

USING ‘LEARNING GALLERY’ STRATEGY TO IMPROVE STUDENT’S PARTICIPATION IN TEACHING AND LEARNING OF COMPUTER AND INFORMATION TECHNOLOGY

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Abstract

Asking students to be active in teaching and learning process is not easy. Lecturer needs a strategy to create learning environment where all students can be involved actively in teaching and learning process. In this paper will be described the usage of strategy called learning gallery in class of Computer and Information Technology (CIT).

In the strategy, students are divided into some groups. Each group prepares an interesting presentation using classic or electronic media about a specific topic in CIT. During the learning, each group presents their topic in class corners like an exhibition. One member of the group served as an exhibition guide and other members visit the other groups. In this visit, all students actively participate in the discussion. Based on student reports, they stated that the activity is interesting, not boring, and can increase student participation in teaching and learning process.

Keywords: learning gallery, student’s participation, Computer and Information Technology

I. INTRODUCTION

Increasing students’ participation in teaching and learning process is not easy. Lecturer needs a strategy to create learning environment where all students can be involved actively in teaching and learning process. While increasing participation is an obvious goal in courses that include frequent discussions and small-group work, it is also important in a lecture course. In short, if only a few students participate by volunteering answers, asking questions, or contributing to discussions, class sessions become to some extent a lost opportunity to assess and promote learning (The teaching center, 2009).

This paper illustrates the using of ‘Learning Gallery’ strategy to increase students’ participation in teaching and learning process of Computer and Information Technology of Mathematics Education International Class, Yogyakarta State University, in first semester academic year 2010/2011. Computer and Information Technology (CIT) is

one of compulsory subjects that must be taken by students at Mathematics Education, Yogyakarta State University. Students both learn many topics in CIT and master several skills of using computer software. Characteristics of the subject matter is 1) includes description of knowledge about computers much more than calculation; 2) describes the latest information of computer technology in education, and 3) train some operations using computer software.

Based on these characteristics, teaching and learning of this subject should be handled using strategy to avoid student boredom. A traditional method that lecturer as a center of learning is not suitable for this subject. Students must be involved actively to gather more new computer information and share their result to other students, also in the mastering of computer software.

In this paper will be elaborated on the use of modification of the gallery of learning, i.e. learning gallery, which is included in the active learning strategy, to increase student participation in teaching and learning of this subject.

II. DISCUSSION

One of strategies can make student more active in teaching and learning is active learning. To maximize learning, students must become involved actively in doing things and thinking about the things that they are doing. Active learning instructional strategies include a wide range of alternative types of classroom activities or course assignments, they commonly (a) engage students in thinking critically or creatively about course content, (b) speaking with a partner, talking in a small group, sharing one's ideas with the entire class, (c) expressing one's ideas through writing, (d) examining one's own personal experiences, attitudes and values, (e) giving and/or receiving feedback, as well as (f) reflecting upon one's own learning experience (Eison, J. 2008).

It is important for lecturer to recognize that active learning instructional strategies (a) can be completed by students either in-class or as out-of-class assignments, and (b) can be completed by students working either as individuals or in groups. In short, active learning instructional strategies can address a number of equally important different types of course goals and can be created for use in a variety of different contexts or situations. The strategy transforms students primarily from listeners to engaged thinkers and doers.

Gallery of leaning is one kind of strategy in active learning, this activity is a way to assess and celebrate what students have learned over a course of study (Silberman, 1996). The steps to implement the strategy gallery of learning are:

1. Divide students into groups of two four member.
2. Ask each subgroup to discuss what its members are taking away from the class.
These may include any of the following: 1) New knowledge; 2) New skills; 3) Improvement in something (e.g., programming skills); 4) New or renewed interest in something (e.g., poetry); 5) Confidence in something (e.g., speaking English).
Then ask them to list on a large paper these “learnings.” Ask them to title the list “What Are We Taking Away.”
3. Paper the walls with these lists.
4. Ask students to walk by each list. Ask that each person place a check mark next to ‘learnings’ on other lists other than his or her own that he or she is taking away as well.
5. Survey the results, nothing the most popular ‘learnings’. Also mention some that are unusual and unexpected.

The following are the steps to implement the activities of 'learning gallery' in CIT class:

1. First, create group of 4 students.
2. Each group gets a different topic to be discussed.
3. Each group prepares electronic media or bulletin board to present the results of their discussion. The media is presented in an easily understood appearance, attractive, etc., like an exhibition.
4. During the learning, each group presents their topic in class corners like an exhibition.
5. One member of the group served as an exhibition guide and other members visit the other groups.
6. One member in charge of exhibition guide provides an explanation of the questions visitors, also notes questions from visitors.
7. Other group members spread out, visiting other groups to obtain information and explanations about the work of the group visited.
8. All group members take turns serving as guide and visitor of the group exhibition.

9. Each group must write a report as a result of this learning activity.

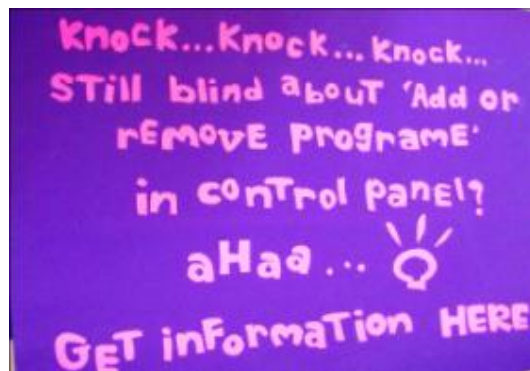
Strategy of 'learning gallery' is held in CIT class to the mastery of new skills using computers, on the topic of 'control panel'. The activity has conducted in computer laboratory of Mathematics Education Department Yogyakarta State University. There are ten groups of 2 or 3 students. Each of group presents one menu in control panel. The topic of each group is shown the table below.

Group No.	Topic
1	Appearance and themes
2	Network and internet connection
3	Add and remove program
4	Sounds, speech, and audio devices
5	Performance and maintenance
6	Printer and other hardware
7	User accounts
8	Date, time, language, and regional option
9	Accessibility at control panel
10	Security center

The activity gives students a chance to express their ideas to share the topic with the other students based on their creativity. They create several properties to transform the topics in order to give detail explanation to other students. Some properties that used in the activity are shown below.

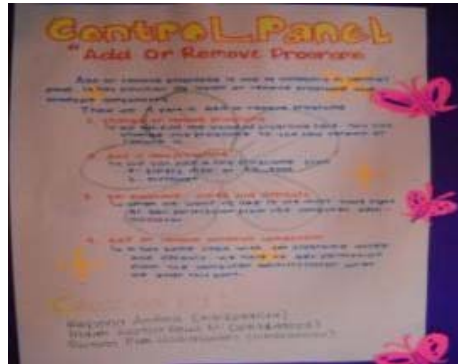
a. Persuasion paper

This paper is created by Group 3, it persuades other students to come in their group.



b. Explanation Paper

This paper is property of Group 3. It tells the visitor how to add or Remove Program.



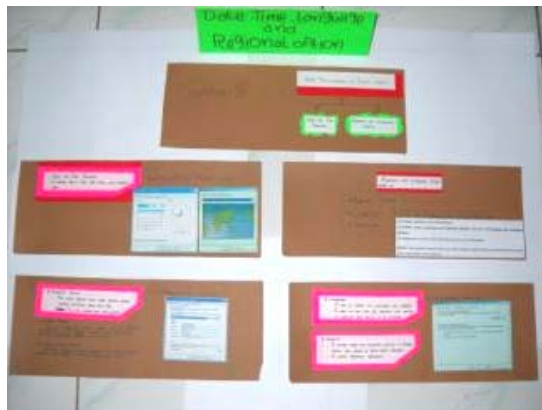
c. Brochure

Group 6 give a brochure to their visitors. It contains information about printer and other hardware



d. Bulletin board

This property is used by Group 8, to give brief description about Date, time, language, and regional option.



The property is used to clarify the information to the visitors. Accordance with the learning objectives, i.e. to mastery new skills on the control panel, then the main medium each group is the laptop. Each group shares a technique to operate each menu on the control panel, using a laptop. They directly demonstrate the steps to use every menu in the control panel to the visitors.

Learning activities using the 'learning gallery' runs well. All students participate actively to visit or tell information to other friends. Two ways interaction was made by them, so there were not passive students. This activity not only forced them to find information about their subject, but also train their creativity to made interesting exhibition.

As mentioned above, this activity is carried out in the International Mathematics Education class. Thus, this activity is also conditioned the students to practice communicating in English. This activity gives students a chance to be confidence in speaking English.

After completion of learning, students get the task to write a report of this activity. In the report, students write their comments about the activity. Below are some of them.

1. **Group 8:** "In our opinion, it is very effective and interesting because we can practice by our self. We can also ask about everything that we want to know. Not only seat and hear our friend presented their topic, but every student active to ask and show their interest."
2. **Group 10:** "It more exciting than we have to hear our presentation or lessons, because we can move and choose what we will invite and learn about it. We are also free to ask questions without embarrassment. We also can study how to explain our knowledge to other."

From the description above, the 'learning gallery' strategy have encouraged students in (a) thinking critically or creatively about course content, (b) speaking with a partner, talking in a small group, sharing their ideas with the entire class, (c) expressing their ideas through writing, (d) examining their own personal experiences, attitudes and values, (e) giving and/or receiving feedback, as well as (f) reflecting upon their own learning experience.

III. CONCLUSION AND SUGGESTION

Lecturers can improve student participation in their course by devoting time and thought to shaping the environment and planning each class session. Ideally, the goal of increasing participation is not to have every student participate in the same way or at the same level. Lecturer should create an environment in which all students have the opportunity to learn and in which the class explores issues and ideas in depth, from a variety of viewpoints.

The lecturer's goal is to create conditions that enable students of various learning preferences and personalities to contribute. To reach this goal, lecturer can use 'learning gallery' strategy to encourage quiet students to speak up and, occasionally, ask the more verbose students to hold back from commenting in order to give others a chance.

IV. BIBLIOGRAPHY

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