
The application of the studio learning method in improving the learning quality of Interior Design I

Dwi Retno Sri Ambarwati
Yogyakarta State University
e-mail: dwi_retno_sa@yahoo.com

Abstract: *This study is aimed at improving the learning quality of Interior Design I in the Visual Arts Education Department, Faculty of Languages and Arts, Yogyakarta State University. The method conducted in this study was classroom action research following the four steps: (1) preparing action plans, (2) implementing the action plan, (3) observing the action, and (4) reflecting. This research was conducted in 2 cycles. The results show that the studio learning method has proven to enhance students' learning achievement in three aspects of cognitive, affective and psychomotor in terms of: 1) consistency and suitability in function, dimensions, standardization, security considerations and comfort, the selection of shapes, styles, materials and colors, suitability in determining space conditions (80%); 2) originality in doing individual task (80%); 3) sensitivity in design composition (80%); 4) creativity in producing new designs (80%); 5) accuracy in technical drawing (80%); and 6) time accuracy in task submission (100%). In conclusion, the applications of the studio learning method can improve learning quality.*

Keywords: *studio learning method, interior design*

1. Introduction

The Interior Design studio is a place for learning, enriching ideas by feeling, touching, and doing, and a potential place for integrating skills, values, and design literacy. So it is more than just a room for drawing. As a place to do many kinds of activities, the studio becomes a place for the students to learn and practice visualization and representation as well as to learn new interior materials and the way to think of an interior designer. In accordance with its character, the design education by studio learning method is not only focusing on the psychomotor training but also on the skill to think as an interior designer and the ability to apply the concept of design. This process

involves intensive relationship between the lecturer and the students.

In the Visual Arts Department, Faculty of Languages and Arts, Yogyakarta State University, the education system through the studio learning method has been applied for the students since the first semester but it has not been done optimally due to many factors. One of the factors is the limited facilities and lack of students' motivation to be engaged in intensive studio work. Therefore, in this study, the studio learning method will be effected and revived to increase the motivation in learning and practicing in the studio for the students to improve the learning quality of Interior Design I.

Interior design is the planning, layout and design of the interior space within build-

ings. These physical settings satisfy our basic needs for shelter and protection. They set the stage for and influence the shape of our activities. They nurture our aspirations and express the ideas which accompany our action. They affect our outlook, mood and personality. The purpose of interior design, therefore, is the functional improvement, aesthetic enrichment, and psychological enhancement of interior space (Ching, 2002: 46).

Interior Design I is one of the competencies that are taught to the students in Visual Art Department. Here, the students learn about basic interior design, technical knowledge of manual drawing, and drafting design. Students are assigned to do the project of residential interior design which is done by the basic principles of planning and drawing techniques, including: a) human needs, b) architectural [the influence of climate, location and complex analysis, which includes site, the concept of space and circulation], and c) construction (building materials).

Based on the description above, it can be expected that students have a responsibility to learn a considerable need for facilities in practice and sufficient time to complete learning responsibility, in this case on the competence of Interior Design I. Thus, the availability of facilities in the design studio and adequate time to learn need to get serious attention from the faculty and the institution, in order to support and motivate students in the completion of tasks, which ultimately is aimed at increasing students' achievement and improving the quality of education.

The design education process through the studio learning method is not a new thing anymore because this kind of method is adopted from the design education system of the France's Beaux-Arts as well as the Germany's Bauhaus (Istanto, 2002). Being an interior designer, one has to master certain knowledge and skills. A designer needs

certain competencies that are, among others: (1) personality (attitude) competency, (2) technical competency (skill and knowledge), (3) communication competency, (4) methodological competency, and (5) social competency (Aditjipto, 2002). Inside the studio, the students' knowledge and their developmental design aspects are being developed by doing some training or students/lecturers' interaction. In this studio, training and discussion will gradually develop and form a kind of design concepts inside the students' mind. In the studio, the students will also be able to do some practices to balance their hand and way of thinking, develop their senses of shape and form, enhance their design skills, elaborate their understanding toward design and improve their skills and design quality.

The teaching and learning process by the studio learning method is just one aspect of education, besides the other important aspects of the education itself. The studio learning method that has been considered as the perfect system for the design education still needs straightening up. The studio is a place for learning and enriching ideas by chatting, feeling, touching, and doing.

Thus, for design education, it must be treated as a studio without a wall. The studio without a wall may be projected to the globalization of information, where students and tutors can access facilities easily to get more information about design around the world (Arifin, 2002). Yet, the most important relationship is the togetherness between the lecturer and the students under the lecturer's guidance. This relationship shows us that besides having the complete facility especially for the technological as the one of the most urgent needs, the studio teaching management is also an important factor to develop the students' competence.

A protocol was constructed for the assessment of the students' development and the successful learning of Interior Design I.

There were six categories and each category was given a score using agreed-upon criteria: 1) consistency and suitability in function, dimensions, standardization, security considerations and comfort, the selection of shapes, styles, materials and colors, alignment processing element of the space, and suitability determination procedure increased space conditions; 2) originality in doing individual tasks; 3) sensitivity in design composition; 4) creativity in producing new designs; 5) accuracy in technical drawing; and 6) time accuracy in task submission.

2. Method

The method conducted in this study was classroom action research following the four steps: (1) preparing action plans, (2) implementing the action plan, (3) observing the action, and (4) reflecting.

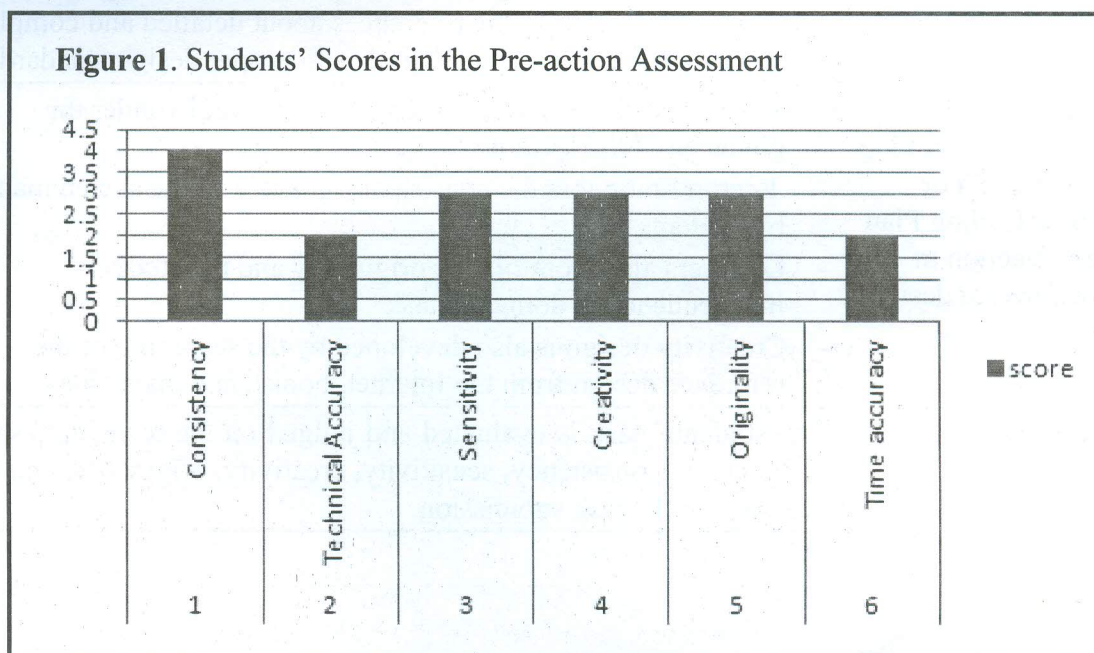
In the planning, 20 students were asked to design a residential interior design that includes: development of planning concept, alternatives sketches, and development of work sheets that include: layout, floor plan, plafond plan, and elevation. The

lecturer gave the introduction to the theory supporting the class assignment, and the students will do the practice of designing that is done at home. Consultation will be done in the campus. At the end of the assignment, the lecturer gave evaluation on the students' works.

The result of pre-action showed that the average score of 20 students in the task of making alternative sketches and developing the work sheet is 74.3 and in developing the design concept is 74.0, so that the average score in a class assignment is 74.2. Beside that, the pre-action obtained data related to processes such as: consistency, technical accuracy, sensitivity, creativity, originality, and time accuracy in task submission, which is illustrated in Figure 1.

In Figure 1 it can be seen that the students were very weak in technical drawing accuracy and time accuracy in task submission. During their first effort at making a design without implementing the studio learning method, the six aspects of teaching and learning were scored respectively on a scale of 5. The score is an average of the scores on the 6 criteria of the evaluation form. The weaknesses were main-

Figure 1. Students' Scores in the Pre-action Assessment



ly in the skill of making a technical drawing and the time accuracy in finishing the task on time.

3. Findings and Discussions

The action took place one month in 4 meetings. Every meeting lasted 4 hours in the design studio at campus.

Implementing the Action Plan Cycle I

Based on the findings of the pre-action above, the weaknesses were caused by the lack of references, and the lack of originality due to the lack of observation of the lecturer.

Based on those weaknesses, the researcher applied the studio learning method in the task of designing a residential interior including the drawing of the layout, floor plan, ceiling plan, and sections. The planning of class action in Cycle I was designed as Table 1.

Description of studio learning methods used in this action can be described briefly in Table 2.

After the conduct of the method of studio learning, the second teaching plan did not show this weakness to the same degree.

In Figure 2, it can be seen that the students could finish their task on time, and the technical drawing accuracy, consistency, originality, and creativity were improving

Table 1
The Planning of the Classroom Action in Cycle I

No	Method	Descriptions
1.	The introduction theory about interior design and interior material	<ul style="list-style-type: none"> - Lecturer explains the technical drawing such as Layout, Floor Plan, Ceiling Plan, and Elevations. - Lecturer demonstrates directly through an example on the board and also through visual media (Powerpoint Program) which directly connected (hyperlink) to the URL (internet) to see examples of existing technical drawings. - Students are encouraged to discuss residential designs to enrich their knowledge and the references about detailed and completed working drawings in accordance with proper design standards.
2.	The students practice in making Layout, Floor Plan, Ceiling Plan and Section of residential design.	<ul style="list-style-type: none"> - The completion of the task is done in the studio under the guidance of the lecturer. - Lecturer monitors the consistency concept of the sketch made by students. - Lecturers also monitors the originality and the students' independence in doing the task - Creativity design is also developed by the searching of the reference design from the Internet, books, and magazines.
3.	Assesment	The students' task is evaluated and judged on the technical aspects of accuracy, consistency, sensitivity, creativity, originality, and time accuracy in the task submission.

Table 2
Descriptive Criteria for the Studio Learning Method

No	Method	Descriptions
1.	Provision of visual media	Students are invited to view and discuss design concepts and images of the interior of houses served through visual media (using Powerpoint Program) to enrich the students' knowledge and resources to develop their projet
	Provision of design studio facilities	Provision of studio with an adequate space to practice drawing for 20 students equipped with manual drawing table and adequate lighting
3.	Provision of the sample of interior material	Students are invited to learn about the types and properties of materials and textures and to observe the color and its application in the design of furniture and space.
4.	Provision of online computer/laptop	Provision of computer/laptop is connected directly to the Internet so that students can immediately get reference images and insights about the most up to date design to develop their design concepts.
5.	Provision of relevant literature/books	Provision of literature/relevant books related to interior design houses, so that students can immediately obtain the required references for their design
6.	Studio practice under the guidance and intensive monitoring by lecturer	Developing knowledge of design aspects by practicing, interacting, discussing, working together with other students and with the lecturer to develop and form a kind of self-concept of design thinking

significantly. The weakness still happened mainly in the sensitivity of the design composition.

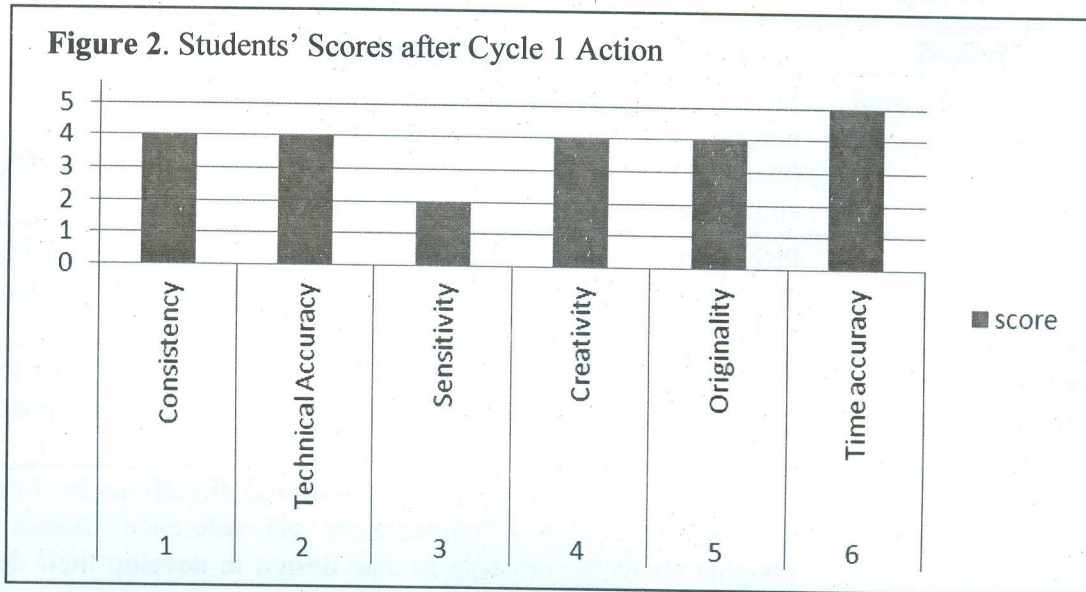
Reflection of Cycle I

The weakness still happened mainly in the sensitivity of design composition, caused by the lack of practices. Based on the weakness that still happened, it was necessary to continue to the next cycle, with an addition matter in strengthening the sensitivity on design composition.

Implementing the Action Plan in Cycle II

Based on the weaknesses that have been identified on the lack of sensitivity in design composition, at the next meeting, the researcher applied the same method again by intensifying the implementation of the studio learning method, focusing in improving the sensitivity of shape and form of the design.

The action plan in Cycle II was designed as follows: The students were trained in their sensitivity of composition by determining the design principles (unity, balance, harmony,



proportion, scale, rhythm, and emphasize) in form and color by discussing them with the lecturer and other students. Students were trained continuously to assess the shape of surface, form, material, and their application to the interior design, so that their sensitivity will increase gradually. Students were also trained to compare between good composition and poor composition of design by observing many designs and drawings obtained from the Internet.

After conducting the method of studio learning focusing in the training of the sensitivity of composition, the teaching plan showed the result in Figure 3.

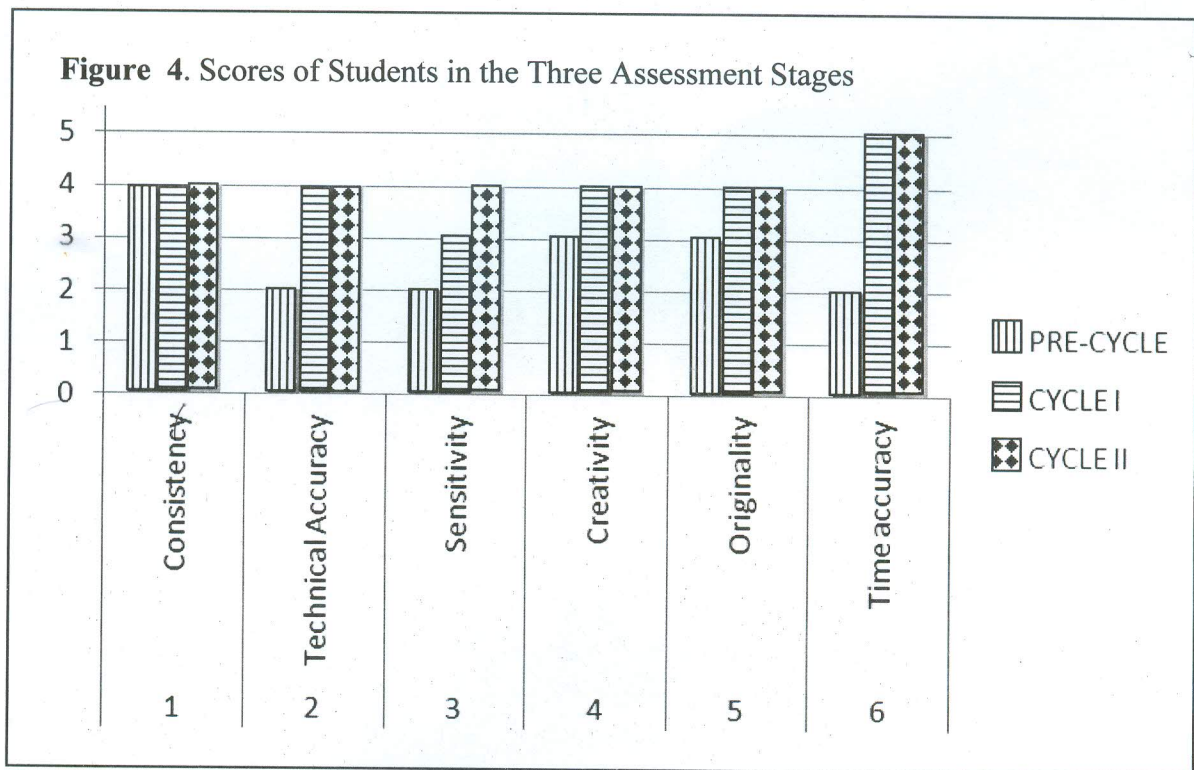
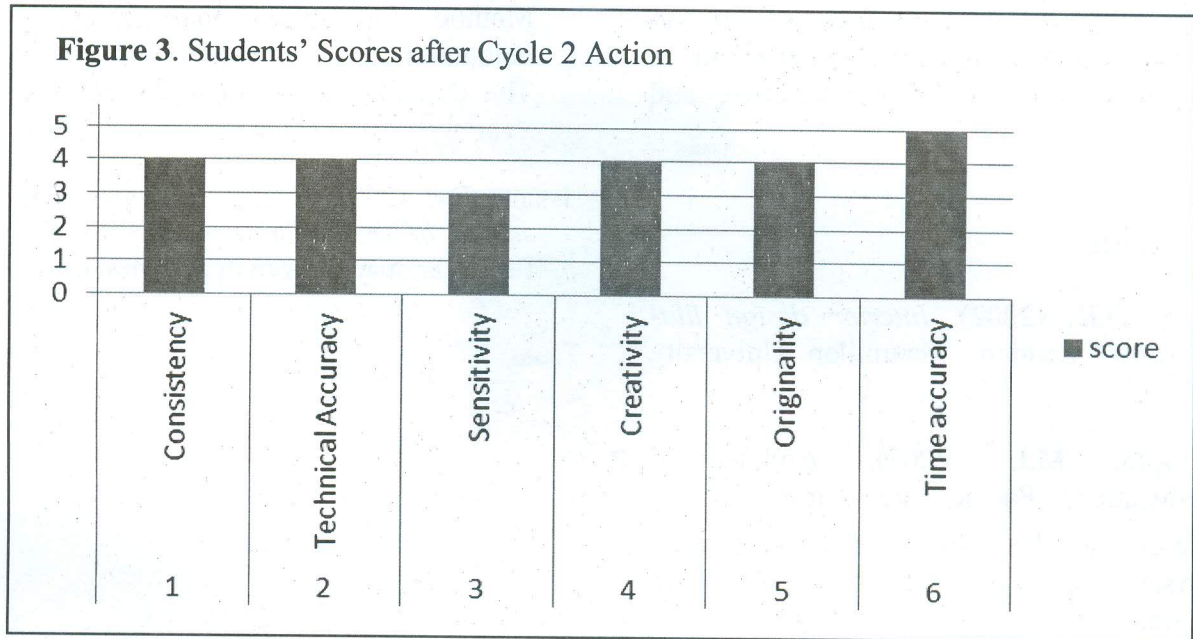
In Figure 3, it can be seen that the students could achieve the ideal scores in sensitivity of design composition.

Reflection of Cycle II

Students' understanding of the design process increased and they were quite capable of integrating the entire design

considerations, shown by the increasing of students' creativity, sensitivity, and consistency. Their competence in technical drawing also increased so did their time accuracy in task submission.

This classroom action research that was performed in this study ended in Cycle II, because the second cycle had reached the set target indicators of success in the study, ie, increased learning Interior Design I by applying the studio learning method in the indicators of 1) consistency and suitability in function, dimensions, standardization, security considerations and comfort, the selection of shapes, styles, materials and colors, suitability in determining space conditions (80%); 2) originality in doing individual task (80%); 3) sensitivity in design composition (80%); 4) creativity in producing new designs (80%); 5) accuracy in technical drawing (80%); and 6) time accuracy in task submission (100%). The increases can be seen in Figure 4.



5. Conclusion

Based on the findings above, it can be concluded that the studio learning method

increased these students' competence, particularly in conducting the Interior Design I in the Visual Art Education Department, Faculty of Languages and Arts, Yogyakarta

State University. The results showed that the studio learning method has proven to enhance students' learning achievement in three aspects of cognitive, affective, and psychomotor.

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