

Project Based Archipelago Ornaments Learning Design in SMA: Vygotsky's Social Constructivist Approach

Raras Nawang Wulan S. Pd^{1,*} Prof. Dr. Trie Hartiti Retnowati, M. Pd¹

1Graduate School of Art Education Yogyakarta State University Yogyakarta, Indonesia

**Corresponding author. Email: rarasnawang.errr@gmail.com*

ABSTRACT

Archipelago ornaments are the products of Indonesian cultures spread from Sabang to Merauke and passed down from prehistoric times. Nowadays, these archipelago and traditional ornaments have begun to be displaced by the global cultures that prioritize modern minimalist style. Conservation efforts are needed to help these ornaments survive and adapt in the midst of modern civilization. One effort that can be done is to incorporate Nusantara ornament subject into the learning activities of Arts and Culture at school. In order to make learning more meaningful and effective, a project-based learning model with the Vygotsky social constructivist approach can be used. The model is applied at the level of senior high school to build creativity and cooperation among students. The project-based Archipelago ornament learning design is carried out with the following steps: 1) identifying the basic competencies used as a reference for making the archipelago ornament projects, 2) determining the student's choice of projects with the archipelago ornament theme, 3) making the design steps for making the selected projects, 4) preparing a project implementation schedule, 5) completing the project by teacher monitoring, 6) preparing a report and presenting project results in the form of archipelago ornament arts, and 7) evaluating the project process and results.

Keywords: archipelago ornament, project-based learning, social constructivist

1. INTRODUCTION

Archipelago Ornaments are one of the results of Indonesia cultures which are spread from Sabang to Merauke and have been inherited from generation to generation since pre-history time. This is proven from the findings of stretching ornaments or decorations in pre-history things, for instances nekaras, bronze axes, menhirs, ancestor statues and so on. Ornament are not only applied to households and praying tools, but also to building design. The varied ornament forms are influenced by the geographic condition and each custom of regions in Indonesia. This is in line with what Sunaryo stated, that is:

“Archipelago Ornaments are varied decorations applied at cultural tools which are spread in various island regions in Indonesia which are inherited from generation to generation, have region characteristics with its variety, as part of arts proverbs that is various tribes in Archipelago Region.” [3]

Types of Archipelago ornaments from time to time also have changes by the time the changes of public mindset and technology advancement. Types of Archipelago Ornaments which has region character and still traditional are getting faded by the modern cultures which prioritize simplicity. To preserve the Archipelago Ornaments to be able to survive

and adjust with the era development, then it needs efforts to introduce it to the young generations. One of them is by making Archipelago Ornaments as a topic to be learned in learning activities at school.

Learning in school environment is an activity or process of giving helps by educators to students to gain knowledge and build good attitude or character. The conducted learning should be able to develop the students' potential become a competence. The learning can be run if it has three main elements, they are educators, learning materials and students. These three elements interact to each other by involving the right learning model and method, attractive learning media and also conducive learning environment so that the learning objective can be achieved well.

The rapid era development makes the learning paradigm of teacher learning center now has turned into student learning center. The student learning center more emphasized the students' participation and liveliness in learning process, so the students actively participate in constructing the science or materials being learned. This is inline with Vygotsky constructivist social theory which emphasizes that children actively build their own knowledge and understanding through social interaction, whether with teachers or more expert person or their skilled friends in same age. This description is inline with Priansa who explains that,

“...Vygotsky theory about social constructivist concepts, is that every individual will have intellectual development when they obtain experiences or new knowledge, that force them to solve the problems come from that new knowledge by constructing and modifying their prior knowledge. In the process of way to understand that new knowledge, Vygotsky believes that social interaction with other people will stimulate the birth of new ideas so it can develop the students’ intellectuality.” [1]

Various methods of student learning center can be used by the students, but group work method becomes one of the right method for Arts and Cultures subject, specifically in making work of Fine Arts. That learning can be more meaningful with group work method which is suitable to Vygotsky social constructivist theory. The theory supports the learning activities in group, in which the students construct and understand the learning material together with their friends, this kind of thing can train the cooperation among the students.

So far, the students are only given individually some art works, but the fact is the students need help from others, whether from teacher or friends. By the existence of social interaction in art work making, then it needs a good communication between the students and teacher or their friends. A good communication can help the students to comprehend the learning materials better. This communication can be a basic for students to cooperate to make fine art work expected and meet with the objective of learning.

Social interaction also has role to build the students’ creativity in art work because the students can share their thought, opinion, knowledge and also experience with other expert people or skilled ones, thus the produced fine art works become more creative and have esthetic value or even probably have worth selling.

Otherwise, Arts and Cultures subject in material of making Archipelago Ornament art work can run effectively by implementing project-based learning model. Erwin states that,

“Project based learning is a learning model which uses activity (project) as media. This learning leads the students to do a simple project by conducting an investigation towards learning materials being learned.” [5]

This model is chosen so that the activity or project will be conducted by the students can be systematically organized before doing their works. The steps of organizing activity schedule in this project-based learning is done to avoid the lateness submission of Archipelago Ornaments Art Work Assignment from the students.

The project based Archipelago Ornaments learning with Vygotsky’s is implemented in senior high school level because the characteristics of the students in this level are suitable to the Piaget’s children development theory in formal operational steps, they are students begin to be able to make decision better and take risks of the decision has made, students can think in abstract and logically make hypothesis from their own thought to solve problems systematically, students begin to aware that they need their friend of the same age to discuss or solve the problems in learning.

Based on the students’ characteristics above, then the project-based Archipelago Ornaments learning design in Arts and Cultures Subject with Vygotsky’s social constructivist theory approach can be done in senior high school.

2. RESEARCH METHOD

Research method employed was qualitative research by using descriptive explanation. The subject of this research was students in senior high school. While the object of this research was Project Based Archipelago Ornaments learning by using group work method which was suitable to Vygotsky’s social constructivist theory.

3. DISCUSSIONS

3.1 Archipelago Ornaments

Archipelago Ornaments are the result of region cultures in the islands spread in Indonesia. The various types of ornaments in Archipelago is influenced by the social and culture development and also the geographical condition in each region. This condition more makes the use of elements and substances of certain tribes which makes the specialty of condition and also regional ethnic color that is quite visible on the visual form of every ornament in Archipelago [3].

Ornament comes from Latin Language *ornare* which means to decorate. Ornament is art element which is intentionally added to decorate a product or stuff. The aim of making the decoration is to beautify the decorated product or stuff so it has esthetic values [3]. Based on the demand of today era development, making the adding ornaments on a stuff or product is expected not only has esthetic value or interesting to see, but also make that stuff or product has higher worth selling than before. However, sometimes the less appropriate or too much ornament implementation will make the esthetic value of a decorated product or stuff decreased.

According to Sunaryo, the existence of ornaments is not only as a meaningless empty part filler, but also as a form of ornament which has some functions, they are:

Esthetic function, it is an ornament used to beautify the look of decorated product or stuff so it becomes an art work, even a product which is supposed to have practical value becomes esthetic value merely as a decoration.

Symbolic function, it is an ornament applied to a product which has symbolic meaning or certain meanings. Type of this ornament is generally found at custom ceremony stuffs or belief’s relics. However, in today development, various forms of symbolic ornaments are only just for decoration or mere esthetic business without symbolic values.

Constructive function, it is technically an ornament used to strengthen, support, sustain or connect part by part of a product, stuff or building. This thing makes ornament not only beautifies the appearance but also functions to construct [3].

Based on the description of ornament functions above, then it could be concluded that the main function of ornament is to decorate so that the appearance of a product, stuff or building becomes so more interesting that can improve the decorated stuff's esthetic values.

Archipelago Ornaments have various kinds of motif, they are:

- Geometric Motif
- Human Motif
- Animal Motif
- Plant Motif
- Nature and View Motif
- Technology, Calligraphy, Abstract Tool Motif

Those various kinds of motif are the ones which underlies the creation of various forms of ornament which spread in many islands in Indonesia. The form and color which are found in various kinds of Archipelago ornaments portray the geographic, socio cultural, customs and also characteristic condition of each region where the ornaments grow and develop. This is the thing that makes Archipelago ornaments region and traditional because it is descended from generation to generation in the same place so that makes a specialty or identity of region culture.

Based on the special characteristic of ornaments in every region in the Archipelago, then students will develop it with help from various kinds of existing motifs.

3.2 Project Based Learning

Project based learning is one of learning model which centers on process done by students. This learning takes long time and has been determined in a previous plan. Project based learning run collaboratively and in a heterogeneous group. Heterogeneous means in a group has various genders, experiences and different level of intelligence or skills possessed by the students. Because basically it is collaborative, then learning skill development runs among the students themselves and teacher only functions as a facilitator and also help students in material mastery and decision making. The strength of each individual, good communication and the right use of how to learn can wholly strengthen teamwork. Thus, project-based learning has potential to give a meaningful and interesting learning experience for students. These things affect on the maturity of students' behavior, mental and skill.

Project based learning model more emphasizes on active participation of the student's personality to solve the problems or learning assignment that should be understood not only by one student but from all of the students in that group. Project based learning which centers on students can employ group work method, with its purpose is to finish a task or project, through cooperation among the students. If the task does not take too much time, then it could be done in

the school environment. However, the task is commonly quite difficult and needs various sources which actually are provided in outside the school and thus the problem is solved in outside the school. In this method, the students are divided into a number of small group and then the group makes different art works. This is done to make the teacher have different point of view from each group about the problem solving. In dividing the group, teacher should maintain the heterogeneity in the group to avoid the competent students gather in one group while the other groups are dominated by slow learners. By concerning the heterogeneity, it is expected that the opinion contribution of each group can be more balanced [4]

3.3 Characteristics of SMA Students

Students in SMA level according to children development from Piaget is on formal operational step, that is in teenage period with age range is 12 years above, in which the students are able to think in abstract, complex and logically. The children in this age start to have changes, such as think egocentric, unique, seek freedom, more choose to find their much time with their friends in their age, thus to respond those changes the adults around must give more many responsibilities in terms of decision making [2]. Nevertheless, not all the students have same steps and changes in the same age range. This condition is affected by the environment factor where children grow and develop. Therefore, the changes happen in the teenage period needs supports from the adults in their surroundings including from teachers.

Based on the characteristics of SMA students who starts to think in abstract and systematically, then project-based learning is expected to be well used to support the implementation of Arts and Culture Subject in making Archipelago Ornament art works. While based on the characteristics of SMA students who more choose to spend their times with their friends in same age, then Vygotsky's social constructivist approach is implemented, where this theory approach more emphasizes on social interaction process among the students or with the more experts in constructing a learning material. Therefore, learning runs by dividing the students into some groups to make limited discussion implemented before having class discussion.

Project Based Archipelago Ornaments Learning Design with Vygotsky's Social Constructivist in SMA

Archipelago Ornaments Learning learned by students in senior high school level needs a right learning model to make the learning process can run more meaningfully and effectively, so it can build creativity and cooperation for the students. That model is project Based Learning by using Vygotsky's social constructivist approach. The purpose of using this model is to train students' ability to think critical systematically by making design or concept before making an art work collaboratively with their friends in same age. While Vygotsky's social constructivist approach theory is chosen because it more emphasizes on social interaction done by the students by using good communication language

with the others, whether with teachers or their friends in same age who are more skilled so the process of constructing the understanding on learning material can be done by cooperation of the team.

Project based Archipelago Ornaments learning design in SMA can be described as follows:

- Identifying basic competence used as a reference in making Archipelago ornaments project

Teacher chooses suitable Basic Competence to learning materials will be given to the students and suitable with applicable curriculum. The basic competence used is Arts and Cultures' subject Basic Competence of Fine Arts for grade XI. The Basic Competence used is related to the project of making three-dimension fine arts, which is Basic Competence 4.2, to make three-dimension fine arts by modifying objects. The object in here means a three-dimension object has been chosen by the students to be decorated by using Archipelago ornaments. Before determining the project choice, the students are divided into some small groups that consist of 3-4 students. This grouping is done by teacher that is by dividing them equally based on skill and gender. The purpose is to make the students who are more skillful or more expert can help guide the less skillful to make work art. Teacher gives beginning introduction about archipelago ornament materials that is later developed by the students collaboratively.

- Determining students' project choice under the theme of Archipelago ornaments.

The students who are in group are given freedom to choose three-dimension object will be made or modified by using ornaments. This object selection is done by discussing among the students in their group, while teacher only gives suggestions and decision strengthening. The selected object can be in form of existing object or object intentionally made in group by the students. That object can be in form of applied object or an object that has esthetic value as a decoration. The selection of this three-dimension art project is in form of selecting tools, materials, medias, functions and ornaments form will be applied. The selected motif is adjusted with three-dimension object will be modified

- Making design of how to make project has been selected.

After students in group decide three-dimension work will be made, then the next task is to make project design, started from philosophy concept making in written form or visualisation concept from object and ornament forms will be applied until finalisation plan of the Archipelago ornament art works.

- Arranging schedule of project implementation

Arranging the schedule of project implementation is vital to make the process of project making be able to watch well by teachers and students themselves so that the success of the project can be maximally achieved. The arranged schedule can be a reference for the students to determine the progress of their project development. Thus, the project being done does not spend time longer as what has been planned before and the late of work art submission is not going to happen. By the reference of the schedule has been arranged before,

then teacher can assess the students' discipleship in making Archipelago ornament work art project.

- Finishing the project by teacher's monitoring
Teacher is roled to monitor or watch the development of project done by the students. Teacher conducts an observation in every group and ensures the students participate actively in the process of making project, so the gap among the students in finishing the project is not going to happen. Teacher ensures the students has their own task and is expected they can support each other to make a positive collaboration or cooperation.

- Arranging the reports and presentation of project in form of Archipelago ornament art works

After the students are successful to finish the project in a group, the next step is to make a written report about the three-dimension fine art work has been modified with archipelago ornament. The report made is expected to have the whole concept, design and also the process of making the art work. Besides the written report, the next task is to have a presentation of the work art has been made in group in front of the classroom, which aims at making the other students can learn about the project the project made by their group. Additionally, the presentation activity in front of the classroom can train the mental, courage and how to communicate well in public. The report and presentation are needed so that the student can be more responsible to their art works they have made.

- Evaluating the project's process and result

The last step is to evaluate the project's process and result. To evaluate the process, teacher can do it by observing in the learning activity or project implementation by using observation table has been prepared previously. Things that can be observed during the process of project implementation are the readiness of making project, such as the readiness of philosophical concept or work art visual will be made, how the group works, how the individuals of every student work, effectivity of time use has been given, and also the steps of making the selected art works. Teacher also can also give assessment by assessing among friends. That assessment is done by giving a questionnaire which will be give to each student to score their group mate's working. To do assessing among students, teacher needs to ensure the students to act honestly and the way they are to make the assessment accurate and suitable to the current condition.

While for assessment of art work products made by the students, teacher prepares table of product assessment with details of things can be assessed, such as function, technique use based on procedure, details and precise, the use of tools and media, form composition, modification creativity and esthetic value from the art work made.

According to Vygostky theory, cultures has an important role in children's cognitive development, so the implementation of learning material can be done with adapting model, it is to implement the learning problems with adapting based on cultures developing in society [4]. This point can be a foundation that project selection done by the students can adjust the era development which is developing nowadays. Thus, the making of three-dimension Archipelago ornament art work can be adjusted with cultural environment condition

currently popular in society without leaving the characteristic of the archipelago ornaments themselves.

4. CONCLUSIONS

The making of three-dimension fine art work by modifying object by applying archipelago ornaments as decoration adds esthetic values even adds selling value of the modified object can be an opportunity for students to develop creativity and also as a way to introduce archipelago ornament to young generation more fun because it is done in group or collaboration with their friends in same age through project based learning. In addition, Vygotsky's social constructivist theory can help students in developing team cooperation by communicating well with their group mate in order to make art works they wish for.

This project-based Archipelago Ornamen learning design through Vygotsky's social constructivist theory approach is composed to help the student understand and master Archipelago Ornament learning material systematically with help from more expert people, such as teachers or friends in same age who are more skilled in school. Therefore, learning objectives can be achieved maximally and more fun, so that the purpose of preserving culture, particularly introducing archipelago ornament can be well conveyed to young generation in SMA level.

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