## The Design of Painting Art Learning Model Based on Ecological Wisdom for Art Education Students of Universitas Negeri Medan

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**Abstract.** This study exposes a design of painting art learning model based on ecological wisdom. Methodologically, this study is a conceptual development which is used to develop new concepts by analyzing theories, concepts, and exploring the environment condition. This study produces a concept of learning model design as an idea of a strategy in painting art learning based on ecological wisdom that can be used as a contextual learning inspiration. This ecological-based painting learning design is expected to provide a learning experience painting by using natural wealth and environment as a source of expression ideas in painting. The design of the hypothetic model design of painting art consist of several steps; 1) Preparation; 2) stimulus the provision; 3) investigation; 4) theme decision; 5) tools and materials preparation; 6) performance; and 7) Evaluation.

Keywords: Design, Ecological, Learning Model, Painting Art.

## **1** Introduction

Learning painting art in college needs the students' basic skill to be capable in proving and demonstrating theoritically and practically in creating painting works based on the observation to the object they see. One of the achievement indicators in this subject is the creation of the painting art products with a certain form which is able to meet the aesthetic needs with the skills and meet the wishes of the enthusiastic or society. In an effort to achieve the achievement indicator maximally, the students must have the ability to explore ideas and understand the painting elements, especially on understanding of the painted objects. For that reason, the students must be equipped with spatial visual intelligence. This ability means to see in detail all the observed objects. Therefore, the ability of painting art students will be proportional to the student's visual spatial intelligence.

The success in the learning process and the subject achievement is basically influenced by many factors, such as the teachers, students, environment, curriculum, and models as well as the effective learning media. To be able to create an interesting learning that can improve the student's ability, the teachers are required to be able to choose, use, and even develop the right

learning model and the appropriate learning and related to the teaching material given as Supena stated [1]. Therefore, in this study, the teachers should be able to facilitate the painting learning that may improve the students' spatial visual intelligence and their paintings quality.

Based on the empirical experience of the researchers and several teachers in the art studies, the students' of visual spatial capabilities especially at early semester students in painting subject are still low. This is found that in the art student's ability tests in showing the aesthetic objects, the skill process, and the creating works technique, most of the students obtained the values which are under the standard of learning achievements and do not even fully understand the object of the painting created. Based on the observations conducted on the art students of Unimed in Art Education Study Program, it was found one of the factors created the low quality of students' painting and the spatial visual capabilities is less maximal implementation of the learning process in the classroom. In fact, the learning process can determine the students' success in painting activities.

Therefore, the learning model used by lecturers should be able to accommodate the learning well to improve the students' ability in painting. As Kherid said [2], in his research on the internship learning model for the art students, the success key to achieve the learning objectives is on the learning practice given or facilitated by the campus. The campus in this case is specific to the teachers as who should be able to provide real output and outcome as long-term learning results. This study offers a learning design which in this context is a design of the painting learning model based on ecological wisdom. This research produces a concept of learning model design in the form of an idea of an ecological based painting learning strategy that can be used as a contextual learning inspiration. This ecological based painting learning design is expected to provide a painting learning experience by using natural wealth and environment as a source of expression ideas in painting.

Sugiarto [3] stated that the nature and the environment cannot be separated as part of the aspects in someone's artwork. The natural environment in this case is called ecological wisdom which is used as the source in art learning. Ecological wisdom is a source of open-oriented-learning that can be a source of ideas for artificial expressions. One of the previous studies such as Miller and Cardamone [4], in a research entitled "Educating through Art, Ecology, and Ecojustice: A Rain Barrel Project. Art Education" revealed a success of ecological-based learning programs in America as the collaborative results of teachers in Junior high school, art students, and professors at the universities. The study designed a curriculum of painting learning that explored the environmental issues and used the artwork to educate the local community members. The study showed the program was successful by revealing that the students were enthusiastic in producing the qualified ecological-based artwork.

Along with this, another study conducted by Pylypchuk et al [5], in a research entitled "Ecological Innovations of Materials in Art Objects to Create a Comfortable Human Environment", developed a modern innovative approach to the use of certain art materials in various art types, in an ecological interior design to create the desired aesthetics effects and the comfortable environment for humans. One of painting art that develops is a visual form with the nature theme as the idea of creation and the use of innovative materials. The research managed to create artwork with high aesthetic quality by prioritizing the materials and ecological concept

Based on the problems of the low spatial visual capabilities and the quality of the students' painting in painting subject, as well as the potential of art learning model with ecological-based earnings as an effort to improve the quality of the painting learning, this study aims to arrange

a design of ecological-based painting learning as the learning inspiration which is expected to contribute to Unimed art students in painting subject. Therefore, explicitly the title of this study is The Design of Painting Art Learning Model Based on Ecological Wisdom for Art Education Students of Unimed.

## 2 Method

Methodologically, this study is a conceptual development which is used to develop new concepts by analyzing the theories, concepts, and exploring the environmental condition. This study produces the concept in the form of learning model design as an idea of an ecological-based painting learning strategy that can be used as a contextual learning inspiration. Meinel et al [6] stated that the concept of the product becomes a common idea for new products that will be further developed with a real prototype. Therefore, this study is based on the library research which by collecting the data from various scientific sources to be analyzed critically to obtain some new ideas or concepts related to the objects being studied and developed as Chaffrey et al [7] described.

## **3 Results and Discussion**

The followings are the result of the painting model design of the painting art based on the ecological wisdom. This section describes the design of the learning development of the conceptually which contains the basis of the development of learning model and design of the painting learning model of ecological wisdom.

# 3.1 Basic Development of Painting Art Learning Model Design Based on Ecological Wisdom

The development of painting art learning model design based on ecological wisdom is brought from ecopedagogy learning. It is a learning approach that makes the learners as self-decision students and able to develop some potential based on their personal experiences from out of the class, so that their abilities do not only affects themselves, but also the environment, as Gadotti stated [8]. In the implementation in learning, ecopedagogy proposed three important points in its concept; they are social ecology, cultural literacy, and the use of wisdom and critical technology, as Kahn described in [9].

Besides it is based on the ecopedagogy learning approach, the development of this painting artwork model design is also based on the ecological wisdom which is adapted the ELM Eco EA proposed by Kopnina and Bedford [10] which consists of; (1) Orientation; (2) Emotions; (3) Watching; (4) Hypothesis; (5) Thinking; (6) investigation; (7) Communication, and free expression learning method, which gives the students to express their ideas and expression freely into the form of artwork without limiting by any obstacles arising from conventional technical provisions in creating images as Sobandi stated [11].

This method has several learning steps, they are; (1) determining the theme; (2) Setting up the media; (3) providing the stimulus; (4) and communicating. The adaptation of Eco EA ELA learning model and the free expression learning method are the basic in designing the developed

ecological-based painting learning design. The steps of learning are reconstructed so that they will produce a more contextualized painting art learning. The basic learning design can be seen as in the following picture.



Fig. 1. Basic design of learning model

## 3.2 Painting Art Learning Model Based on Ecological Wisdom

This section exposes the painting design of ecological wisdom explicitly, which includes the explanation of the learning model as it has been stated

	Table 1. Painting art learning model based on ecological wisdom			
Syntax		Description		
1.	Preparation	Preparation begins at the early stage of learning in the classroom. The teachers and students together perform the learning orientation. The teachers provide the objectives and benefits understanding of painting learning of ecological wisdom.		
2.	Giving stimulus	The students are asked to observe the paintings and video of ecological wisdom. The teacher as a facilitator submits some basic questions related to the type of painting with ecological themes and asks the students' opinions about the paintings.		
3.	Field investigation	The students investigate directly in the surrounded environment or indirectly review through exploration in the media of internet. They are asked to make a list of the objects related to ecological wisdom.		

4.	Theme decision	The theme decision is conducted by the teacher together with the students after investigating the various ecological wisdom objects that will be used as a source of creating the art.
5.	Tools and materials Preparation	The student prepare all the tools, materials and means to be used in painting activities.
6.	Students' performance	The students perform the paiting activities directly in the classroom. This activity is monitored by the teacher as instructors and facilitators during the painting process.
7.	Evaluation	This evaluation activity is the final stage in learning activities. It is filled with assessing the students' paintings directly with the purpose that this will be the reflection and evaluation of the work, so the students know the advantages and weaknesses of their works.

As a conceptual design that describes the systematical procedure in setting the learning activities, the learning model does not only speak about syntax as the sequence of learning steps. The design model must have mandatory elements in the learning process. These elements include syntax, social systems, reaction principles, support systems, and instructional effects as (Joyce) in [12] stated. Below is the design element of ecological wisdom paintings.

Table 2. The design elements of ecological wisdom paintings			
Elements	Description		
Syntacx	(1) Preparation (2) Giving stimulus (3) Project investigation		
	(4) Theme decision (5) Tools and materials preparation		
	(6) Art performance (7) Evaluation		
Social system	This learning design of the painting based on ecological wisdom		
	is created to facilitate the learning collaboration among the teacher		
	and the students as well the surrounding environment. Therefore,		
	this model will be able to influence the atmosphere of social		
	learning that possibly makes the students study together.		
Reaction principles	This learning design of the painting based on ecological wisdom		
	is created to the responds between the teacher and the students		
	through contextually painting activities In the whole activity steps,		
	the teachers are the facilitators and process evaluator, meanwhile		
	the students are as learning executors, so that the learning process		
	will produce a feedback result between them.		
Supporting system	This learning model design certainly uses the coordinated facilities		
	and infrastructure through the stage of preparing the tools and the		
	materials, so that the teacher and the students are required to		
	prepare the learning media in supporting the painting activites.		
Instructional and	The instructional effect was obtained from the students' art		
accompanied effect	performance after the learning activities in the art performance.		
	Then in the accompanied effect, the studentscan be trained		
	creatively in painting with ecological wisdom theme so that it can		
	support the spatial and visual intelligence as well as the painting		
	quality.		

Table 2. The design elements of ecological wisdom paintings

### Material

Painting practice using acrylic media with ecological theme

#### Learning achievement

Able to use the acrylic media with good and correct technique to create painting works with ecological themes (nature and environment)

## Learning Activities:

## Introduction:

1) The teacher greets the students to start the learning by praying together.

2) The students receive the information about materials and the learning objectives **Main Activities** 

## Preparation

- 3) The teacher conveys the advantages and the objectives of the painting learning using the ecological wisdom.
- The students receive the technical information about the painting learning activities using ecological wisdom.

### **Giving Stimulus**

- 5) The students observe the inspirational paintings pictures and videos with the theme of ecological wisdom
- 6) The students are required to ask several questions related to the artwork in panting activities with the theme of ecological wisdom
- 7) The teacher and the students discuss anything related to the ecological wisdom painting activity

## **Field Investigation**

- The students are asked to observe directly to find the ecological conditions in the surrounding environment (this activity can be instructed before the learning begins)
- 9) The students collect the observation of the surrounding environment result that can be sused as the inspiration in painting learning.

#### Theme decision

- 10) The teacher and the students make a list of the objects that will be chosen as the inspirational paintings based on the ecological wisdom
- 11) The students are divided into two big groups. The first group gets an 'environmental pollution' theme and the second one gets a 'natural preservation' theme.
- 12) The Students together in groups discuss and choose personally and they are free to determine what objects will become the paintings.

#### **Tools and materials Preparation**

13) The students prepare tools and materials such as some acrylic paint, palettes, brushes, pencils, drawing paper, and canvas.

## **Art Performance**

- 14) The teacher guides the performance activities by conducting several steps such as exploration, improvisation, and the verbal works.
- 15) The students begin to perform the visual exploration process of shapes or objects that match the determined themes.
- 16) The students next improve the experiment by creating a sketch by organizing the elements based on the visual exploration results.
- 17) The students then move the sketch to the canvas continued by performing the painting activities as a form of painting embodiment.
- 18) The teacher supervised the process of the student's work in painting.

#### Evaluation

- 19) The finished paintings then exhibited and presented in front of the class one by one.
- 20) The students are required to comment the finished painting respectively
- 21) The teacher assesses the students' work by commenting and explaining the plus and minus of their paintings.

22) The teacher conducts reflection activities to ensure the knowledge and skills in learning painting based ecological wisdom.

Closing:

- 23) The teacher ends the learning by providing summative evaluation in the form of a work based ecological wisdom project as a painting product.
- 24) The teacher closes the learning activity

The idea of the painting learning model design based on the ecological wisdom is expected to provide implications to the development of science especially on the students' painting learning in college students. A research conducted by Riyanti [13] successfully developed a project-based learning model in an art graphics lesson.

It is said that the development of a contextual learning model which is conducted by the teacher will immediately impact on the development of the students' competence. This is in line with Frolikova [14] who stated that it is important to instill the learning model of pedagogy based on the cultural and environmental interaction for students in college. Furthermore, the painting learning based on ecological wisdom will produce unique and imaginative works, so that the students as the creators and society as the art lovers will get inspiring art values to grow the ecological awareness as Setem [15] stated. Therefore, this developed design of painting learning model based on ecological wisdom has become an effort in creating spatial visual intelligence to improve the students' painting ability and as well as targeting the qualified human and learning.

## **4** Conclusion

The design of the painting learning based on the ecological wisdom is based on the ecopedagogy learning approach. It concretely adapts the Eco Ea Ela learning model and free expression learning method. The adaptation of Eco Ea Ela learning model and free expression learning method have become a basic in designing the developed painting learning based on the ecological wisdom design. The syntax and the steps of learning method and model are reconstructed to produce a more contextual painting which consist of several steps as follows; 1) Preparation; 2) Giving stimulus; 3) Investigation; 4) theme decision; 5) tools and materials preparation; 6) Performance; 7) Evaluation.

The researchers or the teachers should be able to develop a design model learning that can facilitate the students contextually in improving the quality of the students' ability in learning process. The design of this painting learning model based on the ecological wisdom is still necessary to be developed and tested in a larger scope, so that this research is expected to be followed up in the development and testing process.

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