was selected in order to enable obtaining the richness of information and related data [36]. This is to ensure the comprehensive and specific research finding reached in following the procedural research commitment processes [37]. This study is categorized as a case study with a qualitative research approach [38].

3.2. Participant Selection

This paper attempts to examine cultural sustainability through art education of learning Batik. The data were conducted through participant observation wherein purposive sampling was chosen due in the sense that indicates the participants involved in this study could represent the population to be identified and all the individuals in the group are considered as samples [37,38]. This aims to let the researcher conduct the fieldwork accurately in committing with the procedural etiquette. Following the requirements to fulfil, the respondent groups representing the population are to be identified and all the individuals in the group are considered as samples of selected participants.

3.3. Data Collection

Through the wording and sequencing of questions, the participant observation and documentation arrangements with the schedules could be performed well in enabling to enhance the credibility and reliability of research data [39]. The participant observation with all participants began with making appointments to determine the date, time and place in the school. The listed respondents were approached to encounter the issues during the research process. This includes perceiving the behavior inside the setting with possessing face to face interaction basis with the respondent [40]. Through the flexibility with the focus on achieving detailed feelings, impressions and behavior patterns of the respondents, the limitations of this type of design have included indirect information filtered through the views of participant observations [37,41].

3.4. Data Analysis

Qualitative analysis in this study involved the participant observation with documentation. All such data have been streamlined in the text and the final report. In this study, the researcher analyzed the data from structured basis. Data analysis refers to the several steps in identifying the themes resulted in order to understand the meaning and context of study [36]. The system of data management is designed through restructuring and understanding data, generating categories, and analytical concepts. The focus was given on supporting and interfering factors on co-curricular learning program of Batik. The result revealed that the Batik co-curricular learning program is giving a substantive value of disseminating the culture sustainability. Those are enhancing culture sustainability, enhancing national culture and community responsibility, and for sustainability and environmental accountability.

4. Results and Discussion

4.1. Co-Curricular Program of Learning Batik

The implementation of curricular activities on learning Batik was carried out in one elementary school in Yogyakarta, Indonesia. It was employed through writing Batik activities with Batik products, in the form of handkerchiefs used directly by students themselves and tablecloths used for school. In total, the participants were 71 elementary school students at the grade 5, or equivalent to the age of 11 years old, as indicated in Table 1.

Table 1. Details of participants involved in this study.

Participants		T. (. 1
Male Student	Female Student	Total
36	35	71

There are two kinds of size of object for drawing and painting. The first is a handkerchief with a size of 50×50 cm, and the second one is a tablecloth with a size of 120×120 cm, where all these were made in group. The learning program of Batik activities was held on a weekly basis, carried out after the regular class. In terms of the time duration, the Batik co-curricular activities were held for about one and a half hours, and this program may follow certain conditions such as the additional time in enabling the students to fully understand the process. In order to achieve this, the making conducive during the class activities is required to give full attention among the learners.

In addition, the co-curricular activities of Batik were carried out through several stages of activities. Those are drawing patterns on paper, where this process is followed by tracing Batik patterns on cloth as indicated in Figure 1.

Moreover, the next step is drawing on patterns with wax or pinching, in which this process comes to continue the step of Batik coloring or painting. In particular, the next process is carried out locking the Batik color subsequently followed by walling or closing with wax, basic color dyeing, and night wax. In the co-curricular activities of Batik, the learners could make Batik patterns according to their wishes. With regards to the culture sustainability, the program activities are supposed to support the self-imagination and social skills development amongst them to their peers. Among the value to be transmitted among them during the program include discipline, hard work atmosphere, the creativity and independence to express the idea, patriotism and country loyalty and also the value of responsibility, cooperation and care for the environment.

However, there were challenges such as the learners' reactions to learning Batik with less motivation; this would lead to disturbance of the learning process. As such, the maintenance during the program is ultimately the first point in raising the learners' spirit and motivation. Moreover, the condition of the learning process on Batik art education is enhanced to lead to the running process, whether it will continue or discontinue the class. In other words, the bored condition of one learner will affect others in the same class. In the opposite way, the joyful condition during the learning process would lead to positive feedback among other learners during such co-curricular activity of Batik. It can be seen in the form of students being happy; sometimes, the students also ask for additional time of up to two more hours.



Figure 1. Student draws patterns on paper.

4.2. Supporting Factors for Co-Curricular Program of Learning Batik

The co-curricular activity of learning Batik, at the state elementary school of Sleman of Yogyakarta, Indonesia, is the prominent program in enhancing the support by all school members. During the process of learning Batik, there are two factors, supporting and interfering, where all these refer to enhance the succession or its opposite on the co-curricular program. The implementation of written Batik co-curricular activities for students went well because it was supported by all school members, the financial assistance, parental support, and the committed work of instructors. Among the significant factors could be viewed into the source of funds which aims at supporting the process of cocurricular activities. As such, it is necessary to point out a serious concern to take benefit from the government aid through financial assistance from the government, called as Bantuan Operasional Sekolah: BOS (financial aid for school operation). As consequence, the lack of this support would lead to interfere with the implementation of learning of Batik as co-curricular activities. In other words, the obstacles would become a serious impact on continuing the process of learning Batik, using hand-written-based Batik within co-curricular activities. Since this program was carried out between individuals and groups, learning of Batik co-curricular activities required cooperation between students and supervisors.

Batik co-curricular activities in addition to developing knowledge can shape the attitudes and skills of students for the social awareness enhancement. The program activity of co-curricula learning of Batik would result in the products as an outcome-based process, namely handkerchiefs. Such a product could be used for the students themselves for various purposes such as tablecloths in the school or home. Co-curricular activity products are adopted as internal consumption, namely for local purposes. The purpose of this co-curricular activity for written Batik is for students to get to know the culture and to develop skills so that they can be used as provisions to increase their income in the future. This is by the objectives of implementing co-curricular activities in educational units based on *Permendikbud* (Government regulation of education and culture), the act of 81, point A, in the year 2013. The co-curricular activities could give an insightful value in improving their cognitive skills on the drawing of patterns in order to focus on the theme. Moreover, the ultimate point of this value as the positive feedback should be followed by the social skills in the attempts to collaborate with others.



In addition, the motifs drawn by students in the co-curricular activities of learning Batik are taken from the natural environment in the form of flowers, as indicated in Figure 2.

Figure 2. Student design Batik with leaves patterns.

The method applied in the co-curricular activities of written Batik is the provision of theory about Batik skills and practices. The implementation of written Batik co-curricular activities comes up with following the requirements defined from co-curricular activities, where co-curricular activities are educational activities carried out by students outside of the regular curriculum study. Moreover, the extension of time duration in the co-curricular activities should be carried out within the school guidance in order to develop the internal element of learners with social skills and cognitive intelligence. The broader context beyond the interests on learning of Batik could be developed in following the contemporary agenda of national culture within the curriculum phase [42,43]. The form of internal elements of values in the co-curricular activities of learning on written Batik could be viewed into the number of values such as discipline, hard work, creativity, independence, love for the country, responsibility, cooperation, and caring for the environment [44,45].

Furthermore, the continued practice of Batik patterning could run smoothly because of the support from all parties, namely from all school members and parents [46,47]. With this in mind, schools can provide full support on it in order to strategize a means of developing students' skills [48]. The factors that support co-curricular activities could be pointed out with the facilities such as tools and equipment available. As such, the cocurricular activities of learning Batik can run smoothly with the tools used. Consequently, the availability of supervisors who are experts in their fields is also a supporting factor for written Batik co-curricular activities. Moreover, the source of funds also played a key role in the hand-written Batik co-curricular activity in enabling this activity to run smoothly. The Batik co-curricular activities have been paid full attention from the parents, wherein the parents gave positive feedback to their children. For example, they will wait for their children to finish the assignment of writing Batik and then will pick them up. In particular, the students themselves are also fully supportive and cooperative where they work on their writing of Batik assignment with feeling happy and joyful during such co-curricular school activities.

4.3. Interfering Factor for Co-Curricular Program of Learning Batik

Interfering factors for the co-curricular program of learning Batik could be viewed such as limited facilities, time duration, teaching approach and a less conducive environment. The number of obstacles in co-curricular activities can still be found even as an explicit norm mainly in terms of technical issues, such as the guideline of practicing on writing the Batik pattern [49]. Moreover, there were challenges such as unconducive circumstance among the students in following the instruction given by the teachers. At this point, the teachers would consequently be open and responsive to all their students in allowing them to conduct the writing activities of Batik pattern from the beginning to the end. This is as indicated on the Figure 3.



Figure 3. Students with teacher do the basic color dyeing.

The continued practice with the teachers' guidance played an important pathway in ensuring that the process could be well in line with the planning arrangement from the school co-curricular program. As a result, such practice could be made from drawing stage, where the students should have enough tools such as a ruler, pencil and paper. Otherwise, they will spend their time waiting to borrow the tools from their partners in finishing their writing process of Batik.

Consequently, such an interfering factor would lead to a decrease in the intensity of the total focus among the students on the drawing process. With in mind, the process of implementing written Batik is required for the students to bring the cloth for mapping the picture with the coloring process [50]. In particular, when the learners lack the tools required, then consequently they might need to prepare it in the next program session. From this perspective, the students with no tools would give impact to their peers such as making disturbance to those with the sufficient tools as prepared during the program. As such, the continued practice on this issue would lead to interfere with the writing process on Batik. There were also challenges such as the falling down of wax in inappropriate places, such as the skirts and pants of one students, which made students blame each other. As such, students whose skirts or pants were exposed by wax should replace their focus on cleaning their dirty clothes; thus, due to this occurrence, the writing process is disturbed [51]. Consequently, this interference would lead to impact the co-curricular activities of writing Batik, so in order to prevent this from happening, it is required for the instructors to guide their learners in following the steps of each activity such as chanting.

At the same time, the learners should give their cooperative support through being careful of writing Batik pattern by referring to the update instruction made by the supervisor.

In line with preventing this challenge, the guidance of teacher's reminder would need to incorporate the careful awareness in enabling the students to spill the dye on the cloth, so that the cloth which requires a coloring process needs to have the color spilled. Challenges such as the incident of spilled dye would make students have to look for more dyes from other groups, which consequently result in this coloring activity. As a result, the dyeing activity was postponed to the following week due to the lack of a tub used for dyeing the basic colors. With this regard, the dyeing activity requires time to complete the drawing process of the Batik pattern, which was giving an impact to the large tub for dipping. Such events could be a disturbing challenge, mainly affecting the time for immersion. The following phase was made through the *nglorod* activity which cannot be carried out because it requires a large enough container which is to boil a cloth prior to drawing the Batik. From this background, the large stove should be considered in the *nglorod* process, requiring a large fire, in that the wax can fade on the Batik cloth in order to ensure cleanness from the remaining part of process.

In addition, there were some challenges on the implementation of hand-written Batik such as students' lower preparation of the basic tools. Those are, for example, the cloth as an object for writing Batik, a pencil and ruler to draw the pattern, a tub used to dye the coloring process, a large container for boiling cloth and also a large stove for the *nglorod* process. In particular, the number of interfering factors through the small incidents could be viewed such as students' skirts which are exposed to liquid wax, where sometimes their hands are exposed to it. Moreover, the Batik patterns covered with wax followed by colors spilled on the Batik cloth was among the examples of small incidents which require control and guidance from the instructor. Such interferences can be resolved without disturbing the implementation of written Batik co-curricular activities. The first is that students should have a sufficient preparation about the material to be used for written Batik co-curricular activities. The second is that teachers need to give a reminder to their students to always bring the materials needed in Batik co-curricular activities. The third is that schools should provide the necessary tools and materials needed in writing of Batik.

4.4. Co-Curricular Learning Program of Batik for Enhancing Culture Sustainability

The co-curricular learning program of writing on Batik was held at the elementary school, where both supporting and interfering factors were discussed. On this occasion, its significance to contribute to enhancing the culture sustainability is also examined through elaborating on the findings, which was used of the descending hierarchical analysis. This approach was made in looking in detail into the process of students' active participation on the learning of Batik. The particular point is that attempts to enhance the cultural sustainability played a significant role to reflect on the different conditions of each learner in following the instruction's guidance on learning Batik. This is especially during the implementation stage of learning Batik within the co-curricular school program [52]. In order to achieve the consistency, the committed awareness of continuing to manage the process of learning among the learner should be well prepared by the teachers or instructors. This is to ensure the circumstance of personal and social abilities among learners could have a stability in mainly in comprehending the hidden meaning of learning Batik experience [53]. As this would lead to enhance culture sustainability especially on building the learners' awareness, the reflection from the learning process is needed to expand gaining the main achievement on managing the learning Batik with the basis of voluntary work form.

In addition, the form of voluntary work as one of the outcomes of Batik learning program could be achieved among the learners when they showed their active participation during the process. With such experience from the learning of Batik, the substantial value on gaining their self-reflections on the process would be important especially to the extent of a continuous inquiry. The attempts to fulfil the way of comprehending the steps of learning Batik should bring the cognitive and social skills balance, which might play a role as an important part to enhance their culture awareness. As such, the cooperation skills during the learning of Batik might be advanced in enabling them to develop their potential value of personal, social and organizational skills, as this is also an attempt to advance their well-prepared condition for being part of the societies [54]. Their reflections

potential value of personal, social and organizational skills, as this is also an attempt to advance their well-prepared condition for being part of the societies [54]. Their reflections from their learning experience would lead to enhance their way for being and having a truly continued awareness on nation culture sustainability. As a result, the significance of enhancing their skills on personal and social quality would lead to expand the sustainable development [55]. Moreover, the extent of such skills from this learning of Batik requires a strategic approach in order to manage their operationalization to achieve the clear vision on nation culture sustainability. The arrangement points might come from the essence of having the personal, social, ecological and socio-cultural aspect [56]. As such, the main oriented focus aims to advance the socio-cultural elements in underlying the life circumstance to be applied for the ecological aspects in the society life.

In line with advancing the co-curricular learning program of Batik in order to enhance the main significance of this activity, the way of making the learning impact for being more visible and open requires the knowledge comprehension with consistency as this would give feedback to manage the commitment and discipline in the practice of learning Batik [57]. As this program might give a substantial value in broadening the vision into the real impact, the extent of co-curricular activities could be further managed in a proper manner through developing the learners' reflective way towards the learning of Batik practice, as indicated in Figure 4.



Figure 4. Student tracing Batik patterns on cloth.

The particular attention to help the learners' social and environmental awareness should be committed simultaneously in achieving the culture sustainability as part of the national agenda. The development to achieve the strategic elements of socio-cultural, economic, and ecological pathway as a fundamental dimension of learning Batik activities should come up with determining the goal oriented. As such, the particular implication of bringing the learning of Batik program activity aims at gaining the cooperative skills so that it is an important pathway to prepare them with a clear vision on national culture [58]. As a result, preparing the future generations with the creative skills and national patriotism would be the main goal from what they have learnt. In short, it is important to build the strategy for advancing the knowledge comprehension together with awareness on looking and reflecting the nation culture.

4.5. Co-Curricular Learning Program of Batik for Enhancing National Culture and Community Responsibility

The arrangement to conduct co-curricular learning program for Batik aims at enhancing the national culture together with community responsibility. The outcome could be prepared by managing the proper manner to result in giving a valuable insight into having responsibility and accountability towards the national culture agenda. In order to achieve this, managing the pathway to enhance the learners' responsible awareness in the attempt to maintain the Batik as a national local wisdom should reflect principles and guidelines, as this will nurture their eco-friendly responsibilities [59]. As a result, advancing the learners' experiences and skills from Batik learning process would give a real impact on raising their responsibility commitment on national culture. Moreover, the ultimate point of co-curricular learning program is required for being committed and consistent of learning inquiry process in order to be ready to face the situation circumstance towards uncertainty [60]. As such, attempts to face the different aspects of social realities are needed to prepare the learners' awareness on adopting the strategy with a fundamental platform in looking into the culture existence for the national agenda vision plan.

In line with advancing the experiences and skill expertise among the learners, the consistent practice with a full awareness on the Batik learning is required to substantially result in the cooperative skills with other group member and this becomes one of the main goals of this program. Moreover, the creative and innovative thinking skills are to be embedded to reflect on their attitude and manners from the learning of Batik and thus it is the one which would lead to strengthen the discipline [61]. With this regard, the strategy in the way to make practice of learning of Batik should be stabilized in the manner by managing the responsible awareness and commitment. Achieving this arrangement with planning of the well-founded and effective planning would contribute to advance the sustainable cooperation and awareness with having the belonging feeling to the Batik culture existence amidst the society [62]. The caring awareness about the cultural existence of Batik should be managed in order to continue the community responsibility, as this is the main outcome of learning of Batik [63]. Incorporating the degree of awareness on the way to live together within the group apart from the diverse background is also one of the strategic points in giving the substantial value on the experiential advancement from the learning of Batik. In particular, the significant element to conduct from what they learnt about writing Batik should do with building their national identity with an awareness and caring towards the culture of Batik [64]. From this typical style of comprehending the foundation of this paradigm, it is required to have a clear line for continuing the actual practice of the value. In order to have a substantive detail to look at the situation where the society is concerned, the commitment to continue building the community responsibility with looking at the reality has to bring along with increasing the positive feedback towards the Batik culture existence.

In addition, the pathway of reflective thinking with the consistency to develop the ways to look into the culture existence from learning of Batik is required to have the clear comprehension with cooperation in ensuring the running process well. Moreover, obtaining the experience and skills expertise as the abilities to respond and manage in a proper manner is needed in line with following the principles developed in further advancing their reflective thinking skills [65]. With this regard, the values and skills obtained from learning of Batik could be developed through obtaining an active participation in it. The cooperation skills from Batik learning would lead to enhance the mutual awareness to live together with the group so that their experiences would also raise from what they have learnt on this program [66]. From this perspective, the reflection on the strategy to carry out should come up with strategically coordinating what to do in line with the role to play in it, having a substantial value of gaining the positive feedback for both individual and social inclusion. In this view, the experience and skills from learning Batik should be disseminated in incorporating the significance of cultural existence to be reflected amongst their peers, as this might give an important role in providing the international reflection

in line with stressing the mutual support and trust between them and their peers' invited reflection [67]. The strategic approach of this interaction aims at enriching their reflective comprehension towards generating a cultural identity with the circumstance in leading to live through facing the certain situation.

4.6. Co-Curricular Learning of Batik for Sustainability and Environmental Accountability

The expansion of continued practice on co-curricular learning of Batik is transformed to enhance sustainability and environmental education in order to achieve the cultural responsibility. Having a sufficient consistency on running the co-curricular programs, the learners' activities in assisting their expose with a real experience are strategically considered in building the conscious meaning of co-curricular learning programs [68]. The continued practice of learning Batik is important to point out the substantial contribution in managing their meaningful learning outcomes with having a sufficient experience. As a result, the additional value of both inner and outer pathway of learners is enhanced in guiding the reflection process to play a role in advancing their experience and skills [66]. Moreover, the essence of learning Batik here refers to advance both professional and creative skills in expanding the stability of individual and social competence for the interaction. It is formed with providing the practical manners with the cultural content and context. In this view, such an attainment would give the potential to contribute the professional skills enhanced in order to develop their individual attitudes and values. As such, this achievement plan is arranged to give a guideline of personal development, leading to sustainable development skills and responsibility.

In addition, the particular attention to determine the strategy mainly to produce the learning impact with the practical experiences requires the standpoint of developing the reflective abilities. In providing the clear vision on achieving such attainment, the way to achieve the substantial reflections on nation culture should be incorporated through the extent of learning pathway of Batik [67]. Comprehending the importance of this experience to the development of the extent of reflective skills, the strategic achievement of enhancing the lived experiences needs to continue the adaptive cooperation and consolidation in the basis of the co-curricular activity program [58]. As a result, the attempts to pay attention on focusing on empowering the learners' experience with having the detail about their impactful value should do with the maintenance of improving the learning design of Batik with the current situation. In this view, there should be good arrangement between teachers and learners in charge of managing the programs. Through completing the program in a consistency, the valuable insight of experiential skills from their observation process including what they hear and see during the learning of the Batik program is being an outstanding value to improve the co-curricular program [68]. In this view, the continued exploration of comprehending the content of learning Batik adapted with the context of situation should be taken into reconsideration in order to come up with a reflective pathway of individual diaries.

In line with incorporating the co-curricular activities to advance the experiential skills, transforming the learners' consequence with the continued practice of learning on Batik should generate their strategic pathway in their reflection as this is potentially configured to stabilize their active engagement of national agenda. As a result, the responsible awareness from their active involvement on having the participation in co-curricular activities might give an insightful value on the learners' assessment of the new experience about the nature [64]. In particular, the experiential value from the learning of Batik aims at providing an active participation so that their skills and practices might give a comprehensive commitment and responsibility between their beliefs and practices [65]. From this perspective, the development of arranging the learning comprehension about the Batik activities could be valued through supplying an adequate path for the development of learners' individual and social skills. In this view, the setting position could be contemplated with fostering the lifelong learning procedure, for instance, since this is an attempt to promote their reflection in enabling their enhanced skills to become better people and

better professionals [66]. In the attempts to build the practice and strategy to incorporate the co-curricular learning quality, it is important to take a point that the opportunity in living with such this experiential value would give a tremendous reflection with promoting to help them in order to be aware of realities and situations. In this view, the coordination process in forming them for being the better individual quality with the creative skills should be taken into reconsideration in creating the guidelines to support them to be an active participation in Batik's national agenda.

5. Implication, Limitation and Future Direction

Highlighted to the critical investigation of learning of Batik through the co-curricular school program, the main orientation of this study was on expanding the framework on advancing Batik as part of the national cultural identity of Indonesia. As a result, the implication of this approach is that the learning program involved in Batik might place an initial space of national education agenda. With this in mind, the development procedure in achieving the goal should come up with determining the strategic elements of socio-cultural, economic, and ecological pathway as a fundamental dimension of learning Batik activities [34]. As such, the particular implication of bringing this activity is to gain the cooperative quality skills in producing the learners' creative mind and future vision. As a result, the societies' main concern of having the promotion from what they have learnt should be to do with building the strategic awareness of comprehending the personal and social's well-being in preparing the future generations with a creative skills and national patriotism quality [24].

In line with limitation, this study is only focusing on the learning program of Batik at the elementary school level. The approach made in this study is through participant observation with the need to explore further to address the learning process during the Batik program. It is important to highlight this approach in enabling the further research to be transformed into a mechanism of advancing the learning of Batik within the certain program outside of the school curriculum, as this is attempted to expand the focus of learning quality of Batik under that program [12]. With the concern to advance the learners' comprehension about the learning of Batik, elaborating the elements of cultural program and activities requires an initial review through investigating the strategy in the pathway of cultural sustainability through Batik learning programs for being concerned amongst the public society mainly at the regional and national level [27].

As such, the future direction has to be involved at the age of senior high school level so that the embodiment process of this learning of the Batik program could be achieved in advance. In addition, the planning management of school arrangement throughout the certain program could be improved, in particular referring to the adaptive adjustment on following the today's trends. The main principle of its content, flow and also the motive of the entire picture of Batik could be established through the education agenda of national culture development [28]. Apart from that, the individual level from both teachers, students and also parents might also play a role in their capacity in advancing the learning process of Batik through the program together with maintaining the utility of Batik into daily life circumstance [45]. It can be viewed such as the use for home, office and also other government furniture and souvenirs. This is to ensure the existence of Batik could be well maintained.

6. Conclusions

Batik is an application of coloring the pattern on cloth using wax on certain areas in decorating items of clothing, where the initial steps come from drawing the pattern on paper. Such a process is linked to attempts to maintain Batik for cultural sustainability, where its stage has various values such as discipline, creative, independent, patriotic, responsible, cooperative, and environmental care [19]. With the aim to investigate strategy and attempts of cultural sustainability on Batik's co-curricular learning program, the focus of this paper was made on investigating the Batik's activity as a part of school co-curricular

program as an attempt to advance the national culture sustainability. Through examining the factors of practicing of learning Batik as co-curricular activities at state elementary school, this relates to the regulation of the mechanism under the Education and Culture Minister, which is on act of 81A, in the year 2013, which co-curricular activities are carried out beyond the regular curriculum of learning process.

With the concern to advance the learners' comprehension about learning Batik, elaborating the elements of cultural program and activities is coming up with investigating the strategy in the pathway of maintaining the cultural sustainability through Batik learning programs for being concerned amongst the public society mainly on the regional and national level [29]. The practical stage of Batik as co-curricular activities is attempted to assist in forming the culture sustainability which underlies the components of love for the country, responsibility and cooperation, and caring for the environment [48]. In terms of the phase of learning Batik, there is a need to develop the framework referring the essence of cultural sustainability. The practice should be continued with the cultural sustainability development in underlying the frame of creative and art education within the co-curricular activities. The outline of learning Batik as art education should be managed in a proper way within the co-curricular program, where both supporting and interfering factors for co-curricular program of learning Batik was discussed.

In addition, the point of such practice together with attainment arrangement was followed by examining the co-curricular learning program of Batik in order to enhance the culture sustainability. The model of interaction approach should be well adapted in the aims at enriching the skills together with reflective comprehension towards generating a cultural identity with the circumstance in leading to live through facing the certain situation [7]. As a result, the essence of learning Batik here refers to advance both professional and creative skills in expanding the stability of individual and social competence for the interaction. It is formed with providing the practical manners with the cultural content and context. In this view, such an attainment would give the potential to contribute the professional skills enhanced in order to develop individual attitudes and values [8]. As such, learning of Batik arranged in the learning process among students is supposed to contribute in developing their awareness on having, implementing and maintaining the Batik art education. Moreover, this achievement plan is arranged to give a guideline of personal development leading to the sustainable development skills and responsibility.

Author Contributions: Conceptualization and literature review, S.S.; critical analysis, draft preparation and writing assistant, M.H. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: Not applicable.

Conflicts of Interest: The authors declare no conflict of interest.

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